

## Centralized Contract Group (CCG)

Format No. –  
Revision No. –  
Eff. Date –

Tender no. TPCODL / CCG / 24-25 / 1000009524

## Open Tender Notification

For

**One Year Rate Contract for Supplying HG Fuse & DO Fuse Sets  
at TPCODL, TPNODL, TPSODL & TPWODL**

**Tender Enquiry No.: TPCODL/CCG/ 25-26 / 1000009524**

**Due Date for Bid Submission: 12/06/2026 [16:00 Hrs.]**

**Centralized Contracts Group  
TP Odisha DISCOMs  
1<sup>st</sup> Floor, Anuj Building, Plot No. 29, Satya Nagar,  
Bhubaneswar – 751007**

**TPCODL TPNODL TPSODL TPWODL  
(TATA Power and Odisha Government Joint Venture)**

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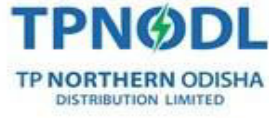
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### Centralized Contracts Group (CCG)

The Centralized Contracts Group (CCG) is a shared service group of four Tata Power Odisha Distribution Companies (DISCOMs) - TPCODL, TPNODL, TPSODL & TPWODL. CCG is responsible for carrying out tendering activities to cater to the purchasing needs of all four DISCOMs.

#### 1.0 Event Information

Bids are invited in Two Bid system from interested Bidders to establish a Rate Contract as below:

Tender Enquiry No.	Work Description	EMD (Rs.) *	Tender Fee inclusive of GST (Rs.) **	Last Date and Time for payment of Tender Fee
TPCODL / CCG / 25-26 / 1000003174	One Year Rate Contract for Supplying HG Fuse & DO Fuse Sets at TPCODL, TPNODL, TPSODL & TPWODL	2.0 Lakh	5,000/-	29/05/2026 17:00 Hrs

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

\*\* Tender fee – Rs. 1,000/- including GST. for MSMEs registered in the State of Odisha (Ref. Odisha MSME Preferential Norms^ for details on Odisha MSME support)

#### 1.1 Scope of work

Bids are invited from interested Bidders to award Rate Contract (RC) for Procurement of HG Fuse & DO Fuse Sets as mentioned below:

Sr.	Item Description	UOM	DISCOM Qty				Total Tender Qty	
			TPCODL	TPNODL	TPSODL	TPWODL		
1	A	HG Fuse (33KV 200A, 3 Pole 50Hz) with PI	Set		70	-	0	70
	B	HG Fuse (11KV 400A, 3 Pole 50Hz) with PI	Set		-	50	0	50
	C	HG Fuse (11KV 200A, 3 Pole 50Hz) with PI	Set	100	500	1,370	400	2,370
	D	HG Fuse (11 KV 200A, 2 Pole 50Hz) with PI	Set	50	-	136	-	186
<b>Total Lot -1 Qty</b>							<b>2,676</b>	
2	A	DO Fuse (11KV 200A, 3 Pole 50Hz)	Set	6,100	-	-	-	6,100
	<b>Total Lot -2 Qty</b>							<b>6,100</b>
3	A	DO Fuse (11KV 200A, 3 Pole 50 Hz) with Clamp Fitting	Set	-	-	-	2,000	2,000
	B	DO Fuse (11KV 200A, 1 Pole 50 Hz) with Clamp Fitting	Set		5,435	-	15	5,450
	<b>Total Lot -3 Qty</b>							<b>7450</b>

Detailed scope as stipulated elsewhere in this tender document.

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### ^ Odisha MSME Preferential Norms

- **Tender Fees Relaxation:** To participate in the tender, MSMEs registered in the State of Odisha shall pay Rs.1,000/- including GST towards cost of tender paper.
- **Earnest Money Deposit (EMD) Exemption:** 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.
- **Qualification Requirement Relaxation:** Qualification Requirement of Financial Turnover for MSME registered in the State of Odisha shall be reduced to 20% of the existing criteria.
- **Past Experience Relaxation:** Instead of relying on the volumes / value of earlier Supplies / Projects, 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.
- **Reservation for MSME :** TP DISCOM shall 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.
- **Performance Bank Guarantee (PBG) Relaxation:** Performance Bank Guarantee for MSME registered in the State of Odisha shall be 25% of the value normally prescribed.

### 1.2 Availability of Tender Documents

The bidder can get primary information about the tender from the Newspaper advertisement. Tender documents can be downloaded from TP Odisha DISCOMS' websites:-

[www.tpcentralodisha.com](http://www.tpcentralodisha.com), [www.tpnodl.com](http://www.tpnodl.com), [www.tpwesternodisha.com](http://www.tpwesternodisha.com), [www.tpsouthernodisha.com](http://www.tpsouthernodisha.com)

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**

**To receive online bidding link**, eligible and Interested bidder shall send an email to Package Owner (Ref. Clause 4.0 for details) attaching duly signed and stamped letter on Bidder's letterhead, with following details, expressing their intent to bid against above tender in following format:

Sr 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. of authorized person	
vi)	E-mail Id to which online ARIBA link to be sent	
vii)	Tender Fee details (Amount / NEFT-RTGS UTR No / Date) (Ref sec 1.2)	
viii)	GST No. of bidder	
ix)	MSME Certificate (if applicable)	
x)	Postal address of bidder for return of EMD BG	

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E-mail has to be sent to [sniyogi@tpsouthernodisha.com](mailto:sniyogi@tpsouthernodisha.com) with copy to [sony.jha@tpcentralodisha.com](mailto:sony.jha@tpcentralodisha.com) and [Rajib.Bhattacharya@tpwesternodisha.com](mailto:Rajib.Bhattacharya@tpwesternodisha.com) before last date and time for payment of tender participation fee (Clause 1.3).

On receipt of the above letter, after due verification, ARIBA link for participation in the tender will be sent to bidder's e-mail address from ARIBA system. Bids shall be submitted only through online e-procurement platform, ARIBA. Any other form of bid submission shall not be accepted. **(Ref. Annexure XII for detailed instructions on bid submission in ARIBA)**

### 1.3 Calendar of Events

(a)	Date of sale/ availability of tender documents from Website	20-05-2026
(b)	Date by which Interested and Eligible Bidder to pay Tender Fee and confirm participation as mentioned in “Procedure to Participate in Tender	29-05-2026 [17:00 Hrs.]
(c)	Date & Time of Pre-Bid Meeting (If any)	02-06-2026
(d)	Due Date of receipt of pre-bid queries by e-mail	04-06-2026 [17:00 Hrs.]
(e)	Due Date of Posting Consolidated replies to all the pre-bid queries as received	08-06-2026
(f)	Due date and time of receipt of Bids	12-06-2026
(g)	Date & Time of opening technical bids	12-06-2026 [16:00 Hrs.]
(h)	Date & Time of opening of Price of qualified bids	To be notified to the successful bidders

**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 TP DISCOM’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.

### 2.0 Pre- Qualification Criteria

Sr No	Parameter	Owner Requirement	Documents to be submitted by Bidder
A	Technical Pre-Qualification Requirements		
1	Own Manufacturing & In-house testing facility	The bidder should have own manufacturing facility to manufacture Tendered HG Fuse & DO Fuse Sets or HG & DO Fuse Sets of Higher Ratings. The bidder should also have an in-house Testing Facility. Bidder shall also arrange for factory evaluation/ pre-dispatch Inspection / routine and acceptance tests at their works, as per requirement.	1. Factory License Certificate / MoA mentioning nature of Business. 2. Self-undertaking with regard to the Routine and Acceptance Tests also to be submitted.

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2	Performance Report	At least two (02) Performance Certificate by any DISCOMs / PSUs / Reputed companies is to be submitted. The work against these issued certificates should be completed in last 07 years from the date of bid submission. In case the bidder has got previous association with TP DISCOMs for supply of similar product, performance feedback of the same will be solely considered irrespective of the performance certificate issued by bidder's other customers.	The performance certificates and contact details of the client need to be submitted.
B	Commercial Pre-Qualification Requirements		
1	Turnover	The bidder should have Average Annual turnover of at least Rs. 2.0 Cr. in last 3 Financial Year (FY 2022-23, 2023-24 & 2024-25) Qualification Requirement of Financial Turnover for MSME registered in the State of Odisha shall be reduced to 20% of the existing criteria. (UDIN no is mandatory for balance sheet.)	Copy of audited P&L Account (with UDIN no.) to be submitted in this regard
2	Experience	Experience of having successfully executed supply orders for at least 50% of tender quantity or single order of 25% of tender quantity or 3 orders of 10% each of same or higher rating during last 5 years (Year calculation to be done wrt to the date of Bid Submission).	Order copies to be submitted.
3	Statutory Compliances	The prospective Bidder(s) should have following certificates- a. Valid GST Registration Certificate. b. Valid PAN No. c. Odisha State MSME Certificate (if applicable)	Certificates to be submitted.

### 3.0 Evaluation Criteria

- The bids will be evaluated technically and on qualifying criteria of tender terms and conditions.
- The bids will be evaluated commercially on Lot-wise basis for all-inclusive lowest cost as calculated in Schedule of Items [Annexure I]).
- Bidder has to mandatorily quote against each item of Schedule of Items [Annexure I]. Failing to do so, CCG may reject the bids.

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

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

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*Based on adverse experiences of Tata Power / Tata Power group companies with BA, Odisha DISCOM reserves the right to disqualify the bidders during techno - commercial evaluation of the bid.*

### 3.1 Price Basis

-Price will be fixed and firm for the entire contractual period.

### 4.0 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 website by the stipulated timelines as detailed in calendar of events.

#### Communication Details:

Package Owner:

Name: Mr. Sourangshu Niyogi

Contact No.: 9564766554

E-Mail ID: [sniyogi@tpsouthernodisha.com](mailto:sniyogi@tpsouthernodisha.com)

Escalation Level I:

Name: Mr. Rajib Bhattacharya, HoG- CCG

E-Mail ID: [rajib.bhattacharya@tpwesternodisha.com](mailto:rajib.bhattacharya@tpwesternodisha.com)

Escalation Level II:

Name: Ms. Sony Jha, HoD- CCG

E-Mail ID: [sony.jha@tpcentralodisha.com](mailto:sony.jha@tpcentralodisha.com)

### 5.0 Submission of Bid Documents

#### 5.1 Bid Submission

Bidders are requested to submit their offer in line with this Tender document through e-tendering process.

All future correspondence regarding the tender, bid submission, bid submission date extension, Pre-bid query etc. shall be through TPCODL E-Tender system (Ariba).

Bids shall be submitted in 3 (Three) parts:

##### 5.1.1 First Part : EMD

EMD as applicable shall be submitted. The EMD shall be valid for 210 days from the due date of bid submission in the form of Bank Guarantee / Bank Draft / Bankers Pay Order (issued from a Scheduled Bank) online NEFT/

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RTGS transfer favoring ‘TP Central Odisha Distribution Limited’ payable at Bhubaneswar. The EMD BG has to be strictly in the format as mentioned in General Condition of Contract, failing which it shall not be accepted by CCG 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: SBIN007891**

**Note-** EMD is preferred in form of Bank Guarantee and to be delivered at the following address. However, in view of present situation if Bidder is finding it difficult to submit BG for EMD amount, they can do online transfer of EMD amount in the above- mentioned Account and submit proof of the same as part of Bid Submission.

-In such case, Tender Fee and EMD should be strictly 2 separate transactions else bids shall be rejected.

-Return of EMD from Bank Account is non-standard practice and the same may take more time than return of EMD BG.

**EMD Original Hard Copy shall be delivered at the following address in Envelope clearly indicating Tender Reference/ Enquiry Number, Name of Tender and Bidder Name**

**“EMD (Earnest Money Deposit)”**

**“PO for supply of HG Fuse & DO Fuse Sets for TPCODL, TPNODL, TPSODL & TPWODL ”**

**Chief –Centralized Contracts Group**

**TP Central Odisha Distribution Limited**

**1<sup>st</sup> Floor, Anuj Building, Plot No. 29, Satya Nagar, Bhubaneswar- 751007**

**Kind Attn.: Mr. Sourangshu Niyogi , Mob No.: 9564766554**

*\*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.*

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

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

- Bank Guarantee 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.

*Ref. GCC for Forma of Bank Guarantee*

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***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

**5.1.2 Second Part : Techno-Commercial Bid**

Techno-Commercial bid shall contain the following documents. Absence of any of these may attract bid rejection:

1. Index Stating Document name & Page No./Document No. in bid. As illustrated below:

Sr No	Document	Page No/Document No
1	Index of Documents	1
2	Formal Forwarding Letter to CCG- Odisha DISCOM	2
3	Type test Reports	8
4	Schedule of Deviations	...
...	.....	...
.....	.....	....

2. Requisite Documents for compliance to Qualification Criteria mentioned in Clause 2.0 and clause no. 1.5.  
3. Type Test Certificate\* of same or higher rating.  
4. Acceptance of Specification as per Annexure II.  
5. Duly signed and stamped ‘Schedule of Deviations’ as per Annexure III on bidder’s letter head.  
6. Duly signed and stamped ‘Schedule of Commercial Specifications’ as per Annexure IV on bidder’s letter head.  
7. Duly filled in Annexure V and VI.  
8. Proper authorization letter / Power of Attorney to sign the tender on the behalf of bidder.  
9. Copy of PAN, GST registration (In case any of these documents is not available with the bidder, same to be explicitly mentioned in the ‘Schedule of Deviations’)

*\*The type tests specified in technical specifications should have been carried out **within five years** (unless otherwise explicitly stated) prior to the date of opening of technical bids and test reports are to be submitted along with the bids. If type tests carried out are not within the five years prior to the date of bidding, the bidder will arrange to carry out type tests specified, at his cost. The decision to accept/ reject such bids rests with DISCOM.*

**The technical bid shall be submitted through CCG / TPCODL E-tender System (Ariba) only. Hard Copy of Technical Bids need not be submitted unless specifically asked for.**

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### 5.1.3 Third Part : Price Bid

Price Bid shall contain only the price details and strictly in format as mentioned in Annexure I along with explicit break up of basic prices and Taxes & duties 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. The price bids containing any deviations/conditions shall be liable to be rejected.

**Price Bid is to be submitted in soft copy through CCG/TPCODL E-Tendering system (Ariba) only. Hard copy of Price Bid shall not be submitted.**

The Bid prepared by the Bidder, and all correspondence and documents relating to the Bid exchanged by the Bidder and CCG, 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.

### 5.2 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.

### 5.3 Mandatory documents required along with the Bid

- 1.4.1 EMD of requisite value and validity
- 1.4.2 Tender Fee.
- 1.4.3 Requisite Documents for compliance to Qualification Criteria mentioned in Clause 1.7.
- 1.4.4 Acceptance of Specification, drawing with filled in GTP as per Annexure II.
- 1.4.5 Duly signed and stamped 'Schedule of Deviations' as per Annexure III on bidder's letter head.
- 1.4.6 Duly signed and stamped 'Schedule of Commercial Specifications' as per Annexure IV on bidder's letter head.

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- 1.4.7 Duly filled in Annexure V and VI.
- 1.4.8 Proper authorization letter/ Power of Attorney to sign the tender on the behalf of bidder.
- 1.4.9 Copy of PAN, GST 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 (as applicable), the bid submitted by a bidder shall be liable for rejection.*

### 5.4 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.

## 6.0 Bid Related Details

### 6.1 Bid Prices

Bidders need to quote for all items as per the Price schedule attached in Annexure I. 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 DISCOMs’ sites. The all-inclusive prices offered shall be inclusive of all costs –Insurance, Transport, duties, taxes, levies paid or payable etc. during the execution of the supply work. Applicable GST to be specified clearly.

The quantity break up shown else-where other than Price Schedule may 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.

### 6.2 Bid Currencies

Prices shall be quoted in Indian Rupees Only unless otherwise stated explicitly.

### 6.3 Period of Validity of Bids

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

Notwithstanding clause above, CCG 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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### 6.4 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.

### 6.5 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.

### 7.0 Bid Opening & Evaluation

#### 7.1 Bid Confidentiality

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 CCG in processing of Bids or award decisions may result in rejection of the Bidder's Bid.

#### 7.2 Technical Bid Opening

Technical Bids shall be opened online as per schedule mentioned in section 1.3, in CCG Office (1<sup>st</sup> Floor Conference room, Plot -29, Anuj Building Satya Nagar, Bhubaneswar). Bidders having authorization letter (format Annexed- XI) for attending bid opening from competent authority of respective Organizations, who may choose to be present physically / online at the time of tender opening. If the office is closed on the specified date of opening of the bids, the opening shall be done on the next working day at the same time. Technical bid must not contain any cost information whatsoever, else bids shall be liable to be rejected.

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

#### 7.2.1 Preliminary Examination of Bids/Responsiveness

CCG 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 in order & format as detailed elsewhere in this document. CCG 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.

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Prior to the detailed evaluation, CCG 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. CCG reserves the right to reject non-responsive bids.

### 7.2.2 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, CCG/Engineering may at its discretion, ask the Bidder for a clarification on its Bid for any deviations with respect to specifications and attempt will be made to bring all bids on a common footing. Any such clarification as sought shall have to be responded to bidder **within two working days**, post which the bids shall be liable to be rejected. 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.

### 7.2.3 Right of Acceptance/Rejection

Bids are liable for rejection in absence of following documents:

- i. EMD of requisite value and validity.
- ii. Tender fee of requisite value.
- iii. Price Bid as per the Price Schedule mentioned in Annexure I (BOQ)
- iv. Necessary documents against compliance to Qualification Requirements mentioned in Clause 2.0 of this Tender Document.
- v. Filled in Schedule of Deviations as per Annexure III.
- vi. Filled in Schedule of Commercial Specifications as per Annexure IV.
- vii. Signed and filled in Specification and GTP as per Annexure II.
- viii. Duly filled and signed Annexure V and VI.
- ix. Receipt of Bid within the due date and time.

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

### 7.3 Price Bid Opening

Price Bids will be opened online for all technically qualified bidders on the dates as shall be informed to qualified bidders in CCG Office (First Floor Conference room, Plot -29, Anuj Building Satya Nagar, and Bhubaneswar). Bidders having authorization letter (format annexed) for attending bid opening from competent authority of respective Organizations shall be allowed to be present physically/online at the time of bid opening. If the office is closed on the specified date of opening of the bids, the opening shall be done on the next working day at the same time. 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 DISCOM without any further correspondence in this regard.

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### 8.0 Market 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, CCG 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

### 9.0 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 CCG. This includes all bidding information submitted to the DISCOM. All tender documents remain the property of DISCOM and all suppliers are required to return these documents to DISCOM upon request. Suppliers who do not honor these confidentiality provisions will be excluded from participating in future bidding events.

### 10.0 Reverse Auctions

CCG reserves the right to conduct the reverse auction 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.

**Bidders shall be allowed to participate in Reverse auction as per following criteria hence bidders are advised to quote their most competitive rates while submitting the bids to avoid disqualification from participation in Reverse Auction.**

**Reverse Auction shall be as per the below approach:**

No of bidders allowed to participate in RA process shall be: Total No of bidders on whom tender would be split PLUS 2 more bidders

**Illustrative example:** Total no of qualified bidders is 10 & tender needs to split amongst 4 bidders.

PLUS 2 means (04 + 02 = 06) means lowest 6 bidders i.e., L1 to L6 bidders would be allowed in the RA process. Balance, H1 to H4 bidders would not be allowed in the RA process.

In case – Total no of qualified bidders is equal to or less than the **PLUS 2** number, all qualified bidders shall be allowed in the RA process.

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**Illustrative example:** Total no of qualified bidders is 4 & tender needs to split amongst 2 bidders. PLUS 2 means (02 + 02 = 04), so all 4 qualified bidders would be allowed in the RA process

**Illustrative example:** Total no of qualified bidders is 3 & tender would be awarded to single party only. PLUS 2 means (01 + 02 = 03), so all 3 qualified bidders would be allowed in the RA process

### 11.0 Award Decision

DISCOM 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 3.0. 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 7.2.1. The decision to place purchase order/LOI solely depends on CCG on bidder qualification & cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that CCG may deem relevant.

CCG reserves the right to split the order quantity wise/Line item wise among **3-4 Nos of Bidders**. All bidders are advised to quote their most competitive rates against each line item. However, CCG reserves the right to adjust the splitting as per bidders' participation/qualification/any other unforeseen condition in tender.

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

DISCOM reserves the right to modify splitting ratio based on successful bidders' turnover irrespective of it's ranking as per the business requirement.

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

### 12.0 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 Items – Price Bid (Annexure I)
2. Technical Specifications (Annexure II)
3. Special Conditions of Contract (Clause 13.1)
4. Submission of Bid Documents (Clause 5.0)
5. Acceptance Form for Participation in Reverse Auction (Annexure VI)
6. General Conditions of Contract (Annexure VII)

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### 13.0 Post Award Contract Administration

#### 13.1 Special Conditions of Contract

1. The Rate Contract shall be valid for a period of 1 year from the placement of the Contract. Release Order (RO) shall be placed as per the requirement of respective TP Odisha DISCOM. Prices shall remain as FIRM throughout the RC period.
2. Prices shall be on FOR Basis, inclusive of Transit Insurance/ Packing & Forwarding charges and shall be inclusive of unloading & stacking at DISCOM site / store locations.
3. BA shall submit applicable PBG as per GCC within 21 days of issuance of RC. PBG applicable shall be 5% of contract value. PBG submitted, shall be released after completion of applicable guarantee period plus one month.  
Performance Bank Guarantee for MSME registered in the State of Odisha shall be 25% of the value normally prescribed.
4. Guarantee period shall be 24 months from the date of last supplies made under the contract.
5. BA shall submit GTP/ Drawing within 07 days from issuance of rate contract. If drawing is not approved by competent authority due to document shortfall or any changes are suggested, vendor has to resubmit new drawing/GTP/documents within 03 days of such intimation. BA shall offer for prototype inspection within 15 days of issuance of approved Drawings/GTP (if applicable). In case BA does not get necessary approvals for issuance of manufacturing clearances /CAT-A within mentioned / mutually agreed timelines, then CCG/TP Odisha DISCOMs reserve the right to cancel issued rate contract / release order and also reserve the right to forfeit EMD/PBG.
6. Release Orders (ROs) shall be issued in a lot-wise manner considering transportation compatibility and logistics feasibility. As far as practicable, DISCOM shall facilitate ROs for full/partial truck-load movement and/or quantities as mutually agreed between the DISCOM and the BA. However, the quantity and lot size of each RO shall remain at the sole discretion of the DISCOM.
7. Delivery Period shall be 45 Days from date of receipt of release order / Manufacturing Clearance, whichever is later.
8. Payment Terms: 100% payment within 60 days of submission of error-free Invoice complete in all respects.  
However, for MSME the payment cycle shall be 45 days.
9. Pre-dispatch inspection, MDCC and LD shall be applicable as per GCC and shall be coordinated by TP Odisha DISCOMs.
10. TP Odisha DISCOMs reserves right to short close the issued Release Order / Rate contract, in case of any quality issues.
11. Any change in statutory taxes, duties and levies during the contract period shall be borne by respective TP Odisha DISCOM. However, in case of delay in supply owing to reasons not attributable to TP Odisha DISCOM, any increase in total liability shall be passed on the Bidder, whereas any benefits arising owing to such statutory variation in taxes and duties shall be passed on TP Odisha DISCOMs.
12. For the DISCOMs where requirement has not been currently provided against some of the line items, the discovered rates shall remain same across pan Odisha. In case requirement against any line item arises within the contract period, same rates may be extended to other DISCOMs.

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13. In case of discrepancies between GCC & SCC, the clauses mentioned under SCC (Special Conditions of Contract) shall supersede GCC.
14. All other terms and conditions of Original Tender TPCODL/CCG/24-25/1000009524, GCC-Supply, Corrigendum, Pre-Bid Query Responses, Post bid discussions and accepted deviations (if any) shall be applicable.
15. For Drawing/GTP submission & approval processes (as applicable), coordination must be done with Central Engineering & Quality Group of TP Odisha DISCOMs.

Mr. Yashobanta Rout, CEQG

Mob +91 9560856551

Email: Yashobanta.Rout@tpcentralodisha.com

16. Contact details for inspection of material:

Mr. Chandan Nayak, Centralized Quality Group,

Mob. +91 9861104310

Email: Chandan.Nayak2@tpcentralodisha.

### 13.2 Drawing Submission and Approval

As per SCC, Clause number 13.1

### 13.3 Payment Terms

As per SCC, Clause number 13.1

### 14.0 Climate Change

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. Please refer attached Environment Policy and Sustainability Policy (Annexure–X).

### 15.0 Ethics

TP DISCOMs are ethical organizations bound by Tata Code of Conduct. As a policy we lay 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.

DISCOM 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 for more information. For details, refer link: <https://www.tata.com/about-us/tata-code-of-conduct>

Any ethical concerns can be reported to contacts given in the following link: <https://www.tpcentralodisha.com/corporate/ethics>

### 16.0 Specification and standards

As per Annexure II

### 17.0 General Condition of Contract

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

### 18.0 Safety Policy and Safety Terms & Conditions

Annexure VIII attached along with this tender.

### 19.0 Tata Code of Conduct

Annexure IX attached along with this tender.

### 20.0 Environment & Sustainability Policy

Annexure X attached along with this tender.

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**ANNEXURE-I : Price Schedule**

S. No.	Item Description*	Unit	Qty	HSN / SAC Code	Unit Price (Rs./ Unit)	GST (Rs/ Unit)	All Inclusive Unit Rate (Rs.)	Total All Inclusive Value (Rs.)
A	B	C	D	E	F	G	H=(F+G)	(D x H)
1	A	HG Fuse (33KV 200A, 3 Pole 50Hz) with PI	Set	70				
	B	HG Fuse (11KV 400A, 3 Pole 50Hz) with PI	Set	50				
	C	HG Fuse (11KV 200A, 3 Pole 50Hz) with PI	Set	2,370				
	D	HG Fuse (11 KV 200A, 2 Pole 50Hz) with PI	Set	186				
	<b>Lot Size -1 (Total 1A+1B+1C+1D)</b>		Set	<b>2676</b>				
2	A	DO Fuse (11KV 200A, 3 Pole 50Hz)	Set	6,100				
	<b>Lot Size-2 (Total of 2A)</b>		Set	<b>6100</b>				
3	A	DO Fuse (11KV 200A, 3 Pole 50 Hz) with Clamp Fitting	Set	2,000				
	B	DO Fuse (11KV 200A, 1 Pole 50 Hz) with Clamp Fitting	Set	5,450				
	<b>Lot Size-3 (Total 3A+3B)</b>		Set	<b>7450</b>				
<b>All inclusive Total Price (Rs.) - Total of Lot 1 +Lot 2 +Lot 3</b>								

*\*Mandatory to quote in all line items (If Applicable)*

**NOTE:**

- The bids will be evaluated commercially on Individual Line Item basis. The price shall be FIRM for the entire contract period.
- The unit price to be entered in column "F" of above table is unit price of the tendered item and exclusive of GST.
- All itemized prices are to be quoted on FOR basis at TPCODL Store -Cuttack or Bhubaneswar, TPWODL Store-Burla, Sambalpur, TPNODL Store- Sovarampur, Balia, Balasore, Odisha, and TPSODL Store-Berhampur, Odisha should be inclusive of freight, insurance, loading & unloading, handling charges and any other charges which may be applicable.
- Issuance of Release Orders (RO) shall be done by respective DISCOMs as per their requirement.
- The material shall be delivered as per the location captured in the release order.
- The bidders are advised to quote prices strictly in the above format. Failing to do so, bids are liable for rejection. Also, mentioning "extra/inclusive"/"other conditions" in any of the column may lead for rejection of the price bid.
- No cutting/ overwriting in the prices is permissible.
- The quantity mentioned above are for evaluation purpose only and may vary as per actual site requirement.

**[Signature & Stamp of Bidder]**

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**ANNEXURE-II : Technical Specification**

***\*Attached separately with this Tender***

**[Signature & Stamp of Bidder]**

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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 specifically mentioned in this schedule, the tender shall be **deemed** to confirm the 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:**

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**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.)*

<b>S. No.</b>	<b>Particulars</b>	<b>Remarks</b>
1.	Prices firm or subject to variation (If variable indicate the price variation clause with the ceiling if applicable)	Firm / Variable
2.	Price Inclusive of transit insurance	Yes / No
3.	Delivery Clause acceptable	Yes / No
4.	Guarantee clause acceptable	Yes / No
5.	Terms of payment acceptable	Yes / No
6.	Performance Bank Guarantee acceptable	Yes / No
7.	Liquidated damages clause acceptable	Yes / No
8.	Validity (180 days) (From the date of opening of bid)	Yes / No
9.	Inspection during stage of manufacture	Yes / No
10.	Covered under Small Scale and Ancillary Industrial Undertaking Act 1992	Yes / No (If Yes, indicate, SSI Reg'n No.)

***Seal of the Bidder:***

***Signature:***

***Name:***

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**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:**

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### **ANNEXURE VI : 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, CCG 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. CCG 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. CCG will make every effort to make the bid process transparent. However, the award decision by CCG would be final and binding on the supplier.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of CCG, 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 CCG.
6. In case of intranet medium, CCG shall provide the infrastructure to bidders. Further, CCG 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.
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 DISCOM site / store.
10. The prices submitted by a bidder during the auction event shall be binding on the bidder.
11. No requests for event time extension of auction event shall be considered by CCG.
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 & Stamp of Bidder]**

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### ANNEXURE VII : General Conditions of Contract

*Attached Separately with Tender*

### ANNEXURE VIII : Safety Policy and Safety Terms & Conditions

*Attached Separately with Tender*

### ANNEXURE IX : Tata Code of Conduct

*Attached Separately with Tender*

Also Refer: <https://www.tata.com/about-us/tata-code-of-conduct>

### ANNEXURE X : Environment & Sustainability Policy

*Attached Separately with Tender*



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#### ANNEXURE XI : Authorization Letter Format

(To be presented by the authorized person at the time of opening of Bid on the letter head of Bidder and should be signed by an Authorized Signatory with Name and Seal of the Company)

#### **Chief - Central Contracts Group**

Tata Power Odisha DISCOMs  
Plot-29 Anuj Building  
Satya Nagar Bhubaneswar

**SUB: Tender for** .....

**Ref: Tender No.**..... **dated.** .....

Dear Sir,

This has reference to your above Tender. Mr. / Miss / Mrs. \_\_\_\_\_ is hereby authorized to attend the bid opening of the above Tender on \_\_\_\_\_ on behalf of our organization.

The specimen signature is attested below:

Specimen Signature of Representative

Signature of Authorizing Authority  
Name & Designation of Authorizing Authority

**NOTE: This Authorization letter is to be carried at the time of Bid Opening**

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**ANNEXURE XII : Undertaking on Conflict of Interest**

To  
The Cheif- CCG & Engineering  
Centralized Contract Group- TP ODISHA DISCOMs  
1st Floor, Anuj Building, Plot no. 29, Satyanagar,  
Bhubaneswar- 751007

**UNDERTAKING ON CONFLICT OF INTEREST WITH ANY OTHER BIDDERS OF THIS TENDER**

**Ref. Tender Doc: TPCODL / CCG / 26-27 / 1000009524**

**Tender Description : One Year Rate Contract for Supplying HG Fuse & DO Fuse Sets at TPCODL, TPNODL, TPSODL & TPWODL**

Dear Sir

This is to certify that --

1. Apart from our bid in the name of M/s ..... we have not participated in this tender through any other name who is/are related firm ( where owner, Partner, Director are same or holding stake in such firm).
2. In case such relation is found out between our firm and any other firm who has participated in this tender, TP Odisha DISCOMs reserves right to disqualify bids from all such related firms or cancel Purchase Order placed on such firm/firms.

**[Signature & Stamp of Bidder]**

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**ANNEXURE XIII : Format for Acceptance of Clauses, T&C of the NIT**

**Format for unconditional acceptance of Clauses, Terms and Conditions of Tender Document,**

**Technical Specification and applicable GCC**

To  
The Cheif-CCG & Engineering  
Centralized Contract Group- TP ODISHA DISCOMs  
1st Floor, Anuj Building, Plot no. 29, Satyanagar,  
Bhubaneswar, Odisha - 751007

**Sub:** Declaration on Tender Terms and Conditions

**Ref. Tender Doc:** TPCODL / CCG / 26-27 / 1000009524

**Tender Description :** One Year Rate Contract for Supply of HG Fuse & DO Fuse Sets at TPCODL, TPNODL, TPSODL & TPWODL

Dear Sir

This is to inform that I, the undersigned (Proprietor / Partner /Director/ Authorized Signatory of M/s \_\_\_\_\_ ) am authorized to sign this declaration and execute the tender bid submission process on behalf of our Organization.

I have carefully read and understood all the terms and conditions of the entire Tender Document, applicable GCC alongwith the Technical Specification and hereby convey my acceptance of the same unless specifically mentioned in Annexure IV of this tender document.

It is also understood that furnishing of any false information/fabricated documents would lead to rejection of my tender at any stage.

With warm regards,

[Signature & Stamp of Bidder]

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**ANNEXURE XIV : Instructions to Bidder for participation in ARIBA System**

**Step 1:** Eligible and Interested bidder shall send an email to Package Owner (Ref. Clause 4.0 for details) attaching duly signed and stamped letter on Bidder's letterhead, with following details, expressing their intent to bid against above tender:

Sr 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. of authorized person	
vi)	E-mail Id to which online ARIBA link to be sent	
vii)	Tender Fee details (Amount / NEFT-RTGS UTR No / Date) (Ref sec 1.2)	
viii)	GST No. of bidder	
ix)	MSME Certificate (if applicable)	
x)	Postal address of bidder for return of EMD BG	

E-mail has to be sent to [sniyogi@tpsouthernodisha.com](mailto:sniyogi@tpsouthernodisha.com) with copy to [sony.jha@tpcentralodisha.com](mailto:sony.jha@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 e-mail address from ARIBA system.

**Step 5:** In this e-mail online link as “[Click Here](#)” shall be there to access the event & participate in the tender.

**Step 6:** First time bidders need to **Sign Up** for accessing the event. Create User Name and password as mentioned in Sign Up page. A 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 events, may LOGIN using same User Name and password. (Bidder's user name and password for their other customer shall not be applicable for TPCODL / TPWODL / TPNODL / TPSODL)

**Step 7:** Post login, access the RFQ



## Centralized Contract Group (CCG)

Format No. –  
Revision No. –  
Eff. Date –

Tender no. TPCODL / CCG / 24-25 / 1000009524

**Step 8:** After review and downloading of all documents click on **“Review Pre-requisites”**

**Step 9:** Review and accept **“Bidder Agreement”**.

**Step 10:** Tender document (PDF) can be downloaded from relevant section in Ariba Portal

**Step 11: Technical Bid Submission:** Bidder has to attach pdf version of technical bid in section relevant to technical bid submission. Uploading any price related information in this section shall lead to bidder rejection.

**Step 12: Price Bid Submission:** Price schedule as attached in relevant section has to be downloaded. Price and tax details to be filled-in as per the format. PDF version of duly filled price bid to be uploaded in relevant section. Price bid to be mandatorily signature & sealed by authorized person on Company letter head. For Price Bid put all the unit price and taxes and duties in provided field. Put "NA" in not applicable field.

**Step 13:** After successfully uploading Techno commercial offer and price part, click - **“Submit Entire Response”**

## STANDARD TECHNICAL SPECIFICATION COVER SHEET

Specification No. : ENG-EHV-1027-R-01

Specification Name: Specification for 33kV 200A HG Fuse

Revision	Prepared By	Reviewed By	Reviewed By	Reviewed By	Reviewed By	Recommended By	Approved By	Released By
	TPSODL, CEG	TPNODL	TPNODL	TPWODL	TPSODL	CEG		
R-01	Pallavi Routray	Udit Sankar Das	Milan Maity	Santosh Patro	Sandeep Sourav	K. Neelgandan		
ENG-EHV-1027	Susavan Biswas	Satya Prasad Nayak	Shantapriya Jena	Jyotiprakash Mohanty			Shailendra Kumar Jaiswal	Shirish Sharad Dikay

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20. SCHEDULE OF DEVIATIONS

**Revision-2 (R02) Details**

Sl. No	Clause No.	Parameter	Description
1	4. 19 (b)	Make of Post Insulator	Detailed make list, TTR of insulator from CPRI & ERDA labs, Silicon content >40% & material of top & bottom fittings
2	4. 19 (e)	PCD	76 mm
3	4. 19 (h)	Dia of weather shed (mm)	≥95
4	4. 19 (i)	Thickness of weather shed	3 mm
5	4. 19 (k)	Dry arc distance	170 mm
6	4. 22	Details of Arcing Horn	Use of Cu Casting grade M6 Fly/Butterfly Nut.
7	4. 23	Rising Unit	Detailed Dimension HG Body & Riser has been mentioned
8	4. 25	Connector Socket	Use of 1 no Cu Bimetallic Socket & 1 no M12 Brass Nut, bolt & washer.
9	4. 27	Name Plate specification	1 no of Al (03 to 0.4 mm thk) Name plate will be required for each phase
10	4. 28	Detail of Packaging included	Packing shall be properly packed in a covered wooden box. Only 1 HG fuse is allowed in 1 packing.
11	5.1	Construction of Insulator	HTV silicon rubber injection sealing included, Details of metal end fitting crimping has been included.
12	6	Marking	Modification in Nameplate & marking specification.
13	7.2	Type Test on post Insulator	Including Mechanical failing load, salt fog test, Chemical composition, Galvanization, Visible discharge, Dry & wet frequency flashover voltage test along with other existing tests.
14	7.3	Acceptance Test	Including Temperature Rise test along with existing tests.
15	8	Test Certificates	CPRI/ERDA/Other govt owned NABL Accredited Lab as per relevant IS for Complete Set of HG Fuse.
16	21	Drawing of HG Fuse	Attached
17	Annexure-I	Drawing of Butterfly Nut & bolt	Attached
18	Annexure-I	Packaging	Attached

**1. SCOPE:**

This specification covers the design, manufacture, testing and supply of 33 KV, 200 A, HG Fuse sets for outdoor installations to be used for 33/11 KV Substations. Scope also includes transportation & unloading of poles at store / site.

**2. APPLICABLE STANDARDS:**

The equipment covered by this specification shall unless otherwise stated, be designed, manufactured and tested in accordance with the latest editions of the following Indian, International Standards and shall conform to the regulations of the local authorities:

IS 9385	High voltage fuses
IS 2062	Hot Rolled Medium and High Tensile Structural Steel
IS 209	Zinc Igot
IS 2629	Recommended Practice for Hot-Dip Galvanizing of Iron and Steel
IS 2633	Methods for testing uniformity of coating of zinc coated articles
IS 4759	Hot-dip zinc coatings on structural steel and other allied products
IEC 62231	Composite station post insulators for substations with a.c. voltages greater than 1 000 V up to 245 kV – Definitions, test methods and acceptance criteria

**3. CLIMATIC CONDITIONS OF THE INSTALLATION:**

1	Maximum ambient temperature	50 deg C
2	Max. Daily average ambient temp	35 deg C
3	Min Ambient Temperature	0 deg C
4	Maximum Humidity	95%
5	Average Annual Rainfall	150cm
6	Average No. of rainy days per annum	120
7	Altitude above MSL not exceeding	1000m
8	Wind Speed	300 Km/hr
9	Earthquakes of an intensity in horizontal direction	Equivalent to seismic acceleration of 0.3g
10	Earthquakes of an intensity in vertical direction	Equivalent to seismic acceleration of 0.15g (g being acceleration due to gravity)

TPSODL/TPNODL/TPWODL/TPCODL service area has heavy saline conditions along the coast and High cyclonic Intensity winds with speed upto 300 Kmph. The atmosphere is generally laden with mild acid and dust in suspension during the dry months and is subjected to fog in cold months.

**4. GENERAL TECHNICAL REQUIREMENTS:**

SL.NO	TECHNICAL PARTICULARS	DESIRED VALUE
1	Name of Manufacturer	To be Specified by Bidder
2	Works Address	To be Specified by Bidder
3	Manufacturers Type	To be Specified by Bidder
4	Standard according to which the HGF are manufactured	IS 9385-1980 (Part-II) amended up to date, IEC 62231/60273
5	Rated Voltage	33 kV
6	System voltage	36 KV
7	Rated Frequency	50 Hz
8	Lightning Impulse Withstand Voltage Positive & Negative Polarity (1.2/50 micro sec wave)	
a.	Across the Isolating distance	195 kV (Peak)
b.	To Earth & Between Poles	170 kV (Peak)
9	Dry Flashover Voltage	95 kV
10	Power frequency Puncture withstand Voltage	1.3 times of actual dry flashover voltage
11	Impulse Withstand Voltage (Switch in position)	170 kV (Peak)
12	Visible Discharge Voltage	27 kV RMS
13	1 Min. Power Frequency Withstand Voltage (Dry & Wet)	
a.	Across the Isolating distance	100 kV (rms)
b.	To Earth & Between Poles	75 kV (rms)
14	Temperature Rise	Within permissible limit as per IS 9385-1980 (Part-II) amended up to date  Note – Ambient + 65 degree
15	Outdoor/Indoor	Outdoor
16	Type of mounting	Horizontal
17	Vertical clearance from top of insulator cap to mounting Channel	508 mm (Minimum)
18	Continuous current Rating	200 Amp
19	Post Insulator Details	
a.	Applicable Standard	IEC 62231 amended up to date
b.	Make of Post Insulator	<ul style="list-style-type: none"> <li>Sun Kouture / Scenario / Yamuna Power/ Navitas Insulators/ Deccan Electricals/ Prime /Adinath.</li> <li>Complete type test reports of post insulator from CPRI/ERDA labs only and shall be provided during tender evaluation process.</li> <li>Year of manufacturing to be properly engraved on the Insulator.</li> <li>Silicon content shall be &gt;40% make of Si: High voltage grade Silicone rubber Wacker-Germany, Dow Corning- USA</li> <li>Material of Top &amp; bottom end Metal fittings shall be SGCI/Forged Steel/SGL.</li> </ul>
c.	Minimum failing load	10 kN
d.	CD of Post Insulator (min.)	900 mm
e.	PCD	76 mm
f.	Number of Insulators per Pole/phase	2 Nos.
g.	Diameter of FRP Rod (min.)	34 mm

I	Dia of weather shed	≥95
J	Thickness of weather shed	3 mm (min)
K	Dry arc distance	170 mm (min)
20	Total weight of Horn Gap Fuse	To be Specified by Bidder (For 1 Set)
21	Details of Arcing Horn	<ul style="list-style-type: none"> <li>• 1 SWG (7.62 mm) dia. Solid copper rod with silver plated provided with screwing arrangement on the fuse carrier made of copper for fixing fuse wire (Total length – 995 mm) along with fly/butterfly nut.</li> <li>• Coating thickness – min 15 microns.</li> <li>• Material: EC Grade Copper.</li> </ul>
22	Fuse Element Holder along with fly/butterfly nut	<ul style="list-style-type: none"> <li>• Material: Copper Casting with silver plating. Brass M6 butterfly Bolt, nut and washer to be used for fixing with arcing horn.</li> <li>• Dimension of fly/butterfly nut is mentioned in the Annexure 1</li> </ul>
23	Riser Unit (250 mm height total)	<p><b>Horn Gap Body:</b></p> <ul style="list-style-type: none"> <li>• The shape of connectors made out of Copper Casting with silver plating;</li> <li>• Copper Riser dimension – 50X50X5 mm, length – 170 mm &amp; height – 80 mm;</li> <li>• Silver plating thickness – 15 micron (min);</li> <li>• Nut &amp; bolt for current carrying parts – M10 brass;</li> <li>• Nut &amp; bolt for non-current carrying parts – M10 GI;</li> </ul> <p><b>Horn Gap Riser:</b></p> <ul style="list-style-type: none"> <li>• 170 mm height G.I Riser made of 25 NB medium gauge G.I pipe welded with 2 nos. of G.I flat of <b>40 mm x 5 mm</b> of both ends.</li> <li>• Non-Current carrying Part – M10 GI</li> </ul>
24	Size of Base Channel	<ul style="list-style-type: none"> <li>• Make – TATA Steel/ SAIL/ Jindal/ RINL (Billet with rerolling not allowed).</li> <li>• 75mmx40mmx4.8mm Length Min. 500 mm (mounting slotted hole 18X36 mm c/c 250 mm)</li> <li>• Hot Dip Galvanised M12 Bolt, nut, washer &amp; spring washer shall be provided for fixing between Polymeric Post Insulator &amp; GI Base Channel.</li> <li>• Min zinc coating thickness is 100 Microns</li> </ul>
25	Connectors Socket/Lug	<ul style="list-style-type: none"> <li>• One no. of solderless copper bimetallic socket shall be used at both ends suitable for 232 sq. mm AAC conductor.</li> <li>• 1 no of M12 Barss Nuts, Bolt &amp; Washer to be provided on each side of HG Fuse.</li> </ul>
26	All ferrous parts shall be hot dipped Galvanized as per IS.2633/1972 (Latest Amendment), IS 2629/1985 (1st. Revision), & all nonferrous parts should be duly electroplated with silver.	<ul style="list-style-type: none"> <li>• Ferrous part coating thickness – 100 microns (min)</li> <li>• Non-Ferrous part coating thickness – 15 microns (min)</li> </ul>
27	Marking/Engraving	<ul style="list-style-type: none"> <li>• Marking details – <ul style="list-style-type: none"> <li>i) Property of TPSODL/TPNODL/TPWODL/TPCODL</li> <li>ii) Serial No.</li> <li>iii) Manufacture’s name or trademark</li> <li>iv) Month &amp; Year of Manufacturing.</li> </ul> </li> </ul>

		<p>v) RO No with date</p> <p>vi) Rated normal current in Amp</p> <ul style="list-style-type: none"> <li>• 1 no of Name plate will be required for each phase.</li> <li>• Name plate details:             <ol style="list-style-type: none"> <li>1. Material – Al</li> <li>2. Thickness – 0.3 to 0.4 mm</li> <li>3. Background – Black;</li> </ol> </li> </ul>
28	Packing	<p>Packing shall be properly done in a covered wooden Box. Proper separator shall be provided between the HG Fuse Poles otherwise polymer housing may get damaged during transportation.</p> <p>OR</p> <p>Only 1 HG fuse pole is allowed in 1 packing.</p>

**5. GENERAL CONSTRUCTIONS/REQUIREMENTS:**

The H.G. Fuses shall have adjustable arcing horns made of solid copper rod having 8.32 mm dia. The horns shall be fitted with screwing devices with fly nuts for fixing and tightening the fuse wire. It shall have robust terminal connector of size as per clause no.4 made of copper duly silver plated with one number of M12 brass bolts and double nuts with flat brass washers. The connector should be capable of connecting crimp able conductor up to 148-232 Sq.mm. size (AAAC) with bimetallic solder less sockets. The H.G. Fuse Set shall be suitable for horizontal mounting on Sub-station structures. All metal (ferrous) parts shall be hot dip galvanized and polished.

**5.1. Insulators:**

The post type insulators used for the Horn Gap Fuse Unit shall conform to IEC: IEC 62231 (amended up to date) in all respects with regard to mechanical and electrical requirements. The electrical characteristics of the insulators shall be as follows:

1	System Voltage	33 kV
2	Lightning Impulse Withstand Voltage in kV	170
3	Power Frequency Withstand Voltage in kV (Dry)	100
4	Power Frequency Withstand Voltage in kV (Wet)	75
5	Power Frequency Flashover Voltage in kV (Dry)	135
6	Power Frequency Flashover Voltage in kV (Wet)	95
7	Creepage Distance in mm	900
	PCD in mm	76
8	FRP Rod Dia. in mm	34

- The type of insulation materials, metal fittings, Creepage distance, protected Creepage distance, tensile strength compression strength, torsion strength and cantilever strength shall be as provided in the guaranteed technical particulars in clause no.19.

- The bidder shall furnish the type test certificate of the post insulators from their manufacturer for reference & scrutiny. For type, test reports refer cl no 7.3.
- Any fittings accessories or equipment which may not have been specifically mentioned in this specification but which are usually necessary in equipment shall be deemed included in the specification and shall be supplied by the Bidder without extra charge. All equipment shall be complete in all details whether such details are mentioned in the specification or not.
- Metal end fitting crimping : Metal End Fittings shall be fitted on the Rod by crimping process, prior to moulding of Sheds, to ensure better sealing & avoiding water ingress. That means First metal end fitting crimping is completed, and thereafter HTV silicone rubber injection/over moulding is carried out. They shall be connected to the rod by means of a Controlled Compression technique.
- The manufacturer shall have in process Acoustic emission arrangement to ensure that there is no damage to the core (FRP) during crimping. This verification shall be in- process and done on each insulator. The strength of bond between Metal Fitting & Sheath shall be more than the tearing strength of the polymer material. In order to have adequate gripping between FRP rod and metal fitting, the manufacturer should properly define parameters for inner surface roughness of metal fittings. There shall not be any sharp protrusions present in the metal end fittings which may result into pockets for retention of water & pollutants.
- HTV Over moulded Silicon rubber Injection: Over moulded HTV silicone rubber injection sealing shall be provided at the metal fitting interface to ensure proper bonding, minimize moisture ingress, and improve long-term sealing reliability. The sealing shall stick to both housing and metal end fitting with silicone rubber compound. The sealing must be humidity proof and durable with time.

#### 6. MARKING:

Below parameters should be embossed on Aluminum sheet of thickness 0.3 to 0.4 mm. It should be riveted on MS channel of HG Fuse: Property of TPCODL/ TPNODL/ TPWODL/ TPSODL. One no of Name plate will be required for each phase. Background: Black

1. Rated Voltage
2. Manufacturer's Name
3. Month/Year of Manufacture
4. Serial Number
5. PO no.
6. Rated normal current in Amps.

Product marking shall be permitted through laser printing on the metal end fitting for proper identification and traceability

#### 7. TESTS CERTIFICATE:

The bidder shall be required to submit complete set of the following test reports along with the offer: -

**7.1. TYPE TESTS ON COMPLETE SET:**

1. Impulse voltage dry test
2. Power frequency voltage dry test
3. Power frequency voltage wet test
4. Temperature rise test.

**7.2. TYPE TESTS ON POST INSULATORS:**

1. Dry & Wet Lightning impulse withstand voltage test.
2. Dry & Wet power frequency test
3. Mechanical failing load test
4. Radio interference test
5. Recovery of hydrophobicity test
6. Salt fog test: On insulators for 1000 hr as per IEC
7. Chemical composition test for silicon content (Min 40%)
8. Galvanization test
9. Brittle fracture resistance test.
10. Visible discharge voltage
11. Dry & Wet frequency Flashover Voltage Test.

**7.3. ACCEPTANCE TESTS:**

1. Power frequency voltage dry test.
2. Tests to prove satisfactory operation.
3. Dimension check.
4. Galvanization test.
5. Temperature rise

**7.4. ROUTINE TESTS:**

1. Power frequency voltage dry test.
2. Tests to prove satisfactory operation.
3. Dimension check.
4. Galvanization test.

**8. TESTS:**

The Bidder shall furnish the type test certificates for the tests as mentioned above as per the corresponding standards. All the tests shall be conducted at CPRI/ERDA/Other govt owned NABL

Accredited Lab as per relevant IS for Complete Set of HG Fuse. Type tests should have been conducted during the period not exceeding 5 years from the date of opening the bid. In the event of any discrepancy in the test reports, i.e. any test report not acceptable, same shall be carried out without any cost implication to TPSODL/TPNODL/TPWODL/TPCODL.

#### **9. PRE DISPATCH INSPECTION:**

The material shall be subject to inspection by a duly authorized representative of the TPSODL/TPNODL/TPWODL/TPCODL. Inspection may be made at any stage of manufacture at the discretion of the purchaser and the equipment, if found unsatisfactory as to workmanship or material, the same is liable to rejection. Bidder shall grant free access to the places of manufacture to TPSODL/TPNODL/TPWODL/TPCODL's representatives at all times when the work is in progress. Inspection by the TPSODL/TPNODL/TPWODL/TPCODL or its authorized representatives shall not relieve the bidder of his obligation of furnishing equipment in accordance with the specifications. Material shall be dispatched after specific MDCC (Material Dispatch Clearance Certificate) is issued by TPSODL/TPNODL/TPWODL/TPCODL.

Following documents shall be sent along with material:

- a) Test reports
- b) MDCC issued by TPSODL/TPNODL/TPWODL/TPCODL
- c) TPSODL/TPNODL/TPWODL/TPCODL Invoice in duplicate d) Packing list
- d) Drawings & catalogue
- e) Guarantee / Warrantee card
- f) Delivery Challan
- g) Other Documents (as applicable).

#### **10. INSPECTION AFTER RECEIPT AT STORES:**

The material received at TPSODL/TPNODL/TPWODL/TPCODL store will be inspected for acceptance and shall be liable for rejection, if found different from the reports of the pre-dispatch inspection and one copy of the report shall be sent to Engineering department.

#### **11. GUARANTEE:**

Bidder shall stand guarantee towards design, materials, workmanship & quality of process/manufacturing of items under the contract for due and intended performance of the same, as an

integrated product delivered under this contract. In the event any defect is found by the Company up to a period of 12 months from the date of commissioning or 24 months from the date of last supplies made under the contract, whichever is earlier, supplier shall be liable to undertake to replace/rectify such defects at his own costs. within mutually agreed timeframe, and to the entire satisfaction of the Company, failing which the Company will be at liberty to get it replaced/rectified at supplier's risks and costs and recover all such expenses plus the Company's own charges (@ 20% of expenses incurred), from the supplier or from the "Security cum Performance Deposit" as the case may be.

**12. PACKING:**

Supplier shall ensure that all material covered by this specification shall be prepared for rail/road transport (local equipment) and be packed in such a manner as to protect it from damage in transit. The bidder shall provide instructions regarding handling and storage precautions to be taken at site.

The packing shall be of sufficient strength to withstand rough handling during transit, storage at site and subsequent handling in the field.

**13. TENDER SAMPLE:**

Not Applicable.

**14. QUALITY CONTROL:**

The bidder shall submit QAP indicating the various stages of inspection, the tests and checks which will be carried out on the material of construction, components during manufacture and bought out items and fully assembled component and equipment after finishing. As part of the plan, a schedule for stage and final inspection within the parameters of the delivery schedule shall be furnished. The Purchaser's engineer or its nominated representative shall have free access to the manufacturer's/sub-supplier's works to carry out.

**15. TESTING FACILITIES:**

Supplier/ Manufacturer shall have adequate in-house testing facilities for carrying out all routine tests & acceptance tests as per relevant Indian standards.

**16. MANUFACTURING ACTIVITIES:**

The successful bidder shall submit the bar chart for various manufacturing activities clearly elaborating each stage, with quantity. This bar chart should be in line with the Quality assurance plan submitted with the offer.

**17. SPARES, ACCESSORIES AND TOOLS:**

Not Applicable.

**18. DRAWINGS AND DOCUMENTS:**

Following drawings and documents shall be submitted in line with the requirement of Tender



**Specification No:** ENG-EHV-1027-R-01

**Specification Name:** Technical Specification for 33kV 200A HG Fuse

specifications:

- a) Clause wise compliances of the technical specification
- b) Type Test Report Complete Set of HG Fuse.

**19. GUARANTEED TECHNICAL PARTICULARS:**

Bidder shall have to comply & submit clause wise compliance of this specification.

**20. SCHEDULE OF DEVIATIONS:**

**(TO BE ENCLOSED WITH TECHNICAL BID)**

All deviations from this specification shall be set out by the Bidders, clause by Clause in this schedule. Unless specifically mentioned in this Schedule, the tender shall be deemed to confirm the purchaser's specifications:

Sl. No.	Clause No.	Details of deviation with justifications

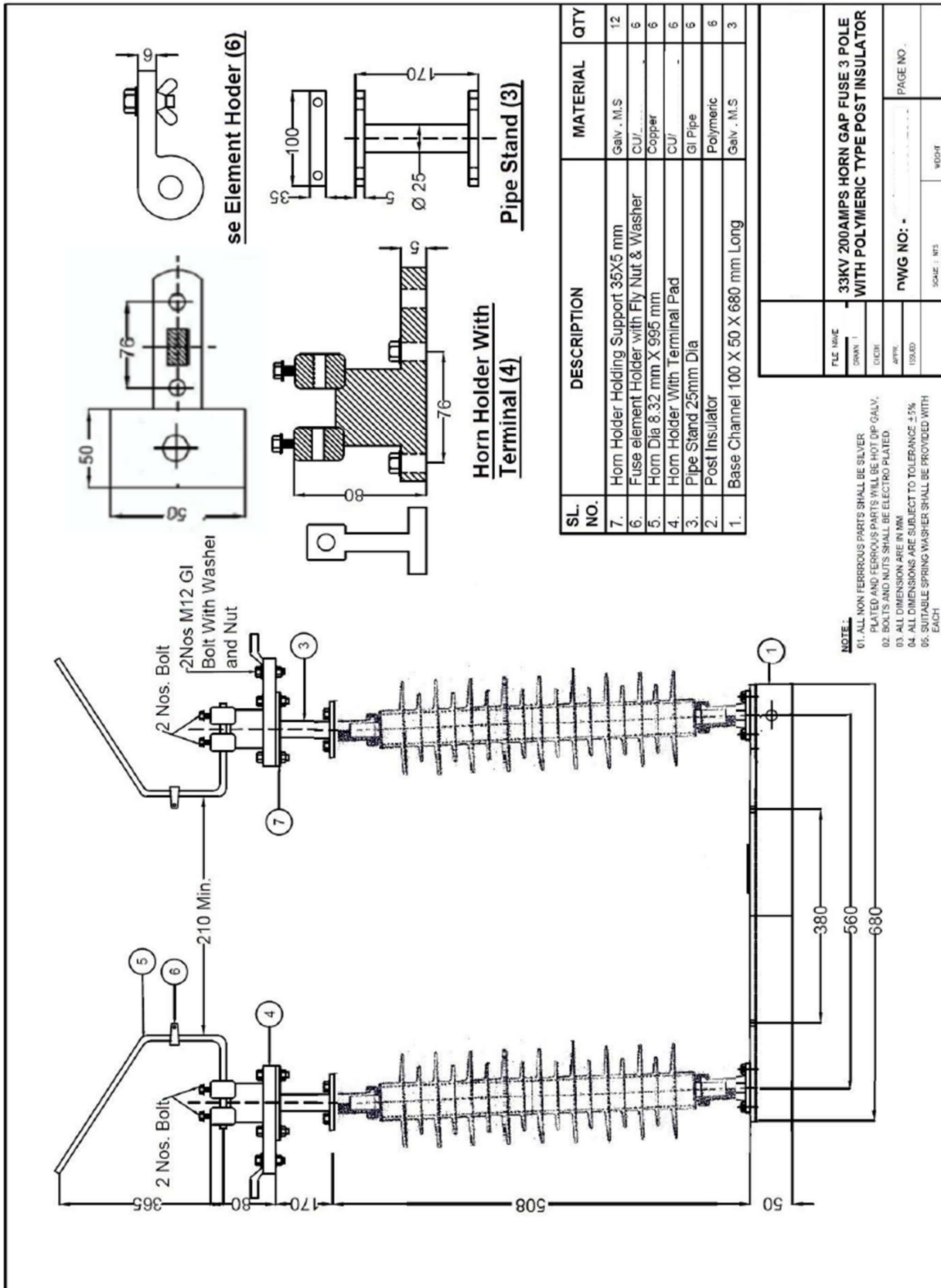
We confirm that there are no deviations apart from those detailed above.

Seal of the Company:

Signature

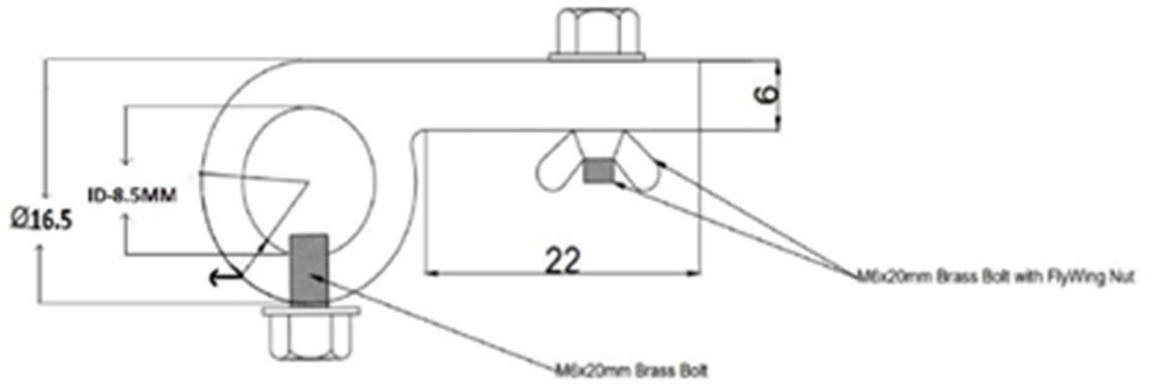
Designation

21. Drawing (Reference for Tender purpose only): Drawing is for indicative purpose only.



Annexure-I

Fly nut/ Butter fly nut details Drawing:



## STANDARD TECHNICAL SPECIFICATION COVER SHEET

Specification No. : ENG-HV-2021-R-02

Specification Name: Specification for 11kV 200A HG Fuse

Revision	Prepared By	Reviewed By	Reviewed By	Reviewed By	Reviewed By	Recommended By	Approved By	Released By
	TPSODL, CEG	TPNODL	TPNODL	TPWODL	TPSODL	CEG		
R-02	Pallavi Routray	Udit Sankar Das	Milan Maity	Santosh Patro	Sandeep Sourav	K. Neelgandan		
	TPSODL	TPCODL	TPNODL	TPWODL				
R-01	Susavan Biswas	Satya Prasad Nayak	Udit Sankar Das	Santosh Patro			Shailendra Kumar Jaiswal	Shirish Sharad Dikay
ENG-HV-2021	Susavan Biswas	Satya Prasad Nayak	Shantapriya Jena	Jyotiprakash Mohanty			Shailendra Kumar Jaiswal	Shirish Sharad Dikay

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**Revision-2 (R02) Details**

Sl. No	Clause No.	Parameter	Description
1	4. 19 (b)	Make of Post Insulator	Detailed make list, TTR of insulator from CPRI & ERDA labs, Silicon content >40% & material of top & bottom fittings
2	4. 19 (e)	PCD	57 mm
3	4. 19 (h)	Dia of weather shed (mm)	≥95
4	4. 19 (i)	Thickness of weather shed	3 mm
5	4. 19 (k)	Dry arc distance	170 mm
6	4. 22	Details of Arcing Horn	Use of Cu Casting grade M6 Fly/Butterfly Nut.
7	4. 23	Rising Unit	Detailed Dimension HG Body & Riser has been mentioned
8	4. 25	Connector Socket	Use of 1 no Cu Bimetallic Socket & 1 no M12 Brass Nut, bolt & washer.
9	4. 27	Name Plate specification	1 no of Al (03 to 0.4 mm Thk) Name plate will be required for each phase
10	4. 28	Detail of Packaging included	Packing shall be properly done in a covered wooden box. Proper separator shall be provided between the HG Fuse Poles otherwise polymer housing may get damaged during transportation. OR Only 1 HG fuse pole is allowed in 1 packing.
11	5.1	Construction of Insulator	HTV silicon rubber injection sealing included, Details of metal end fitting crimping has been included.
12	6	Marking	Modification in Nameplate & marking specification.
13	7.2	Type Test on post Insulator	Including Mechanical failing load, salt fog test, Chemical composition, Galvanization, Visible discharge, Dry & wet frequency flashover voltage test along with other existing tests.
14	7.3	Acceptance Test	Including Temperature Rise test along with existing tests.
15	8	Test Certificates	CPRI/ERDA/Other govt owned NABL Accredited Lab as per relevant IS for Complete Set of HG Fuse.
16	21	Drawing of HG Fuse	Attached
17	Annexure-I	Drawing of Butterfly Nut & bolt	Attached



**Specification No:** ENG-HV-2021-R-02

**Specification Name:** Technical Specification for 11kV 200A HG Fuse

### 1. SCOPE:

This specification covers the design, manufacture, testing and supply of 11 KV 200 A, HG Fuse sets for outdoor installations to be used for 33/11 KV Substations. Scope also includes transportation & unloading of poles at store / site.

### 2. APPLICABLE STANDARDS:

The equipment covered by this specification shall unless otherwise stated, be designed, manufactured and tested in accordance with the latest editions of the following Indian, International Standards and shall conform to the regulations of the local authorities:

IS 9385	High voltage fuses
IS 2062	Hot Rolled Medium and High Tensile Structural Steel
IS 209	Zinc Igot
IS 2629	Recommended Practice for Hot-Dip Galvanizing of Iron and Steel
IS 2633	Methods for testing uniformity of coating of zinc coated articles
IS 4759	Hot-dip zinc coatings on structural steel and other allied products
IEC 62231	Composite station post insulators for substations with a.c. voltages greater than 1 000 V up to 245 kV – Definitions, test methods and acceptance criteria
IEC 60273	Characteristic of Indoor and Outdoor Post Insulators for Systems with Nominal Voltages Greater than 1000 V

### 3. CLIMATIC CONDITIONS OF THE INSTALLATION:

1	Maximum ambient temperature	50 deg C
2	Max. Daily average ambient temp	35 deg C
3	Min Ambient Temperature	0 deg C
4	Maximum Humidity	95%
5	Average Annual Rainfall	150cm
6	Average No. of rainy days per annum	120
7	Altitude above MSL not exceeding	1000m
8	Wind Speed	300 Km/Hr
9	Earthquakes of an intensity in horizontal direction	Equivalent to seismic acceleration of 0.3g
10	Earthquakes of an intensity in vertical direction	Equivalent to seismic acceleration of 0.15g (being acceleration due to gravity)

TPSODL/TPNODL/TPWODL/TPCODL service area has heavy saline conditions along the coast and High cyclonic Intensity winds with speed upto 300 Kmph. The atmosphere is generally laden with mild acid and dust in suspension during the dry months and is subjected to fog in cold months.

**4. GENERAL TECHNICAL REQUIREMENTS:**

SL. NO.	TECHNICAL PARTICULARS	DESIRED VALUE
1	Name of Manufacturer	To be Specified by Bidder
2	Works Address	To be Specified by Bidder
3	Manufacturers Type	To be Specified by Bidder
4	Standard according to which the HGF are manufactured	IS 9385-1980 (Part-II) amended up to date, IEC 62231/60273
5	Rated Voltage	11 kV
6	System voltage	12 KV
7	Rated Frequency	50 Hz
8	Lightning Impulse Withstand Voltage Positive & Negative Polarity (1.2/50 micro sec wave)	
a.	Across the Isolating distance	85 kV (Peak)
b.	To Earth & Between Poles	75 kV (Peak)
9	Dry Flashover Voltage	85 kV
10	Power frequency Puncture withstand Voltage	1.3 times of actual dry flashover voltage
11	Impulse Withstand Voltage (Switch in position)	75 kV (Peak)
12	Visible Discharge Voltage	9kV RMS
13	1 Min. Power Frequency Withstand Voltage (Dry & Wet)	
a.	Across the Isolating distance	32 kV
b.	To Earth & Between Poles	28 kV
14	Temperature Rise	Within permissible limit as per IS 9385-1980 (Part-II) amended up to date  Note – Ambient + 65 degree
15	Outdoor/Indoor	Outdoor
16	Type of mounting	Horizontal
17	Vertical clearance from top of insulator cap to mounting Channel	254mm (Minimum)
18	Continuous current Rating	200 Amp
19	Post Insulator Details	
a.	Applicable Standard	IEC 62231 amended up to date
b.	Make of Post Insulator	<ul style="list-style-type: none"> <li>• Sun Kouture / Scenario / Yamuna Power/ Navitas Insulators/ Deccan Electricals/ Prime /Adinath.</li> <li>• Complete type test reports of post insulator from CPRI/ERDA labs only and shall be provided during tender evaluation process.</li> <li>• Year of manufacturing to be properly engraved on the Insulator.</li> <li>• Silicon content shall be &gt;40% make of Si: High voltage grade Silicone rubber Wacker-Germany, Dow Corning- USA</li> <li>• Material of Top &amp; bottom end Metal fittings shall be SGCI/Forged Steel/SGI.</li> </ul>
c.	Minimum failing load	5 kN
d.	CD of Post Insulator (min.)	320 mm

e.	PCD	57 mm
f.	Number of Insulators per Pole/phase	2 Nos.
g.	Diameter of FRP Rod (min.)	24 mm
h.	Dia of weather shed (mm)	≥95
i.	Thickness of weather shed	3 mm (min)
K	Dry arc distance	170 mm (min)
20	Total weight of Horn Gap Fuse	To be Specified by Bidder (For 1 Set)
21	Details of Arcing Horn	<ul style="list-style-type: none"> <li>• 1 SWG (7.62 mm) dia. Solid copper rod with silver plated provided with screwing arrangement on the fuse carrier made of copper for fixing fuse wire (Total length – 635 mm) along with fly/butterfly nut.</li> <li>• Coating thickness – min 15 microns.</li> <li>• Material: EC Grade Copper.</li> </ul>
22	Fuse Element Holder along with Fly/ Butterfly nut	<ul style="list-style-type: none"> <li>• Material: Copper Casting with silver plating. Brass M6 butterfly Bolt, nut and washer to be used for fixing with arcing horn.</li> <li>• Dimension of fly/butterfly nut is mentioned in the Annexure 1.</li> </ul>
23	Riser Unit (150 mm height total)	<p><b>Horn Gap Body:</b></p> <ul style="list-style-type: none"> <li>• The shape of connectors made out of Copper Casting with silver plating;</li> <li>• Copper Riser dimension – 40 X 40 X 5 mm, length – 120 mm &amp; height – 50 mm;</li> <li>• Silver plating thickness – 15 microns (min);</li> <li>• Nut &amp; bolt for current carrying parts – M10 brass;</li> <li>• Nut &amp; bolt for non-current carrying parts – M10 GI;</li> </ul> <p><b>Horn Gap Riser:</b></p> <ul style="list-style-type: none"> <li>• 100 mm height G.I Riser made of 19 NB medium gauge G.I pipe welded with 2 nos. of G.I flat of <b>30 mm x 5 mm</b> of both ends.</li> <li>• Non-Current carrying Part – M10 GI</li> </ul>
24	Size of Base Channel	<ul style="list-style-type: none"> <li>• Make – TATA Steel/ SAIL/ Jindal/ RINL (Billet with rerolling not allowed).</li> <li>• 75mmx40mmx4.8mm Length Min. 500 mm (mounting slotted hole 18 X 36 mm c/c 250 mm)</li> <li>• Hot Dip Galvanised M12 Bolt, nut, washer &amp; spring washer shall be provided for fixing between Polymeric Post Insulator &amp; GI Base Channel.</li> <li>• Min zinc coating thickness is 100 Microns</li> </ul>
25	Connectors Socket/Lug	<ul style="list-style-type: none"> <li>• One no. of solderless copper bimetallic socket shall be used at both ends suitable for 100 sq. mm AAC conductor.</li> <li>• 1 no of M12 Barss Nuts, Bolt &amp; Washer to be provided on each side of HG Fuse.</li> </ul>
26	All ferrous parts shall be hot dipped Galvanized as per IS.2633/1972 (Latest Amendment), IS 2629/1985 (1st.	<ul style="list-style-type: none"> <li>• Ferrous part coating thickness – 100 microns (min)</li> <li>• Non-Ferrous part coating thickness – 15 microns (min)</li> </ul>



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Specification Name: Technical Specification for 11kV 200A HG Fuse

	Revision), & all nonferrous parts should be duly electroplated with silver.	
27	Marking (Engraving/ Embossing)	<ul style="list-style-type: none"> <li>• Marking details –</li> <li>i) Property of TPSODL/TPNODL/TPWODL/TPCODL</li> <li>ii) Serial No.</li> <li>iii) Manufacture’s name or trademark</li> <li>iv) Month &amp; Year of Manufacturing.</li> <li>v) RO No with date</li> <li>vi) Rated normal current in Amp</li> <li>• 1 no of Name plate will be required for each phase.</li> <li>• Name plate details:               <ol style="list-style-type: none"> <li>1. Material – Al</li> <li>2. Thickness – 0.3 to 0.4 mm</li> <li>3. Background – Black;</li> </ol> </li> </ul>
28	Packing	<p>Packing shall be properly done in a covered wooden box. Proper separator shall be provided between the HG Fuse Poles otherwise polymer housing may get damaged during transportation.</p> <p style="text-align: center;">OR</p> <p>Only 1 HG fuse pole is allowed in 1 packing.</p>

**5. GENERAL CONSTRUCTIONS/REQUIREMENTS:**

The H.G. Fuses shall have adjustable arcing horns made of solid copper rod having 7.62 mm dia. The horns shall be fitted with screwing devices with fly nuts for fixing and tightening the fuse wire. It shall have robust terminal connector of size as per clause no.4 made of copper duly silver plated with one number of M12 brass bolts and double nuts with flat brass washers. The connector should be capable of connecting crimp able conductor up to 100 Sq.mm. size (AAAC) with bimetallic solder less sockets. The H.G. Fuse Set shall be suitable for horizontal mounting on Sub-station structures. All metal (ferrous) parts shall be hot dip galvanized and polished.

**5.1. Insulators:**

The post type insulators used for the Horn Gap Fuse Unit shall conform to IEC: IEC 62231 (amended up to date) in all respects with regard to mechanical and electrical requirements. The electrical characteristics of the insulators shall be as follows:

1	System Voltage	11 kV
2	Lightning Impulse Withstand Voltage in kV	75
3	Power Frequency Withstand Voltage in kV (Dry)	70
4	Power Frequency Withstand Voltage in kV (Wet)	35
5	Power Frequency Flashover Voltage in kV (Dry)	75
6	Power Frequency Flashover Voltage in kV (Wet)	40
7	Creepage Distance in mm	320
	PCD in mm	57
8	FRP Rod Dia. in mm	24



**Specification No:** ENG-HV-2021-R-02

**Specification Name:** Technical Specification for 11kV 200A HG Fuse

- The type of insulation materials, metal fittings, Creepage distance, protected Creepage distance, tensile strength compression strength, torsion strength and cantilever strength shall be as provided in the guaranteed technical particulars in clause no.19.
- The bidder shall furnish the type test certificate of the post insulators from their manufacturer for reference & scrutiny. For type, test reports refer cl no 7.3.
- Any fittings accessories or equipment which may not have been specifically mentioned in this specification but which are usually necessary in equipment shall be deemed included in the specification and shall be supplied by the Bidder without extra charge. All equipment shall be complete in all details whether such details are mentioned in the specification or not.
- Metal end fitting crimping: Metal End Fittings shall be fitted on the Rod by crimping process, prior to moulding of Sheds, to ensure better sealing & avoiding water ingress. That means First metal end fitting crimping is completed, and thereafter HTV silicone rubber injection/over moulding is carried out. They shall be connected to the rod by means of a Controlled Compression technique.
- The manufacturer shall have in process Acoustic emission arrangement to ensure that there is no damage to the core (FRP) during crimping. This verification shall be in- process and done on each insulator. The strength of bond between Metal Fitting & Sheath shall be more than the tearing strength of the polymer material. In order to have adequate gripping between FRP rod and metal fitting, the manufacturer should properly define parameters for inner surface roughness of metal fittings. There shall not be any sharp protrusions present in the metal end fittings which may result into pockets for retention of water & pollutants.
- HTV Over moulded Silicon rubber Injection: Over moulded HTV silicone rubber injection sealing shall be provided at the metal fitting interface to ensure proper bonding, minimize moisture ingress, and improve long-term sealing reliability. The sealing shall stick to both housing and metal end fitting with silicone rubber compound. The sealing must be humidity proof and durable with time.

#### 6. MARKING:

Below parameters should be embossed on Aluminum sheet of thickness 0.3 to 0.4 mm. It should be riveted on MS channel of HG Fuse: Property of TPCODL/ TPNODL/ TPWODL/ TPSODL. One no of Name plate will be required for each phase. Background: Black

1. Rated Voltage
2. Manufacturer's Name
3. Month/Year of Manufacture
4. Serial Number
5. PO no.
6. Rated normal current in Amps.

Product marking shall be permitted through laser printing on the metal end fitting for proper identification and traceability

## 7. TESTS CERTIFICATE:

The bidder shall be required to submit complete set of the following test reports along with the offer: -

### 7.1. TYPE TESTS ON COMPLETE SET:

1. Impulse voltage dry test
2. Power frequency voltage dry test
3. Power frequency voltage wet test
4. Temperature rise test.

### 7.2. TYPE TESTS ON POST INSULATORS:

1. Dry & Wet Lightning impulse withstand voltage test.
2. Dry & Wet Power frequency test
3. Mechanical failing load test
4. Radio interference test
5. Recovery of hydrophobicity test
6. Salt fog test: On insulators for 1000 hr as per IEC
7. Chemical composition test for silicon content (Min 40%)
8. Galvanization test
9. Brittle fracture resistance test.
10. Visible discharge voltage
11. Dry & Wet Frequency Flashover Voltage Test.

### 7.3. ACCEPTANCE TESTS:

1. Power frequency voltage dry test.
2. Tests to prove satisfactory operation.
3. Dimension check.
4. Galvanization test.
5. Temperature rise

### 7.4. ROUTINE TESTS:

1. Power frequency voltage dry test.
2. Tests to prove satisfactory operation.
3. Dimension check.
4. Galvanization test.



**Specification No:** ENG-HV-2021-R-02

**Specification Name:** Technical Specification for 11kV 200A HG Fuse

## 8. TESTS CERTIFICATES:

The Bidder shall furnish the type test certificates for the tests as mentioned above as per the corresponding standards. All the tests shall be conducted at CPRI/ERDA/Other govt owned NABL Accredited Lab as per relevant IS for Complete Set of HG Fuse. Type tests should have been conducted during the period not exceeding 5 years from the date of opening the bid. In the event of any discrepancy in the test reports, i.e. any test report not acceptable, same shall be carried out without any cost implication to TPSODL/TPNODL/TPWODL/TPCODL.

## 9. PRE DISPATCH INSPECTION:

The material shall be subject to inspection by a duly authorized representative of the TPSODL/TPNODL/TPWODL/TPCODL. Inspection may be made at any stage of manufacture at the discretion of the purchaser and the equipment, if found unsatisfactory as to workmanship or material, the same is liable to rejection. Bidder shall grant free access to the places of manufacture to TPSODL/TPNODL/TPWODL/TPCODL's representatives at all times when the work is in progress. Inspection by the TPSODL/TPNODL/TPWODL/TPCODL or its authorized representatives shall not relieve the bidder of his obligation of furnishing equipment in accordance with the specifications. Material shall be dispatched after specific MDCC (Material Dispatch Clearance Certificate) is issued by TPSODL/TPNODL/TPWODL/TPCODL.

Following documents shall be sent along with material:

- a) Test reports
- b) MDCC issued by TPSODL/TPNODL/TPWODL/TPCODL
- c) TPSODL/TPNODL/TPWODL/TPCODL Invoice in duplicate d) Packing list
- d) Drawings & catalogue
- e) Guarantee / Warrantee card
- f) Delivery Challan
- g) Other Documents (as applicable).

## 10. INSPECTION AFTER RECEIPT AT STORES:

The material received at TPSODL/TPNODL/TPWODL/TPCODL store will be inspected for acceptance and shall be liable for rejection, if found different from the reports of the pre-dispatch inspection and one copy of the report shall be sent to Engineering department.

## 11. GUARANTEE:

Bidder shall stand guarantee towards design, materials, workmanship & quality of process/ manufacturing of

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items under the contract for due and intended performance of the same, as an integrated product delivered under this contract. In the event any defect is found by the Company up to a period of 12 months from the date of commissioning or 24 months from the date of last supplies made under the contract, whichever is earlier, supplier shall be liable to undertake to replace/rectify such defects at his own costs. within mutually agreed timeframe, and to the entire satisfaction of the Company, failing which the Company will be at liberty to get it replaced/rectified at supplier's risks and costs and recover all such expenses plus the Company's own charges (@ 20% of expenses incurred), from the supplier or from the "Security cum Performance Deposit" as the case may be.

**12. PACKING:**

Supplier shall ensure that all material covered by this specification shall be prepared for rail/road transport (local equipment) and be packed in such a manner as to protect it from damage in transit. The bidder shall provide instructions regarding handling and storage precautions to be taken at site.

The packing shall be of sufficient strength to withstand rough handling during transit, storage at site and subsequent handling in the field.

**13. TENDER SAMPLE:**

Not Applicable.

**14. QUALITY CONTROL:**

The bidder shall submit QAP indicating the various stages of inspection, the tests and checks which will be carried out on the material of construction, components during manufacture and bought out items and fully assembled component and equipment after finishing. As part of the plan, a schedule for stage and final inspection within the parameters of the delivery schedule shall be furnished. The Purchaser's engineer or its nominated representative shall have free access to the manufacturer's/sub-supplier's works to carry out.

**15. TESTING FACILITIES:**

Supplier/ Manufacturer shall have adequate in-house testing facilities for carrying out all routine tests & acceptance tests as per relevant Indian standards.

**16. MANUFACTURING ACTIVITIES:**

The successful bidder shall submit the bar chart for various manufacturing activities clearly elaborating each stage, with quantity. This bar chart should be in line with the Quality assurance plan submitted with the offer.

**17. SPARES, ACCESSORIES AND TOOLS:**

Not Applicable.

**18. DRAWINGS AND DOCUMENTS:**



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**Specification Name:** Technical Specification for 11kV 200A HG Fuse

Following drawings and documents shall be submitted in line with the requirement of Tender specifications:

- a) Clause wise compliances of the technical specification
- b) Type Test Report Complete Set of HG Fuse.

**19. GUARANTEED TECHNICAL PARTICULARS:**

Bidder shall have to comply & submit clause wise compliance of this specification.

**20. SCHEDULE OF DEVIATIONS:**

**(TO BE ENCLOSED WITH TECHNICAL BID)**

All deviations from this specification shall be set out by the Bidders, clause by Clause in this schedule. Unless specifically mentioned in this Schedule, the tender shall be deemed to confirm the purchaser's specifications:

Sl. No.	Clause No.	Details of deviation with justifications

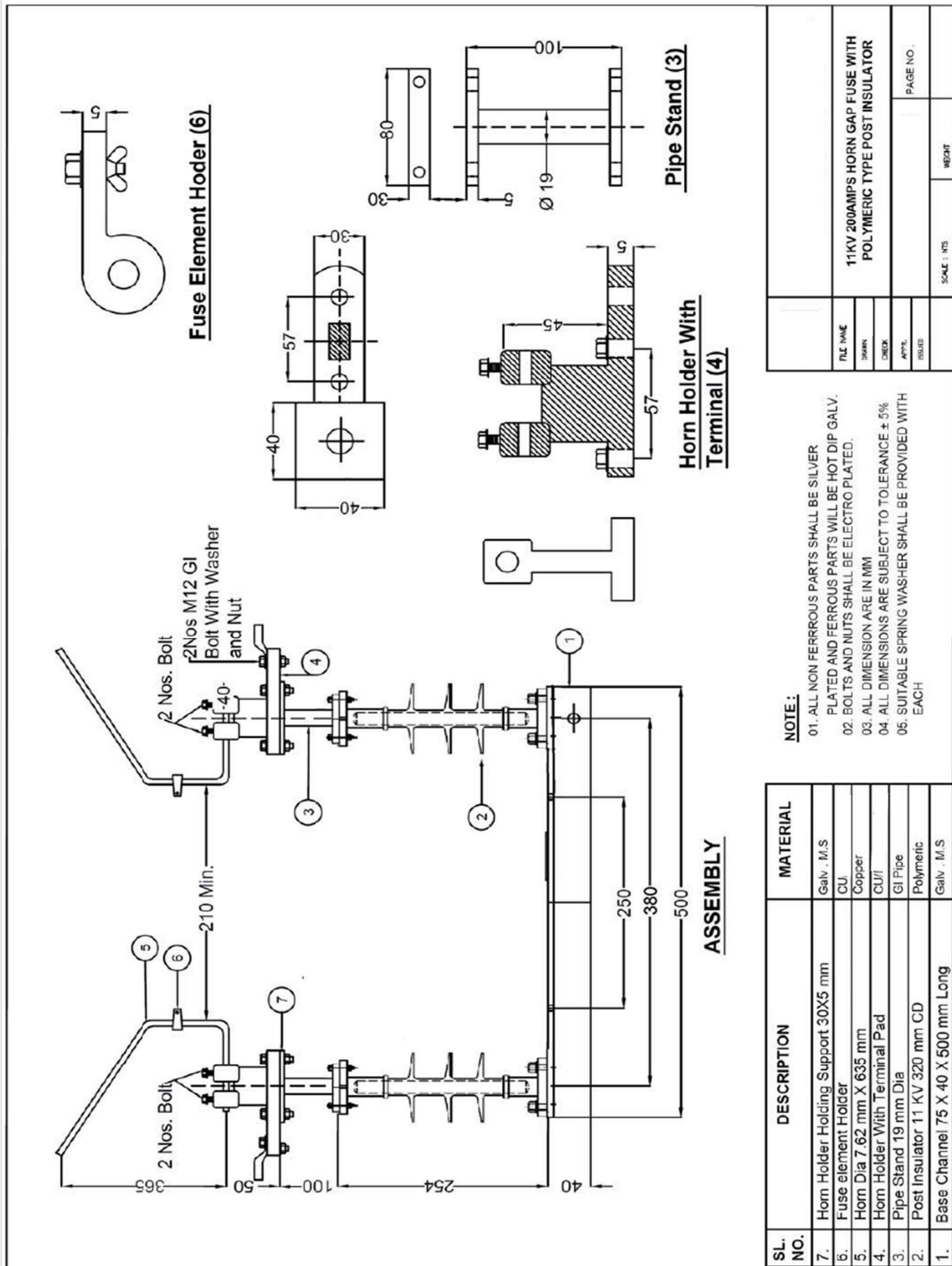
We confirm that there are no deviations apart from those detailed above.

Seal of the Company:

Signature

Designation

21. Drawing (Reference for Tender purpose only): Drawing is for indicative purpose only.



SL. NO.	DESCRIPTION	MATERIAL
7.	Horn Holder Holding Support 30X5 mm	Galv. M/S
6.	Fuse element Holder	CU
5.	Horn Dia 7.62 mm X 635 mm	Copper
4.	Horn Holder With Terminal Pad	CU/I
3.	Pipe Stand 19 mm Dia	GI Pipe
2.	Post Insulator 11 KV 320 mm CD	Polymtic
1.	Base Channel 75 X 40 X 500 mm Long	Galv. M/S

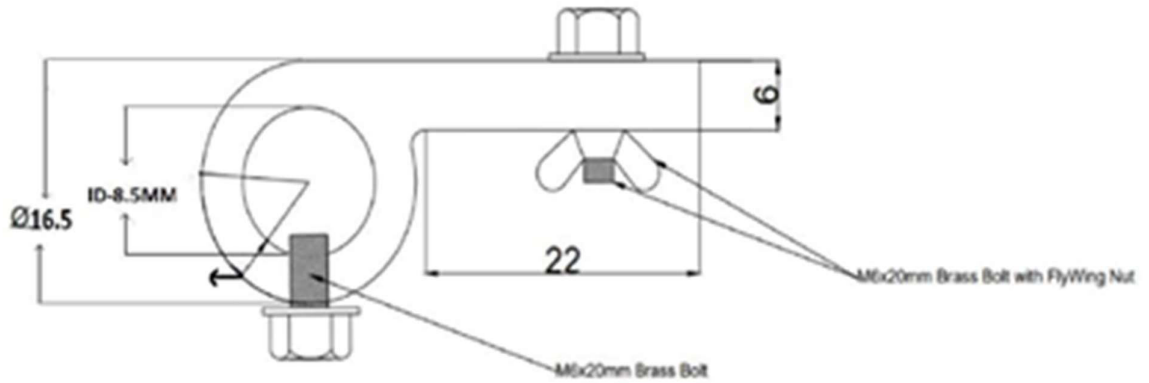
**NOTE:**


01. ALL NON FERROUS PARTS SHALL BE SILVER PLATED AND FERROUS PARTS WILL BE HOT DIP GALV.
02. BOLTS AND NUTS SHALL BE ELECTRO PLATED.
03. ALL DIMENSION ARE IN MM
04. ALL DIMENSIONS ARE SUBJECT TO TOLERANCE ± 5%
05. SUITABLE SPRING WASHER SHALL BE PROVIDED WITH EACH

FILE NAME	11KV 200AMPS HORN GAP FUSE WITH POLYMERIC TYPE POST INSULATOR
DRAWN	
CHECK	
APPL.	
ISSUED	
SCALE: 1:15	HEET
PAGE NO.	

Annexure-I


Fly nut/ Butter fly nut details Drawing:



 <b>TP SOUTHERN ODISHA</b> DISTRIBUTION LIMITED <small>(A Joint Venture of Tata Power and Government of Odisha)</small>	<b>TP SOUTHERN ODISHA DISTRIBUTION LIMITED</b>		F01-(09.07.04)	Revision: 03
	Document No: ENG-HV-2029		Release Date-15.05.2026	
<b>Name of the Specification</b>		<b>Technical Specification for 11kV 200Amp 2P HG Fuse with Porcelain post Insulator</b>		
<b>Prepared By</b>	<b>Reviewed By</b>	<b>Approved By</b>	<b>Issued By</b>	
<b>Sandeep Saurav</b>	<b>Shailendra Kumar Jaiswal</b>	<b>Ashok Saraf</b>	<b>Dnyaneshwar Ramchandra Dharmadhikari</b>	

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<b>Prepared By</b>	<b>Reviewed By</b>	<b>Approved By</b>	<b>Issued By</b>	
Sandeep Saurav	Shailendra Kumar Jaiswal	Ashok Saraf	Dnyaneshwar Ramchandra Dharmadhikari	

### 1. SCOPE:

This specification covers the design, manufacture, testing and supply of 11 KV 200 A 2P HG Fuse sets for outdoor installations. Scope also includes transportation & unloading of poles at store / site.

### 2. APPLICABLE STANDARDS:


The equipment covered by this specification shall unless otherwise stated, be designed, manufactured and tested in accordance with the latest editions of the following Indian, International Standards and shall conform to the regulations of the local authorities:

IS 9385	High voltage fuses
IS 2062	Hot Rolled Medium and High Tensile Structural Steel
IS 209	Zinc Ingot
IS 2629	Recommended Practice for Hot-Dip Galvanizing of Iron and Steel
IS 2633	Methods for testing uniformity of coating of zinc coated articles
IS 4759	Hot-dip zinc coatings on structural steel and other allied products
IEC 62231	Composite station post insulators for substations with a.c. voltages greater than 1 000 V up to 245 kV – Definitions, test methods and acceptance criteria
IEC 60273	Characteristic of Indoor and Outdoor Post Insulators for Systems with Nominal Voltages Greater than 1000 V

### 3. CLIMATIC CONDITIONS OF THE INSTALLATION:


1	Maximum ambient temperature	50 deg C
2	Max. Daily average ambient temp	35 deg C
3	Min Ambient Temperature	0 deg C
4	Maximum Humidity	95%
5	Average Annual Rainfall	150cm
6	Average No. of rainy days per annum	120
7	Altitude above MSL not exceeding	1000m
8	Wind Speed	300 Km/hr
9	Earthquakes of an intensity in horizontal direction	Equivalent to seismic acceleration of 0.3g
10	Earthquakes of an intensity in vertical direction	Equivalent to seismic acceleration of 0.15g (being acceleration due to gravity)

TPSODL service area has heavy saline conditions along the coast and High cyclonic Intensity winds with speed upto 300 Kmph. The atmosphere is generally laden with mild acid and dust in suspension during the dry months and is subjected to fog in cold months.


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Sandeep Saurav		Shailendra Kumar Jaiswal	Ashok Saraf	Dnyaneshwar Ramchandra Dharmadhikari

#### 4. GENERAL TECHNICAL REQUIREMENTS:

SL. NO.	TECHNICAL PARTICULARS	DESIRED VALUE
1	Name of Manufacturer	To be Specified by Bidder
2	Works Address	To be Specified by Bidder
3	Manufacturers Type	To be Specified by Bidder
4	Standard according to which the HGF are manufactured	IS 9385-1980 (Part-II) amended up to date, IEC 62231/60273
5	Rated Voltage	11 kV
6	System voltage	12 KV
7	Rated Frequency	50 Hz
8	Lightning Impulse Withstand Voltage Positive & Negative Polarity (1.2/50 micro sec wave)	
a.	Across the Isolating distance	85 kV (Peak)
b.	To Earth & Between Poles	75 kV (Peak)
9	Dry Flashover Voltage	85 kV
10	Power frequency Puncture withstand Voltage	1.3 times of actual dry flashover voltage
11	Impulse Withstand Voltage (Switch in position)	75 kV (Peak)
12	Visible Discharge Voltage	9kV RMS
13	1 Min. Power Frequency Withstand Voltage (Dry & Wet)	
a.	Across the Isolating distance	32 kV
b.	To Earth & Between Poles	28 kV
14	Temperature Rise	Within permissible limit as per IS 9385-1980 (Part-II) amended up to date <b>Note – Ambient + 65 degree</b>
15	Outdoor/Indoor	Outdoor
16	Type of mounting	Horizontal
17	Vertical clearance from top of insulator cap to mounting Channel	254mm (Minimum)
18	Continuous current Rating	200 Amp
19	<b>Post Insulator Details</b>	
a.	Applicable Standard	IEC 62231 amended up to date
b.	Make of Post Insulator	<ul style="list-style-type: none"> <li>• <b>Make:</b> - Sun Kouture / Scenario / Yamuna Power/ Navitas Insulators/ Deccan Electricals/ Prime /Adinath.</li> <li>• Complete type test reports of post insulator from CPRI/ERDA labs only and shall be provided during tender evaluation process.</li> <li>• Year of manufacturing to be properly engraved on the Insulator.</li> <li>• Silicon content shall be &gt;40% make of Si: High voltage grade Silicone rubber Wacker-Germany, Dow Corning- USA</li> <li>• Material of Top &amp; bottom end Metal fittings shall be SGCI/Forged Steel/SGI.</li> </ul>
c.	Minimum failing load	5 KN
d.	CD of Post Insulator (min.)	320 mm

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	Document No: ENG-HV-2029		Release Date-15.05.2026	
<b>Name of the Specification</b>		<b>Technical Specification for 11kV 200Amp 2P HG Fuse with Porcelain post Insulator</b>		
<b>Prepared By</b>		<b>Reviewed By</b>		<b>Approved By</b>
<b>Sandeep Saurav</b>		<b>Shailendra Kumar Jaiswal</b>		<b>Ashok Saraf</b>
				<b>Issued By</b>
				<b>Dnyaneshwar Ramchandra Dharmadhikari</b>

e.	PCD	57 mm
f.	Number of Pole	2P
g.	Number of Insulators per Pole/phase	2 Nos.
h.	Diameter of FRP Rod (min.)	24 mm
i.	Dia of weather shed (mm)	≥95
K.	Thickness of weather shed	3 mm (min)
l.	Dry arc distance	170 mm (min)
20	Total weight of Horn Gap Fuse	To be Specified by Bidder (For 1 Set)
21	Details of Arcing Horn	<ul style="list-style-type: none"> <li>• 1 SWG (7.62 mm) dia. Solid copper rod with silver plated provided with screwing arrangement on the fuse carrier made of copper for fixing fuse wire (Total length – 635 mm) along with fly/butterfly nut.</li> <li>• Coating thickness – min 15 microns.</li> </ul>
22	Fuse Element Holder along with Fly/ Butterfly nut	<ul style="list-style-type: none"> <li>• Material: Copper Casting with silver plating. Brass M6 butterfly Bolt, nut and washer to be used for fixing with arcing horn.</li> <li>• Dimension of fly/butterfly nut is mentioned in the Annexure 1.</li> </ul>
23	Riser Unit (150 mm height total)	<p><b>Horn Gap Body:</b></p> <ul style="list-style-type: none"> <li>• The shape of connectors made out of Copper Casting with silver plating;</li> <li>• Copper Riser dimension – 40X40X5 mm, length – 120 mm &amp; height – 50 mm;</li> <li>• Silver plating thickness – 15 micron (min)</li> <li>• Nut &amp; bolt for current caring parts – M10 brass</li> <li>• Nut &amp; bolt for non-current caring parts – M10 GI</li> </ul> <p><b>Horn Gap Riser:</b></p> <ul style="list-style-type: none"> <li>• 100 mm height G.I Riser made of 19 NB medium gauge G.I pipe welded with 2 nos. of G.I flat of <b>30 mm x 5 mm</b> of both ends.</li> <li>• Non-Current carrying Part – M10 GI</li> </ul>
24	Size of Base Channel	<ul style="list-style-type: none"> <li>• Make – TATA Steel/ SAIL/ Jindal/ RINL (Billet with rerolling not allowed).</li> <li>• 75mmx40mmx4.8mm Length Min. 500 mm (mounting slotted hole 18X36 mm c/c 250 mm)</li> <li>• Hot Dip Galvanised M12 Bolt, nut, washer &amp; spring washer shall be provided for fixing between Polymeric Post Insulator &amp; GI Base Channel.</li> <li>• Min zinc coating thickness is 100 Microns</li> </ul>
25	Connectors Socket/Lug	<ul style="list-style-type: none"> <li>• One no. of solderless copper bimetallic socket shall be used at both ends suitable for 100 sq. mm AAAC conductor.</li> <li>• 1 no. of M12 Barss Nuts, Bolt &amp; Washer to be provided on each side of HG Fuse.</li> </ul>
26	All ferrous parts shall be hot dipped Galvanized as per IS.2633/1972 (Latest Amendment), IS 2629/1985 (1st.	<ul style="list-style-type: none"> <li>• Ferrous part coating thickness – 100 micron (min)</li> <li>• Non-Ferrous part coating thickness – 15 micron (min)</li> </ul>

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<b>Prepared By</b>		<b>Reviewed By</b>	<b>Approved By</b>	<b>Issued By</b>
Sandeep Saurav		Shailendra Kumar Jaiswal	Ashok Saraf	Dnyaneshwar Ramchandra Dharmadhikari

	Revision), & all nonferrous parts should be duly electroplated with silver.	
27	Marking (Engraving/ Embossing)	<ul style="list-style-type: none"> <li>• Marking details –</li> <li>i) Property of TPSODL</li> <li>ii) Serial No.</li> <li>iii) Manufacture’s name or trademark</li> <li>iv) Month &amp; Year of Manufacturing.</li> <li>v) RO No with date</li> <li>vi) Rated normal current in Amp</li> <li>• 1 no of Name plate will be required for each phase.</li> <li>• Name plate details:               <ol style="list-style-type: none"> <li>1. Material – Al</li> <li>2. Thickness – 0.3mm (min)</li> <li>3. Background – Black</li> </ol> </li> </ul>
28	Packing	Packing shall be properly done in a covered wooden Box. Proper separator shall be provided between the HG Fuse to avoid damage of polymer housing during transportation.  <p style="text-align: center;">OR</p> Only 1 HG fuse pole is allowed in 1 packing.


## 5. GENERAL CONSTRUCTIONS/REQUIREMENTS:

The H.G. Fuses shall have adjustable arcing horns made of solid copper rod having 7.62 mm dia. The horns shall be fitted with screwing devices with fly nuts for fixing and tightening the fuse wire. It shall have robust terminal connector of size as per clause no.4 made of copper duly silver plated with one number of M12 brass bolts and double nuts with flat brass washers. The connector should be capable of connecting crimp able conductor up to 100 Sq.mm. size (AAAC) with bimetallic solder less sockets. The H.G. Fuse Set shall be suitable for horizontal mounting on structures. All metal (ferrous) parts shall be hot dip galvanized and polished.

### 5.1. Insulators:

The post type insulators used for the Horn Gap Fuse Unit shall conform to IEC: IEC 62231 (amended up to date) in all respects with regard to mechanical and electrical requirements. The electrical characteristics of the insulators shall be as follows:

1	System Voltage	11 kV
2	Lightning Impulse Withstand Voltage in kV	75
3	Power Frequency Withstand Voltage in kV (Dry)	70
4	Power Frequency Withstand Voltage in kV (Wet)	35
5	Power Frequency Flashover Voltage in kV (Dry)	75
6	Power Frequency Flashover Voltage in kV (Wet)	40
7	Creepage Distance in mm	320
	PCD in mm	57
8	FRP Rod Dia. in mm	24

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- The type of insulation materials, metal fittings, Creepage distance, protected Creepage distance, tensile strength compression strength, torsion strength and cantilever strength shall be as provided in the guaranteed technical particulars in clause no.19.
- The bidder shall furnish the type test certificate of the post insulators from their manufacturer for reference & scrutiny. For type, test reports refer cl no 7.3.
- Any fittings accessories or equipment which may not have been specifically mentioned in this specification but which are usually necessary in equipment shall be deemed included in the specification and shall be supplied by the Bidder without extra charge. All equipment shall be complete in all details whether such details are mentioned in the specification or not.
- Metal end fitting crimping: Metal End Fittings shall be fitted on the Rod by crimping process, prior to moulding of Sheds, to ensure better sealing & avoiding water ingress. That means First metal end fitting crimping is completed, and thereafter HTV silicone rubber injection/over moulding is carried out. They shall be connected to the rod by means of a Controlled Compression technique.
- The manufacturer shall have in process Acoustic emission arrangement to ensure that there is no damage to the core (FRP) during crimping. This verification shall be in- process and done on each insulator. The strength of bond between Metal Fitting & Sheath shall be more than the tearing strength of the polymer material. In order to have adequate gripping between FRP rod and metal fitting, the manufacturer should properly define parameters for inner surface roughness of metal fittings. There shall not be any sharp protrusions present in the metal end fittings which may result into pockets for retention of water & pollutants.
- HTV Over moulded Silicon rubber Injection: Over moulded HTV silicone rubber injection sealing shall be provided at the metal fitting interface to ensure proper bonding, minimize moisture ingress, and improve long-term sealing reliability. The sealing shall stick to both housing and metal end fitting with silicone rubber compound. The sealing must be humidity proof and durable with time.

## 6. MARKING:

Below parameters should be embossed/engraved on Aluminum sheet of thickness 0.3mm(min). It should be riveted on Base channel of HG Fuse. One no of Name plate will be required for each phase. Background: Black

1. Property of TPSODL
2. Rated Voltage
3. Manufacturer's Name
4. Month/Year of Manufacture
5. Serial Number
6. PO no.
7. Rated normal current in Amps.

Product marking shall be permitted through laser printing on the metal end fitting for proper identification and traceability.

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## 7. TESTS CERTIFICATE:

The bidder shall be required to submit complete set of the following test reports along with the offer: -

### 7.1. TYPE TESTS ON COMPLETE SET:

1. Impulse voltage dry test
2. Power frequency voltage dry test
3. Power frequency voltage wet test
4. Temperature rise test.

### 7.2. TYPE TESTS ON POST INSULATORS:


1. Dry & Wet Lightning impulse withstand voltage test.
2. Dry & Wet Power frequency test
3. Mechanical failing load test
4. Radio interference test
5. Recovery of hydrophobicity test
6. Salt fog test: On insulators for 1000 hrs as per IEC
7. Chemical composition test for silicon content (Min 40%)
8. Galvanization test
9. Brittle fracture resistance test.
10. Visible discharge voltage
11. Dry & Wet Frequency Flashover Voltage Test.

### 7.3. ACCEPTANCE TESTS:

1. Power frequency voltage dry test.
2. Tests to prove satisfactory operation.
3. Dimension check.
4. Galvanization test.
5. Temperature rise

### 7.4. ROUTINE TESTS:

1. Power frequency voltage dry test.
2. Tests to prove satisfactory operation.
3. Dimension check.
4. Galvanization test.

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## 8. TESTS CERTIFICATES:

The Bidder shall furnish the type test certificates for the tests as mentioned above as per the corresponding standards. All the tests shall be conducted at CPRI/ERDA/Other govt owned NABL Accredited Lab as per relevant IS for Complete Set of HG Fuse. Type tests should have been conducted during the period not exceeding 5 years from the date of opening the bid. In the event of any discrepancy in the test reports, i.e. any test report not acceptable, same shall be carried out without any cost implication to TPSODL.

## 9. PRE-DISPATCH INSPECTION:

The material shall be subject to inspection by a duly authorized representative of the TPSODL. Inspection may be made at any stage of manufacture at the discretion of the purchaser and the equipment, if found unsatisfactory as to workmanship or material, the same is liable to rejection. Bidder shall grant free access to the places of manufacture to TPSODL's representatives at all times when the work is in progress. Inspection by the TPSODL or its authorized representatives shall not relieve the bidder of his obligation of furnishing equipment in accordance with the specifications. Material shall be dispatched after specific MDCC (Material Dispatch Clearance Certificate) is issued by TPSODL.

Following documents shall be sent along with material:


- a) Test reports
- b) MDCC issued by TPSODL
- c) TPSODL Invoice in duplicate
- d) Packing list
- e) Drawings & catalogue
- f) Guarantee / Warrantee card
- g) Delivery Challan
- h) Other Documents (as applicable).

## 10. INSPECTION AFTER RECEIPT AT STORES:

The material received at TPSODL store will be inspected for acceptance and shall be liable for rejection, if found different from the reports of the pre-dispatch inspection and one copy of the report shall be sent to Engineering department.

## 11. GUARANTEE:

Bidder shall stand guarantee towards design, materials, workmanship & quality of process/ manufacturing of

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items under the contract for due and intended performance of the same, as an integrated product delivered under this contract. In the event any defect is found by the Company up to a period of 12 months from the date of commissioning or 24 months from the date of last supplies made under the contract, whichever is earlier. supplier shall be liable to undertake to replace/rectify such defects at his own costs. within mutually agreed timeframe, and to the entire satisfaction of the Company, failing which the Company will be at liberty to get it replaced/rectified at supplier's risks and costs and recover all such expenses plus the Company's own charges (@ 20% of expenses incurred), from the supplier or from the "Security cum Performance Deposit" as the case may be.

**12. PACKING:**

Supplier shall ensure that all material covered by this specification shall be prepared for rail/road transport (local equipment) and be packed in such a manner as to protect it from damage in transit. The bidder shall provide instructions regarding handling and storage precautions to be taken at site.

**13. TENDER SAMPLE:**

Not Applicable.

**14. QUALITY CONTROL:**

The bidder shall submit QAP indicating the various stages of inspection, the tests and checks which will be carried out on the material of construction, components during manufacture and bought out items and fully assembled component and equipment after finishing. As part of the plan, a schedule for stage and final inspection within the parameters of the delivery schedule shall be furnished. The Purchaser's engineer or its nominated representative shall have free access to the manufacturer's/sub-supplier's works to carry out.

**15. TESTING FACILITIES:**

Supplier/ Manufacturer shall have adequate in-house testing facilities for carrying out all routine tests & acceptance tests as per relevant Indian standards.

**16. MANUFACTURING ACTIVITIES:**

The successful bidder shall submit the bar chart for various manufacturing activities clearly elaborating each stage, with quantity. This bar chart should be in line with the Quality assurance plan submitted with the offer.


**17. SPARES, ACCESSORIES AND TOOLS:**

Not Applicable.

**18. DRAWINGS AND DOCUMENTS:**

Following drawings and documents shall be submitted in line with the requirement of Tender specifications:

- a) Clause wise compliances of the technical specification

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b) Type Test Report Complete Set of HG Fuse.

**19. GUARANTEED TECHNICAL PARTICULARS:**

Bidder shall have to comply & submit clause wise compliance of this specification.

**20. SCHEDULE OF DEVIATIONS:**

**(TO BE ENCLOSED WITH TECHNICAL BID)**

All deviations from this specification shall be set out by the Bidders, clause by Clause in this schedule. Unless specifically mentioned in this Schedule, the tender shall be deemed to confirm the purchaser's specifications:


Sl. No.	Clause No.	Details of deviation with justifications

We confirm that there are no deviations apart from those detailed above.

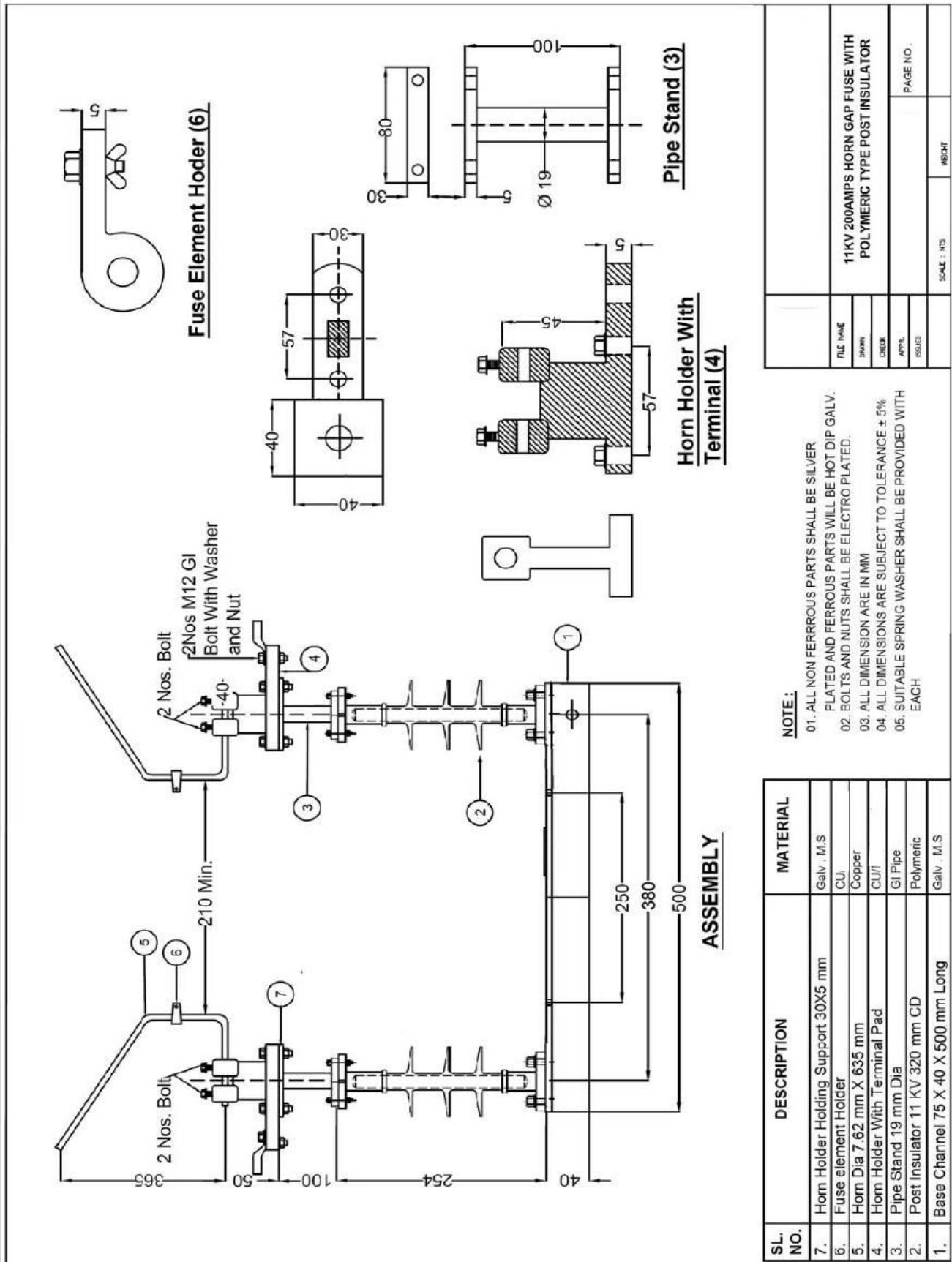
Seal of the Company:


Signature

Designation

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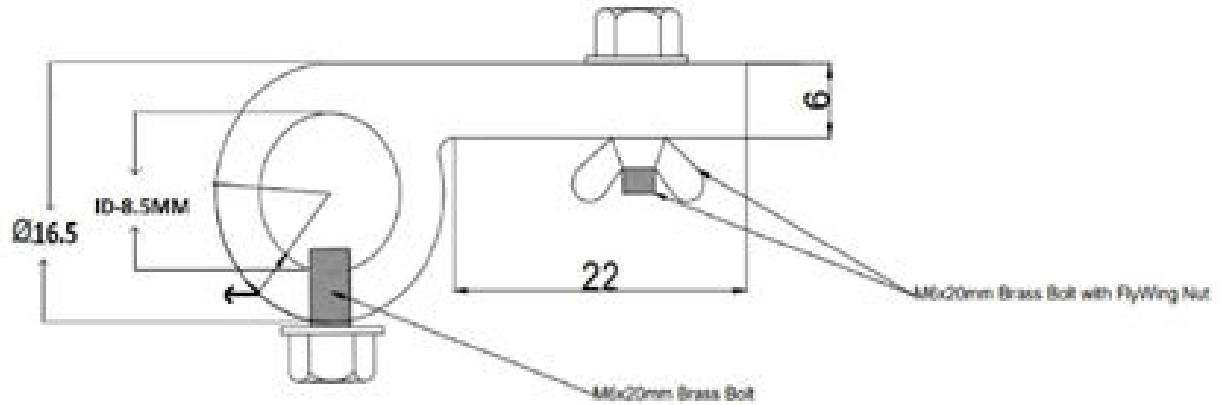
21. Drawing (Reference for Tender purpose only): Drawing is for indicative purpose only.




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### Annexure-I


#### Fly nut/ Butter fly nut details Drawing:



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### 1. SCOPE:

This specification covers the design, manufacture, testing and supply of 11 KV 400 A, HG Fuse sets for outdoor installations to be used for 33/11 KV Substations. Scope also includes transportation & unloading of poles at store / site.

### 2. APPLICABLE STANDARDS:


The equipment covered by this specification shall unless otherwise stated, be designed, manufactured and tested in accordance with the latest editions of the following Indian, International Standards and shall conform to the regulations of the local authorities:

IS 9385	High voltage fuses
IS 2062	Hot Rolled Medium and High Tensile Structural Steel
IS 209	Zinc Igot
IS 2629	Recommended Practice for Hot-Dip Galvanizing of Iron and Steel
IS 2633	Methods for testing uniformity of coating of zinc coated articles
IS 4759	Hot-dip zinc coatings on structural steel and other allied products
IEC 62231	Composite station post insulators for substations with a.c. voltages greater than 1 000 V up to 245 kV – Definitions, test methods and acceptance criteria
IEC 60273	Characteristic of Indoor and Outdoor Post Insulators for Systems with Nominal Voltages Greater than 1000 V

### 3. CLIMATIC CONDITIONS OF THE INSTALLATION:


1	Maximum ambient temperature	50 deg C
2	Max. Daily average ambient temp	35 deg C
3	Min Ambient Temperature	0 deg C
4	Maximum Humidity	95%
5	Average Annual Rainfall	150cm
6	Average No. of rainy days per annum	120
7	Altitude above MSL not exceeding	1000m
8	Wind Speed	300 Km/hr
9	Earthquakes of an intensity in horizontal direction	Equivalent to seismic acceleration of 0.3g
10	Earthquakes of an intensity in vertical direction	Equivalent to seismic acceleration of 0.15g (being acceleration due to gravity)

TPSODL service area has heavy saline conditions along the coast and High cyclonic Intensity winds with speed upto 300 Kmph. The atmosphere is generally laden with mild acid and dust in suspension during the dry months and is subjected to fog in cold months.


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#### 4. GENERAL TECHNICAL REQUIREMENTS:

SL. NO.	TECHNICAL PARTICULARS	DESIRED VALUE
1	Name of Manufacturer	To be Specified by Bidder
2	Works Address	To be Specified by Bidder
3	Manufacturers Type	To be Specified by Bidder
4	Standard according to which the HGF are manufactured	IS 9385-1980 (Part-II) amended up to date, IEC 62231/60273
5	Rated Voltage	11 kV
6	System voltage	12 KV
7	Rated Frequency	50 Hz
8	Lightning Impulse Withstand Voltage Positive & Negative Polarity (1.2/50 micro sec wave)	
a.	Across the Isolating distance	85 kV (Peak)
b.	To Earth & Between Poles	75 kV (Peak)
9	Dry Flashover Voltage	85 kV
10	Power frequency Puncture withstand Voltage	1.3 times of actual dry flashover voltage
11	Impulse Withstand Voltage (Switch in position)	75 kV (Peak)
12	Visible Discharge Voltage	9kV RMS
13	1 Min. Power Frequency Withstand Voltage (Dry & Wet)	
a.	Across the Isolating distance	32 kV
b.	To Earth & Between Poles	28 kV
14	Temperature Rise	Within permissible limit as per IS 9385-1980 (Part-II) amended up to date <b>Note – Ambient + 65 degree</b>
15	Outdoor/Indoor	Outdoor
16	Type of mounting	Horizontal
17	Vertical clearance from top of insulator cap to mounting Channel	254mm (Minimum)
18	Continuous current Rating	400 Amp
19	<b>Post Insulator Details</b>	
a.	Applicable Standard	IEC 62231 amended up to date
b.	Make of Post Insulator	<ul style="list-style-type: none"> <li>• <b>Make:</b> - Sun Kouture / Scenario / Yamuna Power/ Navitas Insulators/ Deccan Electricals/ Prime /Adinath.</li> <li>• Complete type test reports of post insulator from CPRI/ERDA labs only and shall be provided during tender evaluation process.</li> <li>• Year of manufacturing to be properly engraved on the Insulator.</li> <li>• Silicon content shall be &gt;40% make of Si: High voltage grade Silicone rubber Wacker-Germany, Dow Corning- USA</li> <li>• Material of Top &amp; bottom end Metal fittings shall be SGCI/Forged Steel/SGI.</li> </ul>
c.	Minimum failing load	5 KN
d.	CD of Post Insulator (min.)	320 mm

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e.	PCD	57 mm
f.	Number of Insulators per Pole/phase	2 Nos.
g.	Diameter of FRP Rod (min.)	24 mm
h.	Dia of weather shed (mm)	≥95
i.	Thickness of weather shed	3 mm (min)
K	Dry arc distance	170 mm (min)
20	Total weight of Horn Gap Fuse	To be Specified by Bidder (For 1 Set)
21	Details of Arcing Horn	<ul style="list-style-type: none"> <li>• 0 SWG (8.23 mm) dia. Solid copper rod with silver plated provided with screwing arrangement on the fuse carrier made of copper for fixing fuse wire (Total length – 635 mm) along with fly/butterfly nut.</li> <li>• Coating thickness – min 15 microns.</li> </ul>
22	Fuse Element Holder along with Fly/ Butterfly nut	<ul style="list-style-type: none"> <li>• Material: Copper Casting with silver plating. Brass M6 butterfly Bolt, nut and washer to be used for fixing with arcing horn.</li> <li>• Dimension of fly/butterfly nut is mentioned in the Annexure 1.</li> </ul>
23	Riser Unit (150 mm height total)	<p><b>Horn Gap Body:</b></p> <ul style="list-style-type: none"> <li>• The shape of connectors made out of Copper Casting with silver plating;</li> <li>• Copper Riser dimension – 40X40X5 mm, length – 120 mm &amp; height – 50 mm;</li> <li>• Silver plating thickness – 15 micron (min)</li> <li>• Nut &amp; bolt for current carrying parts – M10 brass</li> <li>• Nut &amp; bolt for non-current carrying parts – M10 GI</li> </ul> <p><b>Horn Gap Riser:</b></p> <ul style="list-style-type: none"> <li>• 100 mm height G.I Riser made of 19 NB medium gauge G.I pipe welded with 2 nos. of G.I flat of <b>30 mm x 5 mm</b> of both ends.</li> <li>• Non-Current carrying Part – M10 GI</li> </ul>
24	Size of Base Channel	<ul style="list-style-type: none"> <li>• Make – TATA Steel/ SAIL/ Jindal/ RINL (Billet with rerolling not allowed).</li> <li>• 75mmx40mmx4.8mm Length Min. 500 mm (mounting slotted hole 18X36 mm c/c 250 mm)</li> <li>• Hot Dip Galvanised M12 Bolt, nut, washer &amp; spring washer shall be provided for fixing between Polymeric Post Insulator &amp; GI Base Channel.</li> <li>• Min zinc coating thickness is 100 Microns</li> </ul>
25	Connectors Socket/Lug	<ul style="list-style-type: none"> <li>• One no. of solderless copper bimetallic socket shall be used at both ends suitable for 100 sq. mm AAAC conductor.</li> <li>• 1 no. of M12 Barss Nuts, Bolt &amp; Washer to be provided on each side of HG Fuse.</li> </ul>
26	All ferrous parts shall be hot dipped Galvanized as per IS.2633/1972 (Latest Amendment), IS 2629/1985 (1st.	<ul style="list-style-type: none"> <li>• Ferrous part coating thickness – 100 micron (min)</li> <li>• Non-Ferrous part coating thickness – 15 micron (min)</li> </ul>

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	<b>Document No: ENG-HV-2013</b>		Release Date-15.05.2026	
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<b>Prepared By</b>		<b>Reviewed By</b>		<b>Approved By</b>
<b>Sandeep Saurav</b>		<b>Shailendra Kumar Jaiswal</b>		<b>Ashok Saraf</b>
				<b>Issued By</b>
				<b>Dnyaneshwar Ramchandra Dharmadhikari</b>

		Revision), & all nonferrous parts should be duly electroplated with silver.	
27	Marking (Engraving/ Embossing)		<ul style="list-style-type: none"> <li>• Marking details –</li> <li>i) Property of TPSODL</li> <li>ii) Serial No.</li> <li>iii) Manufacture’s name or trademark</li> <li>iv) Month &amp; Year of Manufacturing.</li> <li>v) RO No with date</li> <li>vi) Rated normal current in Amp</li> <li>• 1 no of Name plate will be required for each phase.</li> <li>• Name plate details: <ul style="list-style-type: none"> <li>1. Material – Al</li> <li>2. Thickness – 0.3mm (min)</li> <li>3. Background – Black</li> </ul> </li> </ul>
28	Packing		Packing shall be properly done in a covered wooden Box. Proper separator shall be provided between the HG Fuse to avoid damage of polymer housing during transportation.  OR Only 1 HG fuse pole is allowed in 1 packing.


## 5. GENERAL CONSTRUCTIONS/REQUIREMENTS:

The H.G. Fuses shall have adjustable arcing horns made of solid copper rod having 8.23 mm dia. The horns shall be fitted with screwing devices with fly nuts for fixing and tightening the fuse wire. It shall have robust terminal connector of size as per clause no.4 made of copper duly silver plated with one number of M12 brass bolts and double nuts with flat brass washers. The connector should be capable of connecting crimp able conductor up to 100 Sq.mm. size (AAAC) with bimetallic solder less sockets. The H.G. Fuse Set shall be suitable for horizontal mounting on structures. All metal (ferrous) parts shall be hot dip galvanized and polished.

### 5.1. Insulators:

The post type insulators used for the Horn Gap Fuse Unit shall conform to IEC: IEC 62231 (amended up to date) in all respects with regard to mechanical and electrical requirements. The electrical characteristics of the insulators shall be as follows:

1	System Voltage	11 kV
2	Lightning Impulse Withstand Voltage in kV	75
3	Power Frequency Withstand Voltage in kV (Dry)	70
4	Power Frequency Withstand Voltage in kV (Wet)	35
5	Power Frequency Flashover Voltage in kV (Dry)	75
6	Power Frequency Flashover Voltage in kV (Wet)	40
7	Creepage Distance in mm	320
	PCD in mm	57
8	FRP Rod Dia. in mm	24

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- The type of insulation materials, metal fittings, Creepage distance, protected Creepage distance, tensile strength compression strength, torsion strength and cantilever strength shall be as provided in the guaranteed technical particulars in clause no.19.
- The bidder shall furnish the type test certificate of the post insulators from their manufacturer for reference & scrutiny. For type, test reports refer cl no 7.3.
- Any fittings accessories or equipment which may not have been specifically mentioned in this specification but which are usually necessary in equipment shall be deemed included in the specification and shall be supplied by the Bidder without extra charge. All equipment shall be complete in all details whether such details are mentioned in the specification or not.
- Metal end fitting crimping: Metal End Fittings shall be fitted on the Rod by crimping process, prior to moulding of Sheds, to ensure better sealing & avoiding water ingress. That means First metal end fitting crimping is completed, and thereafter HTV silicone rubber injection/over moulding is carried out. They shall be connected to the rod by means of a Controlled Compression technique.
- The manufacturer shall have in process Acoustic emission arrangement to ensure that there is no damage to the core (FRP) during crimping. This verification shall be in- process and done on each insulator. The strength of bond between Metal Fitting & Sheath shall be more than the tearing strength of the polymer material. In order to have adequate gripping between FRP rod and metal fitting, the manufacturer should properly define parameters for inner surface roughness of metal fittings. There shall not be any sharp protrusions present in the metal end fittings which may result into pockets for retention of water & pollutants.
- HTV Over moulded Silicon rubber Injection: Over moulded HTV silicone rubber injection sealing shall be provided at the metal fitting interface to ensure proper bonding, minimize moisture ingress, and improve long-term sealing reliability. The sealing shall stick to both housing and metal end fitting with silicone rubber compound. The sealing must be humidity proof and durable with time.

## 6. MARKING:

Below parameters should be embossed/engraved on Aluminum sheet of thickness 0.3mm(min). It should be riveted on Base channel of HG Fuse. One no of Name plate will be required for each phase. Background: Black

1. Property of TPSODL
2. Rated Voltage
3. Manufacturer's Name
4. Month/Year of Manufacture
5. Serial Number
6. PO no.
7. Rated normal current in Amps.

Product marking shall be permitted through laser printing on the metal end fitting for proper identification and traceability.

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## 7. TESTS CERTIFICATE:

The bidder shall be required to submit complete set of the following test reports along with the offer: -

### 7.1. TYPE TESTS ON COMPLETE SET:

1. Impulse voltage dry test
2. Power frequency voltage dry test
3. Power frequency voltage wet test
4. Temperature rise test.

### 7.2. TYPE TESTS ON POST INSULATORS:


1. Dry & Wet Lightning impulse withstand voltage test.
2. Dry & Wet Power frequency test
3. Mechanical failing load test
4. Radio interference test
5. Recovery of hydrophobicity test
6. Salt fog test: On insulators for 1000 hrs as per IEC
7. Chemical composition test for silicon content (Min 40%)
8. Galvanization test
9. Brittle fracture resistance test.
10. Visible discharge voltage
11. Dry & Wet Frequency Flashover Voltage Test.

### 7.3. ACCEPTANCE TESTS:

1. Power frequency voltage dry test.
2. Tests to prove satisfactory operation.
3. Dimension check.
4. Galvanization test.
5. Temperature rise

### 7.4. ROUTINE TESTS:

1. Power frequency voltage dry test.
2. Tests to prove satisfactory operation.
3. Dimension check.
4. Galvanization test.

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## 8. TESTS CERTIFICATES:

The Bidder shall furnish the type test certificates for the tests as mentioned above as per the corresponding standards. All the tests shall be conducted at CPRI/ERDA/Other govt owned NABL Accredited Lab as per relevant IS for Complete Set of HG Fuse. Type tests should have been conducted during the period not exceeding 5 years from the date of opening the bid. In the event of any discrepancy in the test reports, i.e. any test report not acceptable, same shall be carried out without any cost implication to TPSODL.

## 9. PRE-DISPATCH INSPECTION:

The material shall be subject to inspection by a duly authorized representative of the TPSODL. Inspection may be made at any stage of manufacture at the discretion of the purchaser and the equipment, if found unsatisfactory as to workmanship or material, the same is liable to rejection. Bidder shall grant free access to the places of manufacture to TPSODL's representatives at all times when the work is in progress. Inspection by the TPSODL or its authorized representatives shall not relieve the bidder of his obligation of furnishing equipment in accordance with the specifications. Material shall be dispatched after specific MDCC (Material Dispatch Clearance Certificate) is issued by TPSODL.

Following documents shall be sent along with material:


- a) Test reports
- b) MDCC issued by TPSODL
- c) TPSODL Invoice in duplicate
- d) Packing list
- e) Drawings & catalogue
- f) Guarantee / Warrantee card
- g) Delivery Challan
- h) Other Documents (as applicable).

## 10. INSPECTION AFTER RECEIPT AT STORES:

The material received at TPSODL store will be inspected for acceptance and shall be liable for rejection, if found different from the reports of the pre-dispatch inspection and one copy of the report shall be sent to Engineering department.

## 11. GUARANTEE:

Bidder shall stand guarantee towards design, materials, workmanship & quality of process/ manufacturing of

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items under the contract for due and intended performance of the same, as an integrated product delivered under this contract. In the event any defect is found by the Company up to a period of 12 months from the date of commissioning or 24 months from the date of last supplies made under the contract, whichever is earlier. supplier shall be liable to undertake to replace/rectify such defects at his own costs. within mutually agreed timeframe, and to the entire satisfaction of the Company, failing which the Company will be at liberty to get it replaced/rectified at supplier's risks and costs and recover all such expenses plus the Company's own charges (@ 20% of expenses incurred), from the supplier or from the "Security cum Performance Deposit" as the case may be.

**12. PACKING:**

Supplier shall ensure that all material covered by this specification shall be prepared for rail/road transport (local equipment) and be packed in such a manner as to protect it from damage in transit. The bidder shall provide instructions regarding handling and storage precautions to be taken at site.

**13. TENDER SAMPLE:**

Not Applicable.

**14. QUALITY CONTROL:**

The bidder shall submit QAP indicating the various stages of inspection, the tests and checks which will be carried out on the material of construction, components during manufacture and bought out items and fully assembled component and equipment after finishing. As part of the plan, a schedule for stage and final inspection within the parameters of the delivery schedule shall be furnished. The Purchaser's engineer or its nominated representative shall have free access to the manufacturer's/sub-supplier's works to carry out.

**15. TESTING FACILITIES:**

Supplier/ Manufacturer shall have adequate in-house testing facilities for carrying out all routine tests & acceptance tests as per relevant Indian standards.

**16. MANUFACTURING ACTIVITIES:**

The successful bidder shall submit the bar chart for various manufacturing activities clearly elaborating each stage, with quantity. This bar chart should be in line with the Quality assurance plan submitted with the offer.


**17. SPARES, ACCESSORIES AND TOOLS:**

Not Applicable.

**18. DRAWINGS AND DOCUMENTS:**

Following drawings and documents shall be submitted in line with the requirement of Tender specifications:

- a) Clause wise compliances of the technical specification

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b) Type Test Report Complete Set of HG Fuse.

**19. GUARANTEED TECHNICAL PARTICULARS:**

Bidder shall have to comply & submit clause wise compliance of this specification.

**20. SCHEDULE OF DEVIATIONS:**

**(TO BE ENCLOSED WITH TECHNICAL BID)**

All deviations from this specification shall be set out by the Bidders, clause by Clause in this schedule. Unless specifically mentioned in this Schedule, the tender shall be deemed to confirm the purchaser's specifications:


Sl. No.	Clause No.	Details of deviation with justifications

We confirm that there are no deviations apart from those detailed above.

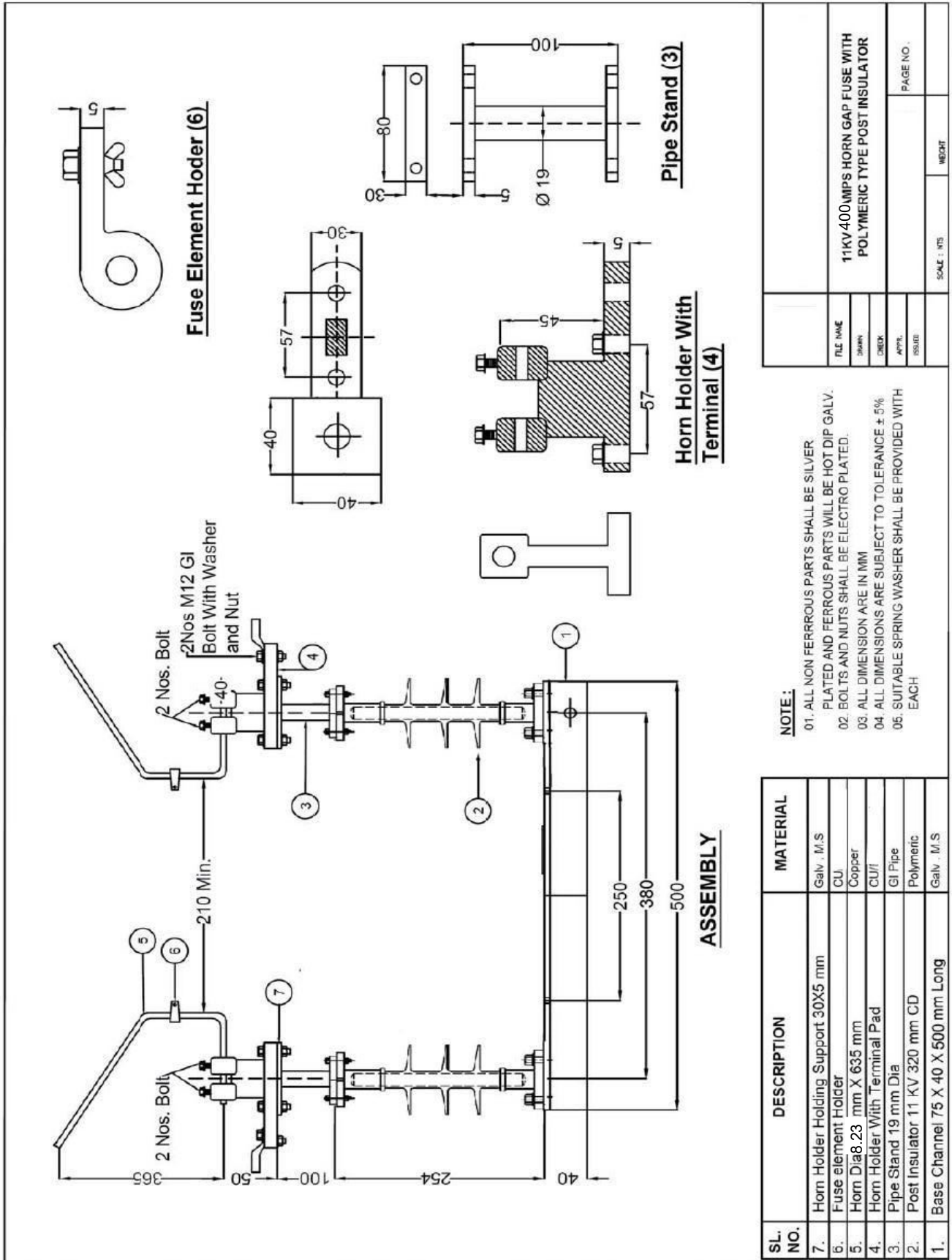
Seal of the Company:


Signature

Designation

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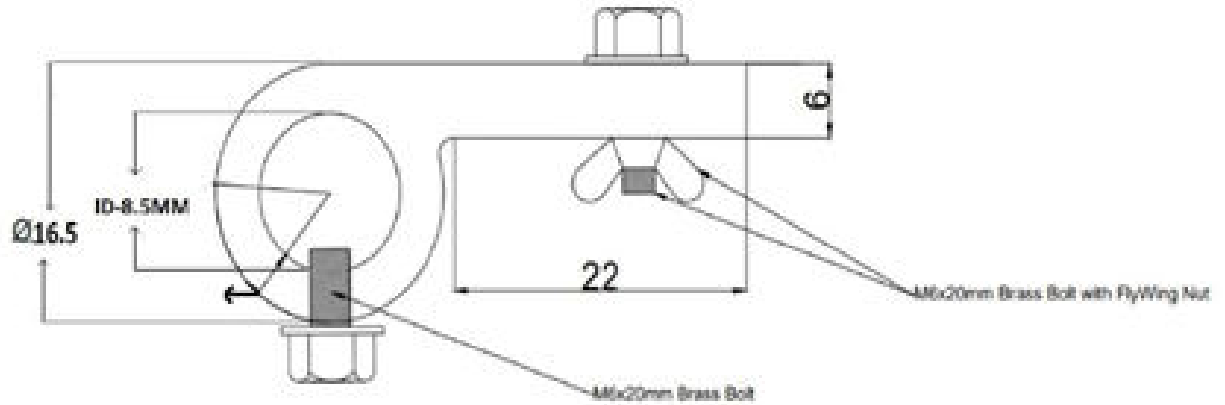
21. Drawing (Reference for Tender purpose only): Drawing is for indicative purpose only.



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Sandeep Saurav	Shailendra Kumar Jaiswal	Ashok Saraf	Dnyaneshwar Ramchandra Dharmadhikari	

### Annexure-I



#### Fly nut/ Butter fly nut details Drawing:



<b>TPNODL</b>	<b>TP NORTHERN ODISHA DISTRIBUTION LIMITED</b>		<b>FO1 – (10.44.15)</b>
	<b>TECHNICAL SPECIFICATIONS</b>		
<b>Doc. Title</b>	<b>Operating rod for drop out fuse along with fuse link</b>		
<b>Doc. No:</b>	<b>ENG – GEN – 218</b>		<b>Eff. Date: 20 – 04 – 2025</b>
<b>Rev No:</b>	<b>01</b>		<b>Page 1 of 12</b>
<b>Prepared by:</b> Udit Sankar Das	<b>Reviewed by:</b> Milan Maity	<b>Approved by:</b> Tapan Kumar behera	<b>Issued by:</b> Sandip pal

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Initiator		HEAD (Engineering)	
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**Doc. No:**
**ENG – GEN – 218**
**Eff. Date: 20 – 04 – 2025**
**Rev No:**
**01**
**Page 2 of 12**
**Prepared by:**
**Udit Sankar Das**
**Reviewed by:**
**Milan Maity**
**Approved by:**
**Tapan Kumar behera**
**Issued by:**
**Sandip pal**
**1. SCOPE**

This specification covers technical requirements of design, manufacture, construction, performance, testing at manufacture's work, packing, forwarding, supply and unloading of **11kV, 200 Amps Polymer DO Fuse, fuse element along with fuse barrel & mounting arrangement** at stores/site complete with all accessories for efficient and trouble free-operation. The specific requirements are covered in enclosed technical data sheet.

**2. APPLICABLE STANDARDS:**

The equipment covered by this specification shall unless otherwise stated, be designed, manufactured and tested in accordance with the latest editions of the following Indian, IEC/Other applicable standards and shall conform to the regulations of the local authorities:

Sl/No	IS standard	Application
1	IS 9385 (Part-1)	Specification for high voltage fuse Part 1 – Current Limiting Fuse
2	IS 9385 (Part-2)	Specification for high voltage fuse Part 1 – Expulsion and similar fuses
3	IS 9385 (Part-3)	Specification for high voltage fuse Part 1 – Application for high voltage fuses
4	IS 3400-1	Methods of test for vulcanized rubbers; Part1 Rubber, Vulcanized— Determination of Tensile Stress-Strain Properties (Third Revision)
5	IS 3400-2	Methods of test for vulcanized rubbers; Part2 Rubber, Vulcanized or thermoplastic-Determination of Hardness (Hardness between 10 IRHD and 100 IRHD)
6	IS 3400-9	Methods of test for vulcanized rubbers; Part9 Rubber, Vulcanized— Determination of Density (Second Revision)
7	REC 53/1987	11 kV drop out fuses
8	IEC 61109	Insulators for overhead lines - Composite suspension and tension insulators for a.c. systems with a nominal voltage greater than 1 000 V - Definitions, test methods and acceptance criteria
9	IS 2633	Method for Testing Uniformity of Coating on Zinc coated Articles ( Second Revision )
10	IS: 1364	Hexagon Head Bolts, Screws and Nuts of Product Grades A and B
11	IEC 60587	Electrical insulating materials used under severe ambient conditions – Test methods for evaluating resistance to tracking and erosion
12	IEC 62217	Polymeric insulator for indoor and outdoor use with a nominal >1000v – General definition, test methods & acceptance criteria
13	IEC 60282 - 1	High Voltage Fuses- Part 1: Current Limiting Fuses
14	IEC 60282 – 2	High-voltage uses - Part 2: Expulsion fuses
15	ASTM D412	Standard test methods for vulcanised rubber and thermoplastic elastomers – Tension
16	ASTM D624	Standard test method for tear strength of conventional vulcanised rubber and thermoplastic elastomers
17	ASTM G154-06	Standard practice for operating fluorescent light apparatus for UV exposure of non-metallic materials
18	ASTM 2863/UL 94	Standard test method for measuring the minimum oxygen concentration support candle like combustion of plastics (oxygen index).
19	ASTM D790 – 10	Standard test methods for flexural properties of unreinforced and reinforced plastics and electrical insulating material.
20	ASTM D349-07	Standard test method for laminated round rods used for electrical insulation
21	ASTM D495	Standard test methods for high voltage, low content, dry arc resistance of solid electrical insulation
22	ASTM D570	Standard Test method for water absorption of plastics

\*In case of any conflict on any technical particular in the specification, the stricter requirement mentioned in the relevant standard shall be valid.

**3. CLIMATIC CONDITIONS:**

a)	Maximum Ambient Temperature	50°C
b)	Maximum Daily Average Ambient Temperature	40 °C

Initiator



HEAD (Engineering)



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**Tapan Kumar behera**
**Issued by:**
**Sandip pal**

c)	Minimum Ambient Temperature	2 °C
d)	Maximum Humidity	99.7 %
e)	Minimum Humidity	15 %
f)	Average Annual Rainfall	1800 mm
g)	Average Wind Speed prevailing in the area	200 km/hr.
h)	Average Thunderstorms prevailing in the area	70 days per annum
i)	Average dust storms prevailing in the area	20 days per annum
j)	Average number of rainy days per annum	160
k)	Maximum Altitude above sea level	1200 m
l)	Rainy months	June to October

Note – The atmosphere across coastal divisions of TPNODL is very saline, laden with salt, acid and dust suspended during dry months and subjected to fog in cold months. The design of the equipment and accessories shall be suitable to withstand seismic forces corresponding to an acceleration of 0.3g.

**4. GENERAL TECHNICAL REQUIREMENTS**

Sl/No	Particulars	Unit	Requirement
1	Type Expulsion (as per IS 9385)		Class-2
2	Rated Voltage	KV	12
3	Service Voltage	KV	11
4	Rated Frequency	Hz	50
5	No. of Phases		3
6	Current Rating	Amps	200
7	Rated Breaking Capacity	kA	10
8	Max. Switching Voltage	kV(max.)	38
9	Minimum creepage distance (min)	mm	320
10	Rated lightning impulse withstand voltage to earth & between poles.	kV (Peak)	75
11	Rated lightning impulse withstand voltage across the isolating distance	kV (Peak)	85
12	Rated one-minute power frequency-withstand voltage to earth & between poles.	kV (rms)	28
13	Rated one-minute power frequency-withstand voltage across the isolating distance.	kV (rms)	32
14	Max. Permissible temperature rise at an ambient temp. not exceeding 400	°C	65
15	Length of Fuse holder (No tolerance allowed)	mm	285
16	Inner diameter of the fuse holder Tube (minimum)	mm	17
17	Outer diameter of the fuse holder (minimum)	mm	25
18	Minimum Thickness of galvanization at any point of measurement (All MS parts)	microns	86
19	Outer diameter of the fiber glass tube of the fuse link	mm	10
20	Length of the fiber glass tube of the fuse link	mm	140
21	Material of the fuse link tube (Fiber glass tube)		Fiber with flame retardant properties
22	Material of the fuse element		Tinned copper
23	Min overall length of the fuse link (with wire) (Fuse element)	mm	550
24	Diameter of the washer of fuse element	mm	19
25	Transient Recovery Voltage (TRV)		As per IEC 60282
26	Diameter of solid FRP rod used for insulator	mm	24
27	Overall height of insulator including end terminals (minimum)	mm	380
28	Mechanical strength of polymeric insulation	KN	5
29	Area of Cross Section for Main Live parts mm <sup>2</sup> (Female part)		40X2 mm Length –

Initiator



HEAD (Engineering)



Doc. Title

Operating rod for drop out fuse along with fuse link

Doc. No:

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Reviewed by:

Milan Maity

Approved by:

Tapan Kumar behera

Issued by:

Sandip pal

			150 mm (min)
30	Insulator make		Shall be from TPNODL approval vendor list. Type test report needs to submit.

**5. GENERAL CONSTRUCTION**

- Type – Single vent (downward), front-connected fuse carrier, angle mounted.
- Ferrous parts – Hot dip galvanized as per IS:2633, after machining.
- Nuts & Bolts: As per IS:1364 →
  - M10 & below – Stainless steel
  - Above M10 – Hot dip galvanized, Grade 5.6
- Spring washers – Electro-galvanized.

**A. FUSE BASE TOP ASSEMBLY:**

- **Material & Plating**
  - Made of high conductivity brass → ensures good electrical performance.
  - Tinned plating on contacts → prevents corrosion, keeps low resistance.
- **Contact & Latching**
  - Socket cavity design → securely holds the fuse carrier until fault clearing.
  - Prevents loose connections.
- **Self-Spring Action**
  - Provides constant pressure for firm contact.
  - Absorbs stresses during fuse insertion → avoids damage to contacts.
- **Protection**
  - Stainless-steel top cover → shields contacts from water, dust, and pollution.
- **Robust Design**
  - Strong enough to handle mechanical forces during opening/closing.
  - Prevents accidental fuse drop/opening due to vibration or impact.

**B. FUSE BASE BOTTOM ASSEMBLY:**

- **Material & Plating**
  - Conducting parts are made of high-strength, highly conductive brass.
  - Contact areas are tinned plated → prevents corrosion and ensures a low-resistance current path from fuse carrier to terminal connector.
- **Hinge Contacts**
  - Made from highly conductive, anti-corrosive copper alloy.
  - Designed so the fuse carrier can be placed in or lifted out easily without awkward maneuvering.
  - Ensures secure and efficient connection at the bottom.
- **Operational Functions**
  - On opening (manually or after fault), the fuse carrier swings through 180° to a vertical position.
  - The bottom assembly stops further travel at that point, ensuring controlled movement.
  - The self-locking hinge prevents the carrier from slipping out under normal operation.
  - Only at the fully open position can the carrier be safely removed.
- **Terminal Connector**
  - The bottom assembly includes an aluminum alloy terminal connector, providing a reliable and corrosion-resistant connection to the incoming/outgoing line.

**C. FUSE BASE BOTTOM ASSEMBLY:**

- **Material & Plating**

Initiator

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*Sandip Pal*

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- Conducting parts are made of high-strength, highly conductive brass.
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  - The bottom assembly stops further travel at that point, ensuring controlled movement.
  - The self-locking hinge prevents the carrier from slipping out under normal operation.
  - Only at the fully open position can the carrier be safely removed.
- **Terminal Connector**
  - The bottom assembly includes an aluminum alloy terminal connector, providing a reliable and corrosion-resistant connection to the incoming/outgoing line.

**D. FUSE CARRIER TOP ASSEMBLY:**

- **Material & Contact Design**
  - Made of highly conductive, anti-corrosive Brass.
  - Tinned plating on the contact area ensures corrosion resistance and provides a low-resistance path between the fuse base top contact and the fuse link.
- **Drop-Out Mechanism**
  - Designed to allow latch-free rotation when the fuse element burns (during a fault).
  - This ensures the fuse carrier drops open automatically, giving a clear visible indication of fuse operation.
- **Operation Feature (Pull Ring)**
  - Fitted with a brass opening eye (pull ring).
  - Allows safe manual operation using an insulated hook stick from ground level.

**E. FUSE CARRIER BOTTOM ASSEMBLY:**

- **Material & Contact Design**
  - Made of brass casting, with tinned plating at the contact points.
  - Ensures efficient current transfer to the fuse base and smooth engagement during closing.
- **Operational Feature (Lifting Eye)**
  - Provided with a lifting eye so that the fuse carrier can be safely removed or replaced using a hook stick from ground level.
- **Ejector Mechanism (Key Functions)**
  - The ejector is a vital part of the bottom assembly, performing multiple roles:
    - ❖ Fuse Link Centering & Tensioning: Keeps the fuse link aligned and under tension in all operating conditions.
    - ❖ Shock Absorption: Absorbs impact when the fuse carrier is pushed closed, protecting low-ampere fuse links from damage.
    - ❖ Arc Extinguishing Support: Holds the fuse carrier in closed position long enough during fault clearing so that the arc fully extinguishes inside the fuse tube, preventing surface arcing and contact damage.
    - ❖ Drop-Out Support: After interruption, it aids in fuse link separation and allows the carrier to drop out, clearing the blown fuse link tail properly through the fuse tube bore.

**F. FUSE BASE (Polymeric):**

- **Design & Construction**
  - The fuse base is made of two polymeric post insulators (bird-proof type) for 11 kV service.
  - Each insulator must have a minimum creepage distance of 320 mm (to prevent flashover in pollution).

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➤ Mechanical requirement: cantilever failing load  $\geq 5$  kN, ensuring strength against mechanical stresses.

• **Testing & Certification**

➤ Type tests as per IEC 62231-Ed-1-1:2006 are mandatory.

➤ Supplier must allow inspection of insulators at the manufacturer's works (both prototype and lot inspection) at their own cost.

• **Marking & Identification**

➤ Each insulator must be embossed/engraved with:

➤ Manufacturer's name/trademark & year of manufacture.

➤ Guaranteed mechanical strength (in kN).

• **Insulator make** – As per TPNODL approved list

**G. FUSE CARRIER TUBE:**

- The fuse tube shall be manufactured from high-strength fiberglass material, provided with an ultraviolet (UV) resistant coating on the outer surface to ensure long-term outdoor durability.
- The inner surface of the fuse tube shall be lined with arc-quenching bone fiber for effective interruption of fault currents.
- The fuse tube shall possess high bursting strength to withstand the internal pressure generated by gases during fault interruption without deformation or damage.
- The solid cap of the fuse carrier shall firmly clamp the button head of the fuse link, thereby sealing the top end of the fuse tube and ensuring that gases are vented only in the downward direction during fault interruptions.

**H. MOUNTING ARRANGEMENT:**

- Cutouts shall be mounted on a 75 × 40 × 4.8 mm channel cross arm inclined at 15°–20° from vertical, as per reference drawing, ensuring proper clearances.
- Mounting arrangement shall be of high-strength galvanized steel C-section, robust to withstand operating stresses.
- Strength test: Members clamped with M10 bolts, force applied along M14 bolt axis. After 50 kg preload, at 425 kg load the permanent set at M14 axis shall not exceed 1.6 mm.
- Strength of M14 bolt  $\geq 1900$  kg; M10 bolts  $\geq 3500$  kg.

**I. TERMINAL CONNECTIONS:**

- Cutout shall have two aluminum alloy lugs (Alloy 2280 / A-11, IS:617-1975) at top and bottom of fuse base to connect AAA conductors of 34–100 mm<sup>2</sup>.
- Terminals shall be easily accessible regardless of cutout mounting position on the pole.
- Terminals shall comply with REC construction standard E-30.

**J. FUSE LINK**

- Fuse link shall not emit flame; minor flame from an indicator is permissible if it does not cause breakdown or significant leakage to earth.
- After operation, all fuse components, except those intended for replacement, shall remain intact, and the fuse-link shall be removable in one piece.
- Cut-off current values shall not exceed the limits corresponding to the fuse's cut-off characteristics for each prospective breaking current.
- After operation, the fuse shall withstand the power-frequency recovery voltage across its terminals.
- Tensile withstand strength – 6.1 Kg

**K. FUSE CARRIER HOLDER**

- Made of fiberglass with UV-resistant coating; inner layer lined for arc-quenching gas generation. High bursting strength to withstand fault pressures.
- Top contact with solid tinned-plated brass replaceable cap.

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- Installation/removal via operating rod: lower hinge lifting eye for insertion; top hook for downward pull to release latch.
- Upper stationary contact with safety latch; lower hinge designed to prevent holder drop due to vibration.
- Lower contact absorbs shock when carrier is closed, protects fuse link (even low-ampere ratings), keeps link centered and tensioned.
- Top metal button accommodates fuse link supporting washer of  $19 \pm 0.5$  mm OD.

**L. TERMINALS**

- The upper and lower terminals shall be provided in tin plated copper to provide low resistance current path
- Copper strip in the upper contact plate shall be single strip.
- M12 Bolt for the fixing of the lugs from 7.50mm to 12.78mm

**M. FUSE BARREL STICKERS**

- Stickers shall have non-fading and UV resistant colors so that there is no effect of sunlight.
- They shall be of good adhesive quality so that they do not peel off in outdoor conditions.
- The pigmentation shall be of florescent nature to allow visibility during night time.
- The sticker color for various fuse current shall be as per following:

Sl/No	Fuse Current Rating	Color
1	2 A	Yellow (equivalent to shade 309 of IS:5 or RAL 1003)
2	5 A	Red (equivalent to shade 537 of IS:5 or RAL 3001)
3	8 A	Blue (PANTON E2727C)
4	10 A	Green (equivalent to RAL6024) (Note – 16-100KVA DTR)
5	20 A	White (equivalent to RAL9003)
6	30 A	Pink (equivalent to shade 442 of IS:5 or RAL 3015) (Note – Above 100 & up to DTR)
7	50 A	Brown (RAL 8003 / IS:5 – Shade 413) (Note – Above 250KVA DTR)

**Bill of Material (For each DO fuse)**

Sl/No	DESCRIPTION	MATERIAL	QTY	REMARK
1	Fuse base 320MM C. D	Polymer insulator	3	IS2544-1973
2	Flat strip earthing with bimetallic sheet	MS (HDG) 3mm thickness; Length & width – To be specified by the bidder	6	HDG (Note – Length & width of the strip shall be cover the surface area of <b>120 mm<sup>2</sup> lug size</b> )
3	Terminal connection (Lug / socket)	Bimetallic lug	6	Suitable for 100 mm <sup>2</sup> AAAC ( <b>120 mm<sup>2</sup> lug</b> )
4	Male contact top part	Brass	3	Tinned plating
5	Fuse carrier tube	Fiber glass tube	3	25mm O.D.
6	Male contact bottom part	Brass	3	Tinned plating
7	Female contact	Brass strip 40X2 mm, length – 150 mm (min)	3	Tinned plating
8	Female Arcing horn (U-type)	MS (HDG) flat – 25x5mm & Rod – 6mm	3	HDG
9	High press spring	SS, diameter – 10 SWG, Height – 1.5 inches	3	Tinned plating
10	Hook for operating male part	Brass	3	Tinned plating
11	Insulator upper clamp support	MS (HDG)	3	HDG
12	Insulator lower clamp support	MS (HDG)	3	HDG
13	Bracket mounting arrangement	MS (HDG) flat 50X6 mm with 2 holes for M12 bolt	3	HDG
14	Top cover	SS	3	SS
14	Fuse wire link bolt	Brass (M6)	3	
15	Mounting arrangement	As per drawing	3	

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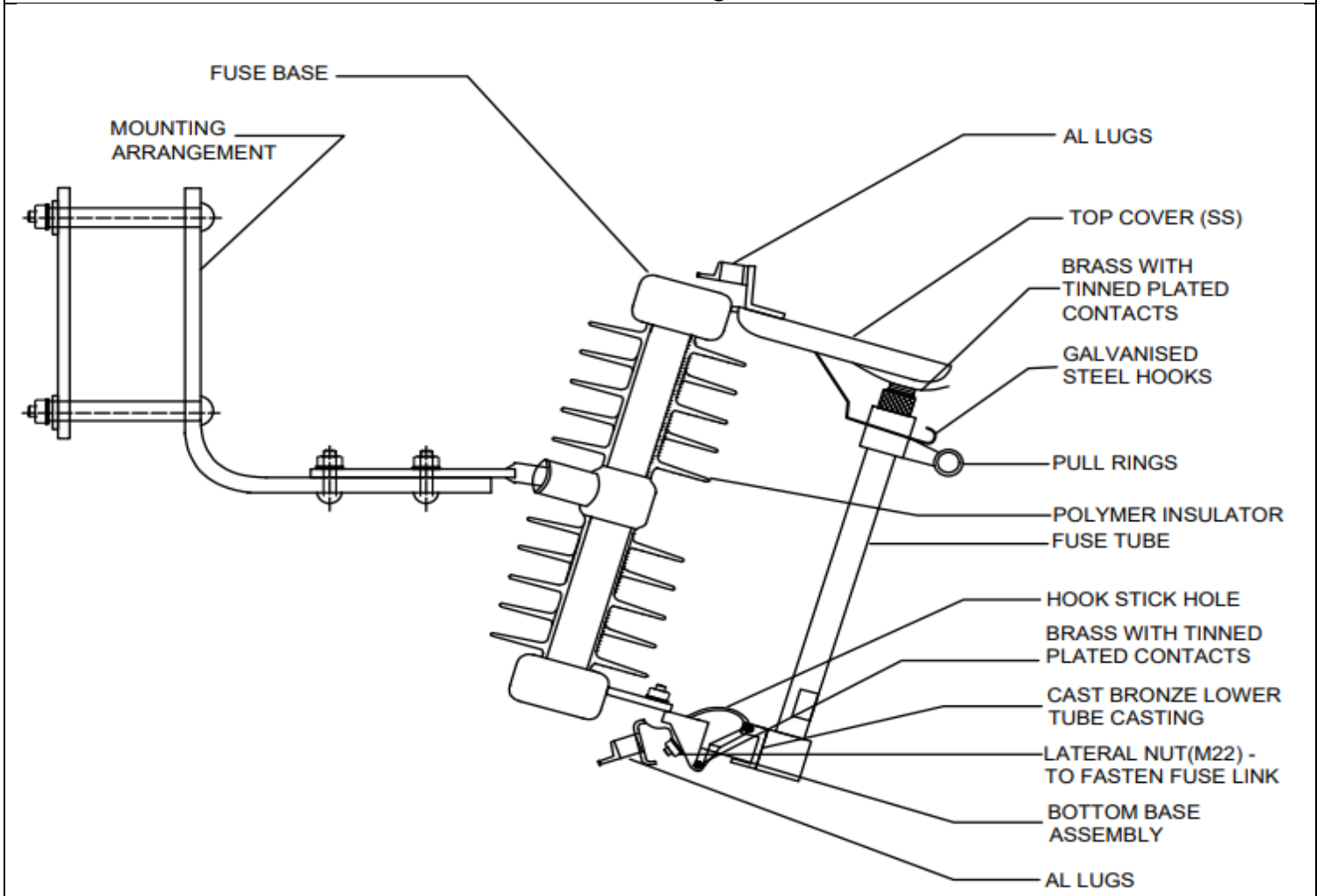
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Tapan Kumar behera

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Sandip pal

**Bill of Material (For Fuse link)**

1	Fiber tube barrel	OD – 10 mm, Length – 140 mm, thickness – 1 mm	3
2	Copper wire	Length – 550 mm Diameter – As per IS (To be specified by the bidder)	3
3	Top bottom brass with flat washer	Flat Washer – 19 mm	3

**DO fuse Image**



**Fuse link Image**

Initiator	<i>Udit Sankar Das</i>	HEAD (Engineering)	<i>Sandip Pal</i>
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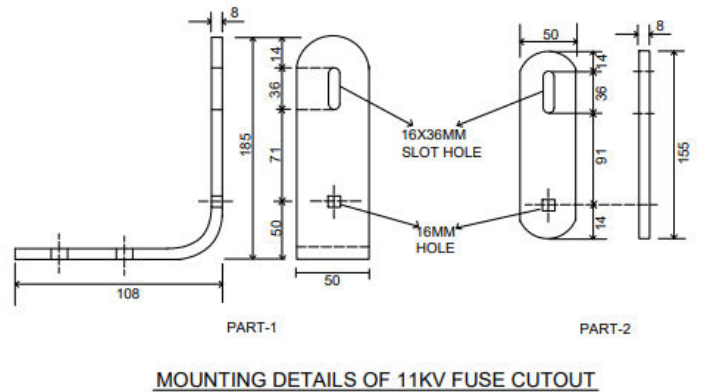
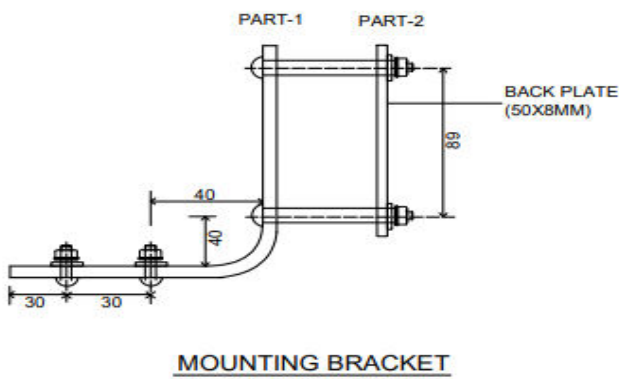
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**Mounting Arrangement**



**6. MARKING**

Name plate showing all technical parameters shall be provided on all equipments. Name plate shall be embossed with “PO no. with date”, “TPNODL”, “Code number” along with other technical parameters.

The marking shall be made on fuse base, fuse carriers and fuse links as follows.

**A. On fuse base**

- Manufacturer’s name
- Type designation
- Class designation
- Rated Voltage
- Rated maximum current

**B. On fuse carrier**

- Manufacturer’s name
- Rated Voltage
- Rated maximum current
- Rated Breaking current
- Rated Frequency

The name plate of each functional unit shall be legible during normal service. The removable parts, if any, shall have a separate nameplate with the data relating to the functional units they belong to, but this nameplate only legible when the

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removable parts is in removed position.

### 7.0 TESTS

All routine, acceptance & type tests shall be carried out in accordance with the relevant Indian or International Standards. All acceptance tests shall be witnessed by the TPNODL's authorized representative at Bidder's location.

\*In case of any conflict on any technical particular in the specification, the stricter requirement mentioned in the relevant standard shall be valid.

**A. Type test** – Following type test shall be carried out as per procedure mentioned in IS 16622:2019 or IEC 61235 or IS 13770-1993 or relevant standards:

#### DO fuse

1	Type Test Description	IS Standard
2	Visual & Dimensional Check	IS 9385 (Part-1)
3	Power Frequency Withstand Voltage Test (Dry)	IS 9385 (Part-1)
4	Power Frequency Withstand Voltage Test (Wet)	IS 9385 (Part-1)
5	Lightning Impulse Withstand Voltage Test	IS 9385 (Part-1)
6	Temperature Rise Test	IS 9385 (Part-1)
7	Short Circuit / Breaking Capacity Test	IS 9385 (Part-1)
8	Mechanical Operation (Drop-out) Test	IS 9385 (Part-1)
9	Cantilever Strength Test (Mechanical Load on Insulator)	IS 9385 (Part-1)
10	Rain Test	IS 9385 (Part-1)
11	Contact Resistance Test	IS 9385 (Part-1)
12	Corrosion Resistance Test (Male Parts)	IS 9385 (Part-1)
13	Marking & Identification Verification	IS 9385 (Part-1)

#### Fuse link

Sl. No	Type Test Description	IS Standard
1	Conductor resistance test	IS 9385 (Part-1)
2	Pre sulphate test	IS 9385 (Part-1)
3	Dry power frequency voltage withstand test	IS 9385 (Part-1)
4	Copper purity test	IS 9385 (Part-1)
5	Visual & dimension test	IS 9385 (Part-1)

#### Insulator

Sl. No	Type Test Description	IS Standard
1	Visual & dimension	IS 166222
2	Dielectric test before and after exposure to humidity	IS 166222
3	Dielectric wet test	IS 166222
4	Bending Test	IS 166222
5	Torsion Test	IS 166222
6	Crushing Test	IS 166222
7	Mechanical Fatigue test (Bending Test)	IS 166222
8	Mechanical Fatigue test (Dielectric Test)	IS 166222

### B. Routine test

Sl. No	Test Description	IS Standard
1	Visual & dimension	IS 9385 (Part-1)
2	Power frequency withstand test in open condition	IS 9385 (Part-1)
3	Power frequency withstand test in close condition	IS 9385 (Part-1)
4	Test of strikers	IS 9385 (Part-1)
5	Temperature rise	IS 9385 (Part-1)

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*Sandip Pal*

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**Sandip pal**

6 Marking test

IS 9385 (Part-1)

7 Fitment and interchangeability check

IS 9385 (Part-1)

8 Operational test

IS 9385 (Part-1)

**C. Acceptance test**

Sl. No	Test Description	IS Standard
1	Visual & dimension	IS 9385 (Part-1)
2	Power frequency withstand test in open condition	IS 9385 (Part-1)
3	Power frequency withstand test in close condition	IS 9385 (Part-1)
4	Test of strikers	IS 9385 (Part-1)
5	Temperature rise	IS 9385 (Part-1)
6	Marking test	IS 9385 (Part-1)
7	Fitment and interchangeability check	IS 9385 (Part-1)
8	Operational test	IS 9385 (Part-1)

**8.0 TYPE TEST CERTIFICATE**

The bidder shall furnish the type test certificates as mentioned above as per the corresponding standards. All the tests shall be conducted at CPRI / ERDA/ Govt lab which is NABL accredited as per the relevant standards for offered product. Type tests must be conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid. In the event of any discrepancy in the test reports, i.e. any test report not acceptable same shall be carried out without any cost implication to TPNODL

**9.0 PRE-DESPATCH INSPECTION**

Equipment shall be subject to inspection by a duly authorized representative of the TPNODL. Bidder shall grant free access to the places of manufacture to TPNODL's representatives at all times when the work is in progress. Inspection by the TPNODL or its authorized representatives shall not relieve the bidder of his obligation of furnishing equipment in accordance with the specifications. Material shall be dispatched after specific MDCC (Material Dispatch Clearance Certificate) is issued by TPNODL.

Following documents shall be sent along with material

- Test reports
- MDCC issued by TPNODL
- Invoice in duplicate
- Packing list
- Drawings
- Delivery Challan
- Other Documents (as applicable)

**10. INSPECTION AFTER RECEIPT AT STORE:**

The material received at TPNODL, Balasore, Odisha store shall be inspected for acceptance and shall be liable for rejection, if found different from the reports of the pre-dispatch inspection and one copy of the report shall be sent to Plant Engineering department.

The material shall be liable for rejection, if test results are found different from the reports of the pre-dispatch inspection

**11. GUARANTEE:**

Bidder shall stand guarantee towards design, materials, workmanship & quality of process/ manufacturing of items under the contract for due and intended performance of the same, as an integrated product delivered under this contract. In the event any defect is found by the Company up to a period of 12 months from the date of receipt after internal inspection at TPNODL stores i.e. GRN made under the contract, supplier shall be liable to undertake to replace/rectify such defects at his own costs. within mutually agreed timeframe, and to the entire satisfaction of the Company, failing which the Company will be at liberty to get it replaced/rectified at supplier's risks and costs and recover all such expenses plus the Company's own charges (@ 20% of expenses incurred), from the supplier or from the "Security cum Performance Deposit" as the case may

Initiator



HEAD (Engineering)



<b>TPNODL</b>	<b>TP NORTHERN ODISHA DISTRIBUTION LIMITED</b>		<b>FO1 – (10.44.15)</b>
	<b>TECHNICAL SPECIFICATIONS</b>		
<b>Doc. Title</b>	<b>Operating rod for drop out fuse along with fuse link</b>		
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be. Bidder 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.

**12. PACKING:**

Each Rod shall be packed in individual package of sufficient strength to protect from moisture, dust and can be protected from damage during normal conditions. The Rod shall be packed in such a way that the Rod does not get deformed or damaged during transportation and storage. Note: Single use plastic not to be used for packing of the material.

**13.TENDER SAMPLE:**

One Sample of each rating to be submitted during technical bid submission.

**14.TRAINING:**

NA

**15. QUALITY CONTROL**

The bidder shall submit with the offer Quality assurance plan indicating the various stages of inspection, the tests and checks which will be carried out on the material of construction, components during manufacture and bought out items and fully assembled component and equipment after finishing. As part of the plan, a schedule for stage and final inspection within the parameters of the delivery schedule shall be furnished. TPNODL's engineer or its nominated representative shall have free access to the manufacturer's/sub-supplier's works to carry out inspections.

**16. MINIMUM TESTING FACILITIES**

Bidder shall have adequate in-house testing facilities for carrying out all routine tests & acceptance tests as per relevant International / Indian standards.

**17. MANUFACTURING ACTIVITIES**

The successful bidder will have to submit the bar chart for various manufacturing activities clearly elaborating each stage, with quantity. This bar chart should be in line with the Quality assurance plan submitted with the offer. This bar chart will have to be submitted within 15 days from the release of the order.

**18. SPARES, ACCESSORIES AND TOOL**

NA

**19. DRAWING AND DOCUMENTS**

Following drawings & Documents shall be prepared based on TPNODL specifications and statutory requirements and shall be submitted with the bid:

- a. Completely filled in Technical Particulars issued by OEM and compliance to each clause of the specification.
- b. Experience Certificate and past supply list.
- c. Type test certificates.

All the documents & drawings shall be in English language.

**20. GUARANTEED TECHNICAL PARTICULARS**

ALL clauses and points in specification to be complied. Further The bidder shall furnish GTP covering:

**21. SCHEDULE OF DEVIATIONS**

(TO BE ENCLOSED WITH TECHNICAL BID)

All deviations from this specification shall be set out by the Bidders, clause by Clause in this schedule. Unless specifically mentioned in this Schedule, the tender shall be deemed to confirm the Purchaser's specifications:

Sl.No	Clause No.	Details of deviation with justifications
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We confirm that there are no deviations apart from those mentioned above.

Seal of the Company

Designation & Signature

Initiator		HEAD (Engineering)	
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TP NORTHERN ODISHA DISTRIBUTION LIMITED

TECHNICAL SPECIFICATIONS

FO1 – (10.44.15)

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		<b>WORK INSTRUCTION /OPERATING GUIDELINES</b>	
Doc. Title		GENERAL CONDITIONS OF CONTRACT –SUPPLY ORDERS	
Rev. No.		0	Page 1 of 50
Prepared By: - Rajib Bhattacharya		Reviewed By: - Vipin Chouhan	Approved by: - Pourush Garg

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GENERAL CONDITIONS OF CONTRACT

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## 1.0 ORGANIZATIONAL VALUES

The TP Odisha Discoms (TPCODL/TPNODL/ TPSODL/TPWODL) 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 Associates and Stakeholders are requested to register any grievance on ethics violation on respective discom's website.

The Business Associate and TP Odisha Discom shall be bound by the provisions/ clauses mentioned in Tata Code of Conduct (TCoC) in all their dealings with stakeholders. The Associate is advised to go through the TCoC document available as Annexure-J.

2.1 The below practices would be liable for punitive actions such as cancellation of contracts, banning and blacklisting of bidders

2.1.1 **Anti-competitive practice**": any collusion, bid rigging or anti-competitive arrangement, or any other practice coming under the purview of The Competition Act, 2002, between two or more bidders, with or without the knowledge of the procuring entity, that may impair the transparency, fairness and the progress of the procurement process or to establish bid prices at artificial, non-competitive levels.

2.1.2 **Conflict of interest**": participation by a bidding firm or any of its affiliates that are either

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involved in the consultancy contract to which this procurement is linked; or if they are part of more than one bid in the procurement; or if the bidding firm or their personnel have relationships or financial or business transactions with any official of procuring entity who are directly or indirectly related to tender or execution process of contract; or improper use of information obtained by the (prospective) bidder from the procuring entity with an intent to gain unfair advantage in the procurement process or for personal gain

## **CONTRACT PARAMETERS**

### **3.0 Issue/Award of Contract**

TPCODL awards the contract to the Associate in writing in the form of Purchase Order (PO) or 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.

### **3.1 Contract Commencement Date**

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

### **3.2 Contract Completion Date**

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

### **3.3 Contract Period/Time**

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

### **3.4 Contract Execution Completion Date**

The stipulated date for completing the supply as per schedule of quantities shall be deemed as the Contract Execution Completion Date.

### **3.5 Contract Price /Value**

The total all inclusive price/value mentioned in the PO/RC 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 and accepted and certified by the authorized representative of the company unless otherwise specified in schedule of quantities or in contract documents.

#### **3.5.1 Anti Profiteering Clause**

Notwithstanding anything contained in the Contract, in the event of introduction of any new legislation or any change or amendment or enforcement of any Act or Law, or any change in the interpretation by the Supreme Court of India of any said Act or law, rules or regulations of Government of India or State Government(s) or Public Body which becomes effective after the bid date to the completion of work including defect liability period, if any, which results in any decrease in the cost of the works through reduced liability of taxes & duties, increase in the input tax credits, the Supplier shall pass on the benefits of such reduced cost, taxes or duties to the extent which is directly attributable to such Introduction of new legislation or change or amendment as mentioned above as per Anti-profiteering Rules, 2017, hereby, "Tax" or "tax" shall include taxes, duties, levies, cess and similar imposts by whatever name called whether in the nature of Indirect Tax or direct taxes and whether or not imposed by the Central government, state government, local or municipal authority or any other statutory body.

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### 3.6 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.
- 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)

### 3.7 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.

### 3.8 Reverse Auction

TP Odisha Discoms 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 F.

## 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 and undertake fully the technical/commercial requirements of items to be supplied as listed in the Schedule of Quantities together with the tests to be performed /test reports to be furnished before dispatch, arrangement of stage and final inspections during manufacturing as per terms and conditions of contract, technical parameters & delivery terms and conditions including transit insurance to be met in order to fully meet TP Odisha Discom requirements.

Completeness: 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, license 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.

TP Odisha Discom 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 respective TP Odisha Discom, provide Purchaser with a reasonably detailed estimate of the cost of the change outlined in the request.

In the event, TP Odisha Discom requests a change, the Contract price and time shall be adjusted

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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 wherever so applicable in terms of or otherwise directed by the TP Odisha Discom.

#### 4.1 Bid Evaluation- Commercial & Technical

TP Odisha Discom reserves the right to evaluate the bid on the parameters below as per the requirement:

**Commercial Evaluation:** The bid shall be evaluated on the basis of Qualifying Requirement parameters and other commercial parameters as mentioned in tender.

**Technical Evaluation:** The bid shall be evaluated on the parameters and not limited to Bidder Experience, Bidder Performance with other utility/company, internal performance feedback, Technical Specification, General Technical Parameters (GTP), Layout, Drawings and factory evaluation.

#### 5.0 PRICES/RATES/TAXES

Unless specified elsewhere in the contract document, the prices/rates are inclusive of cost of finished product for which MDCC will be issued by TPCODL, packaging and forwarding charges, freight and transit insurance charges covering loading at Associate's works, transportation to TP Odisha Discom's store/site & unloading & delivery at respective TP Odisha Discom's stores/ respective TP Odisha Discom's site, cost of documentation including all the relevant test certificates and other supportive documents to be furnished.

The Prices/Rates are inclusive of all taxes, levies, cess 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/rates shall remain firm till actual completion of entire supply of goods/material/equipment as per contract is achieved and shall remain valid till the completion of the contract.

The prices shall remain unchanged irrespective of TP Odisha Discom 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 TP Odisha Discom 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 respective TP Odisha discom.

#### 6.0 TERMS OF PAYMENT

On delivery of the materials in good condition and certification of acceptance by TP Odisha Discom's official, Associate shall submit the Bills/Invoices in original in the name of respective Discom i.e "TP Central Odisha Distribution Limited" / "TP Northern Odisha Distribution Limited" / "TP Southern Odisha Distribution Limited" / "TP Western Odisha Distribution Limited" to invoice desk, complete with all required documents as under:

- Test Reports (4 sets).
- MDCC issued by TPCODL.

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- Packing List.
- Drawing and Catalogue.
- Guarantee/Warranty Card.
- Delivery Challan.
- O&M Manual.
- Copy of Order.
- Minutes of Meeting.
- E-Way challan (if applicable)

Bills/ invoices shall mention Supplier's GST Number. Respective TP Odisha Discom will make 100% payment within 60 days of submission of the error free certified Bill/Invoice complete in all respects and along with all the requisited documents mentioned above, subject to condition that Associate has furnished the requisite Security-cum-Performance Guarantee as stipulated in the contract.

### 6.1 Quantity Variation

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

### 6.2 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 crossed Cheque or RTGS/ NEFT/ Online Net banking mode whichever of the two modes chosen by the Associate, in favour of Associate's Bank Account on TP Odisha Discom's 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 G. Further, for any payments made, TP Odisha Discom shall not be 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.

### 8.0 SECURITY CUM PERFORMANCE DEPOSIT

Associates shall submit within 21 days from the effective date of issue of PO/RC, Security Performance Bank Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to respective TP Odisha Discom for:

- 5% of the PO value if purchase order value is more than Rs 5 Crores.
- 10% of the PO value if purchase order value is less than Rs 5 Crores.
- 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus six months.

In case of non-submission of PBG by BA within 21 days post awarding the contract, respective TP Odisha Discom will reserve the right to take any appropriate action. However, in case of non-submission of PBG till the date of first bill submission, the amounts towards PBG shall be retained by respective TP Odisha Discom from Bills.

The validity of PBG shall be Guarantee Period of contract, plus six months. Claim period shall be another six months of post BG expiry.

- 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

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while processing the invoice and shall be released after completion of GuaranteePeriod 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 Six 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 respective TP Odisha Discom. Alternatively, Associate may extend the validity of original SPBG only till the requisite period, i.e. Guarantee Period plus six months.

## 9.0 STATUTORY COMPLIANCE

### 9.1 Compliance to Various Acts

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 concerned TP Odisha Discom indemnified always till completion of contracts.

### 9.2 SA 8000

Each TP Odisha Discom 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

TP Odisha Discom believes in promoting social equity and opportunities that enable and empower socially and economically disadvantaged sections of society, specifically the Scheduled Caste, Scheduled Tribes, Persons with Disabilities and women from marginalized communities (AA group). The company recognizes that diversity in the workplace positively impacts its business, partnerships and future-readiness. TP Odisha Discom will volunteer its training resources to the best extent to improve education, employability, financial & digital inclusivity of the AA group of society. TP Odisha Discom will empower and encourage AA groups for entrepreneurship and inclusion in industrial value chains.

### Relaxation in Contract Clauses under Affirmative Action for AA Community Associates\*\*

TP Odisha Discom 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 Women from marginalized communities & Persons with Disabilities has been adopted across the company.

Under the same pre-text, and to promote entrepreneurship among SC/ST community, Women from

marginalized communities & Persons with Disabilities TP Odisha Discom has taken initiative by proposing relaxations in contract clauses as per below:

S. No	Initiative	for SC/ ST, Women from marginalized communities & Persons with Disabilities BA's	Guideline Document
1	Tender Fees	Tender Fees Rs 1000/- (including tax)	All Open Tenders
2	Earnest Money Deposit	EMD exempted for AA Category Bidders, 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.	All limited and Open Tenders
3	Performance Bank Guarantee	Performance Bank Guarantee for AA Category bidders shall be 25% of the value normally prescribed.	All limited and Open tenders
4	Turnover	Qualification Requirement of Financial Turnover for AA Category bidders shall be reduced to 20% of the existing criteria.	All Open Tenders

**\*\*Classification of BAs under AA Category shall be governed under following guidelines:**

- Proprietorship/ Single Ownership Firm: Proprietor of the firm should be from SC/ST community, Women from marginalized communities & Persons with Disabilities. Governing document shall be duly audited balance Sheet for the last FY bearing the name of proprietor.
- Partnership Firm: Only such firms shall qualify which have SC/ST, Women from marginalized communities & Persons with Disabilities partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed and audited balance sheet/ ITR for last FY.
- Private limited company: Only such firms shall qualify which have SC/ST, Women from marginalized communities & Persons with Disabilities directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing documents shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

*Note: Certification from SC/ST commission, Women from marginalized communities & Persons with Disabilities shall be required for deciding upon AA category of a person / firm.*

**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 TP Odisha Discom /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 Material/Equipment/Works Quality**

The items / works under the scope of the Associate shall be of the best quality and workmanship according to the latest engineering practice and shall be manufactured from materials of best quality considering strength and durability for their best performance and, in any case, in accordance with the specifications set forth in this Contract. All material shall be new. Substitution of specified material

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or variation from the process of fabrication/ construction/ manufacture may be permitted but only with the prior written approval of the respective TP Odisha Discom.

### 10.3 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 TP Odisha Discom 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 TP Odisha Discom. 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.

### 10.4 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 TP Odisha Discom. 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 TP Odisha Discom. All such products and equipment shall be used or installed in strict accordance with original manufacturer's recommendations, unless otherwise directed by the TP Odisha Discom. In any circumstances the codes, specimen and standards prescribed by any government agency should not be violated.

## 11.0 INSPECTION/PARTICIPATION

### 11.1 Right to Carry Out Inspection

TP Odisha Discom reserves the right to send its representatives for inspection or participation at various stages of contract execution listed below, applicable as per contract construction.

- During basic design and detail engineering of material/ Equipment carried out by Associate /Outsourced Agencies.
- During manufacturing stages of the product at Associate's/Associate's Outsourced Agency's Plant/Facility.
- During Pre-dispatch Inspection and Testing of finished/manufactured product at Associate's/Associate's outsourced Agency's Plant/Facility.
- During Installation & Commissioning Activities/Stages.
- Prior to Clearing of the completed installation for commissioning.
- Any other stage as find appropriate by TP Odisha Discom during contract execution time.

All inspections and participations shall be carried out by TP Odisha Discom giving written intimation to the Associate or receiving appropriate advance written inspection call from the Associate, unless otherwise specified elsewhere in the contract document.

### 11.2 Facilitating Inspection

The Associate shall provide all opportunities and information to TP Odisha Discom's engineers to get acquainted with the technical know-how and the methods and practices adopted by the Associate in basic and detail engineering. The Associate shall provide documents, drawings, calculations etc. as

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may be required by the Engineers.

The Associate shall provide free of charge office accommodation, office facilities, secretarial services, communication facilities, general and drawing office stationary, etc. as may be reasonably required by the TP Odisha Discom's engineers. Similarly, facilities shall also be provided by Associate's outsource agencies/partners/authorized dealers (collectively termed as sub associates) if such basic and detail engineering activities are carried out in the design offices of sub-Associates.

The Associate shall be responsible for the safety of employees of TP Odisha Discom /Third Party Agency when they are at the Associate's /Associate's outsource agency's plant or facility for carrying out/witnessing inspection/testing. All statutory safety precautions as applicable shall be followed by the Associate during Inspection Testing. If TP Odisha Discom inspectors are not satisfied with the safety arrangements at the plant, TP Odisha Discom have the right to call off inspection till such time corrective action is taken by the Associate.

Before raising the call for pre-dispatch final inspection and testing, the Associate shall conduct all the tests—type tests, routine tests etc-as specified in the contract document and submit copies of the test certificates to TP Odisha Discom along with the inspection call, for scrutiny of TP Odisha Discom.

The Associate and TPCODL shall jointly document all the observations, comments and action points after completion of inspection and it shall be binding on the Associate to provide compliance on all the points requiring compliance and furnish the compliance report to the designated authority of TP Odisha Discom for receiving clearance for dispatch of materials.

### **11.3 Third Party Nomination**

TP Odisha Discom also may nominate a third party for the purpose of carrying out the inspection and such an agency shall be entitled to all the rights and privileges of TP Odisha Discom as far as conducting the inspection.

### **11.4 Waiver of Inspections**

TP Odisha Discom on its own discretion shall choose to waive off any inspection and ask the Associate to submit all the test reports as applicable as per contract specifications, related to inspection and testing of the goods ordered for scrutiny and clearance for dispatch.

### **11.5 Incorrect Inspection Call**

In case it is observed that the material offered for inspection is not ready at the time of TP Odisha Discom inspection visit rendering it as futile, all costs towards such inspection shall be recovered from the BA. Taxes as applicable on such recoveries shall be borne by the BA.

## **12.0 MDCC & DELIVERY OF MATERIALS**

### **12.1 Material Dispatch Clearance Certificate**

Associate shall deliver material/goods/equipment against Supply Contracts or Supply Part of Composite/Service Contracts only after receiving Material Dispatch Clearance Certificate (hereafter termed as MDCC) issued by designated authority of TP Odisha Discom. Material delivered at respective TP Odisha Discom stores or at project site without a valid MDCC issued by the designated official of TP Odisha Discom shall be rejected. MDCC shall be issued to associate furnishing compliance report on the action points documented during pre-dispatch inspection and testing at Associate's/ Sub Associate's plant/ facility. In case Pre-dispatch inspection is waived at the discretion of TP Odisha Discom, then, MDCC shall be issued on receiving all the test reports-routine & type—from the Associate and finding them in order.

The associate shall include and provide for securely protecting and packing the materials so as to avoid loss or damage during handling and transport by air, sea, rail and road or any other means.

All such packing shall allow to the extent possible for easy removal and checking at Site. The associate shall take special precautions to prevent rusting of steel and iron parts during transit by sea.

Gas seals or other materials shall be utilized by the associate for protection against moisture during transit of all Plant and Equipment. The associate shall use environmentally friendly packing to a great extent.

Each Equipment or parts of Equipment shall be tagged with reference to the assembly drawings and corresponding part numbers. Each bale or package shall contain a packing note quoting specifically the name of the associate, item description, quantity, item / package identification.

All packing cases, containers, packing and other similar materials shall be new and supplied free by the associate and it shall not be required to be returned to the associate.

Notwithstanding anything stated in this clause, the associate shall be entirely responsible for loss, damage or depreciation or deterioration to the materials and supplies due to faulty and/or insecure packing or otherwise during transportation to the Site until otherwise provided herein.

In case of the consignments dispatched by road, the associate shall ensure that it or its subcontractors:

- i) Identify and obtain the correct type of trucks/trailers, keeping in view the nature of consignments to be dispatched.
- ii) Take such actions as may be necessary to avoid all possible chances of damages during transit and to ensure that all packages are firmly secured.

Timelines for inspection and MDCC is as below:

S. No.	Inspection	MDCC issuance time including Inspection date (max.)
1	Outside Odisha	10 days
2	Within Odisha	5 days
3	Waiver*	3 working days

\* Associate is expected to raise the inspection call assuming that Inspection shall be carried out by TP Odisha Discom. The decision for waiver of inspection shall be on sole discretion of TP Odisha Discom. The Bidder has to intimate 7 days prior for inspection to respective discoms.

### 12.2 Right to Rejection on Receipt

Goods/Material/Equipment delivered in condition physically damaged & incomplete as a product ordered, or not packed and transported as per the terms and conditions of the contract is liable to be rejected. Such item shall be lifted back by Associates within 15 days from receipt of rejection note from respective TP Odisha Discom and have to supply back the material within next 30 days or within the timeframe mutually decided by Associate and concerned TP Odisha Discom.

If delivery of the material is beyond the agreed time, Liquidated damage clause, mentioned in this GCC separately shall be applicable; but the period for levy of LD shall be considered as per the original delivery schedule and not from the agreed timelines for material rectification.

### 12.3 Consignee

Unless otherwise specified in the Contract Document, Materials/Goods/Equipment shall be consigned to "Stores-In-Charge", TPCODL, Bhubaneswar / "Stores-In-Charge", TPNODL, Borsore / "Stores-In-Charge", TPSODL, Berhampur / "Stores-In-Charge", TPCODL, Burla.

Store location will be depending upon the concerned Discom, mentioned on the Rate Contract / Purchase Order / Released Order.

### 12.4 Submission of mandatory documents on Delivery

Following documents shall be mandatorily submitted by BA along with supply of material to TPCODL stores/site:

S. No.	Documents	Requisite
1	Invoice copy in original	With all consignments
2	LR copy	Wherever required
3	Packing list	With all consignments
4	MDCC	With all consignments
5	Purchase order / Release order	Signed copy
6	Test certificates	With all consignments
7	Inspection/JVR report	In case pre-dispatch inspection is conducted
8	Device data in CD as per template for metering items	Wherever applicable

## 12.5 Dispatch and Delivery Instructions

S. No.	Instructions
1	Purchase order/ Release order no. shall be mentioned on invoice and on material
2	TP Odisha Discom's material code and material description shall be mentioned in invoice and on material.
3	"Property of respective TP Odisha Discom's" shall be embossed on material. Example :- Property of TPCODL .
4	The material shall be properly sealed and packed in standard packing as per purchase order terms & conditions.
5	The weight and quantity of material shall be mentioned wherever applicable
6	The material supplied shall be co-related with the packing list.
7	The name plate detail on equipment shall include Material code, Material description, specification detail of material [as applicable], Serial No. Year of manufacturing, PO/RO no. and date, "PROPERTY OF TPCODL" / "PROPERTY OF TPNODL" / "PROPERTY OF TPSODL" / "PROPERTY OF TPWODL", Guarantee period and Associate's name.
8	In case of manual unloading, supplier / transporter shall deploy sufficient Labour for unloading the material at respective TP Odisha Discom's central store. For heavy item(s), crane shall be arranged by the BA.
9	The driver should have valid License and one helper in truck. All the documents of truck like registration papers, PUC etc. should be available in Truck.
10	BA representative should accompany the material and get it unloaded / stacked in his presence wherever possible.

## 13.0 GUARANTEE

### 13.1 Guarantee of Performance

Associates shall stand guarantee that the equipment and material supplied 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, for a specific period termed as Guarantee Period (as elaborated elsewhere in this clause). The Associate should also guarantee that the equipment/material is new

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and unused except for the usage required for the tests and checks required as part of quality assurance.

### 13.2 Guarantee Period

The Guarantee Period will be equipment/service/work specific and shall be as specified in the Standard Specifications of TP Odisha Discom for the equipment/material/service/work and where standards 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.

### 13.3 Failure in Guarantee Period (GP)

If the equipment and material supplied 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 within time frame specified in the SCC or elsewhere in the contract documents at associate's cost to make the equipment and materials 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 rendered under the contract, failed in Guarantee Period, respective TP Odisha Discom will be at liberty to get the same done at Associate's risks and costs and recover all such expenses plus the respective TP Odisha Discom'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.

Any repairs during the Guarantee Period shall be carried out by the Associate within 30 days of reporting the issue to Associate by respective TP Odisha Discom. However, if replacement of the Equipment is required, Associate shall notify the same to respective TP Odisha Discom within 7 days of reporting the issue by respective TP Odisha Discom. 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.

### 13.4 Cost of repairs on failure in GP

The cost of repairs/rectification/replacement, required transportation, site inspection /mobilization/dismantling and re-installation costs as applicable, to be borne by Associate. 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.

### 13.5 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, respective TP Odisha Discom shall have the benefit of any additional guarantee period if provided by the third party for the part supplied/executed by them.

### 13.6 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

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years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the Company.

### 13.7 Support beyond the Guarantee Period

The Associate shall ensure availability of spares and necessary support for a period of at least 10 years post completion of guarantee period of equipment supplied against the contract.

### 14.0 LIQUIDATED DAMAGES

- a) For supplies which are of standalone use, multiple in quantities and having a single final delivery schedule, Liquidated damages shall be levied without prejudice to any of the other contractual rights of TP Odisha Discom, as described below:

For delay of each week and part thereof from the delivery schedule specified in the contract, 1% of contract value corresponding to undelivered quantity, provided full quantity is supplied within 130% of the original contract time. If full contractual quantity is not delivered within 130% of contract time for delivery, respective TP Odisha Discom has the right to levy LD on the delayed delivered contract value, subject to a maximum of 10% of the total contract value.

- b) For Supplies having phased delivery schedule 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 respective TP Odisha Discom, as described below:

For the purpose of calculating and applying LD, each delivery lot shall be considered separately. For delay of each week and part thereof, from the delivery schedule specified for the lot, 1% of the contract value corresponding to the undelivered quantity of the lot subject to a maximum of 10% of the total contract value of the subject lot. However, if full contractual quantity is not delivered within 130% of contract time for delivery, respective TP Odisha Discom has the right to levy LD on the delayed delivered 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 respective TP Odisha Discom as a proof of deduction/ recovery.

#### 14.1 LD Waiver Request

Any request of LD waiver shall be submitted within thirty (30) days of deducting LD or on receipt of detail payment summary with LD details whichever is later. Request submitted beyond the timeline shall not be entertained.

### 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 TP Odisha Discom's interest failing which appropriate action (legal or otherwise) may be taken against the Associate by the respective TP Odisha Discom, 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 TP Odisha Discom in connection with the performance of the contract shall be held confidential by the Associate and shall remain the property of the TP Odisha Discom 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

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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 TP Odisha Discom.

## 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 TP Odisha Discom shall not be published or disclosed to the third parties or taken out of the country without prior written approval of the TP Odisha Discom and upon execution of confidentiality agreements satisfactory to the TP Odisha Discom 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. TP Odisha Discom 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 TP Odisha Discom. 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 TP Odisha Discom under the Contract shall be passed on to the TP Odisha Discom. The TP Odisha Discom shall have the right to use these for 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 TP Odisha Discom.

## 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 TP Odisha Discom. All rights, with respect to, or arising from such intellectual property, as afore mentioned, shall solely vest in TP Odisha Discom.

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

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proceeding/s, or otherwise. No liability of TP Odisha Discom shall arise in this respect, and any costs, damages, expenses, compensation payable by TP Odisha Discom 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 respective discoms under TP Odisha Discom 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 respective discom under TP Odisha Discom is held liable for by any court judgement. In this connection, the respective discom under TP Odisha Discom shall pass on all claims made against him to the Associate for settlement.

The Associate assumes responsibility for and shall indemnify and save harmless the respective discom under TP Odisha Discom 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 respective discom under TP Odisha Discom 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 respective discom under TP Odisha Discom.

The respective discom under TP Odisha Discom 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 TP Odisha Discom 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 TP Odisha Discom. The constituents & leader of the consortium or joint venture shall not be changed without the prior consent of TP Odisha Discom.

TP Odisha Discom 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.

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## 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.

"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

TP Odisha Discom 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 be 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 days' 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
- 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 TP Odisha Discom, 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.

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- 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 the respective discom under TP Odisha Discom, 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.**

TP Odisha Discom shall suspend execution of whole/or part thereof the contract till such time Associate complies with the conditions stipulated under section clause 22.1 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 TP Odisha Discom and not due to any breach of contract conditions by the associate, TP Odisha Discom 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 TP Odisha Discom.

If the suspension of contract in whole or part thereof is due to breach of contract conditions (refer clause 22.1) 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 the respective discom under TP Odisha Discom 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 TERMINATION OF CONTRACT**

### **22.1 Termination for Default/Breach of Contract**

The contract / PO /RC shall be subject to termination by TP Odisha Discom 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 the respective discom under TP Odisha Discom and within the timeframe as specified in the contract 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 TP Odisha Discom that Associate has adopted/ or attempted to adopt any unethical conduct, action in award of the contract /PO or at any time thereafter.

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- 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 TP Odisha Discom.

If the default or breach as specified under clause 22 (except sub clause g thereof) be committed by the associate for the first time, TP Odisha Discom shall issue, along 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 the particular discom under TP Odisha Discom then TP Odisha Discom 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 22 g stated above, TP Odisha Discom shall have the right to terminate all the contracts TP Odisha Discom is having with the Associate by issuing termination notice which shall be without prejudice to the other rights of TP Odisha Discom available to it under law.

Without prejudice to its right to terminate for breach of contract, TP Odisha Discom 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 TP Odisha Discom 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 arrangements which the associate might have entered into with third parties for due discharge of its obligations under the contract with TP Odisha Discom.
- 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 TP Odisha Discom 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 TP Odisha Discom 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 TP Odisha Discom 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 TP Odisha Discom 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 TP Odisha Discom 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, TP Odisha Discom 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 TP Odisha Discom 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 TP Odisha Discom 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 TP Odisha Discom against the amount recoverable from him on this ground. The same shall be without prejudice to other rights available to TP Odisha Discom 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, TP Odisha Discom shall be entitled to bar the associate, its agents, affiliates from undertaking any negotiation / tendering, bidding, participation activities concerning TP Odisha Discom for a period of two years from date of such termination. The same shall be without prejudice to other rights available to TP Odisha Discom.

## 22.2 Termination for Convenience of Associate

Associate at its convenience may request for termination of contract, clearly assigning the reason for such request. TP Odisha Discom has full right to accept, reject or partially accept such request. However, associate shall continue its supply as per contract till final approval is given to associates for such termination.

## 22.3 Termination for Convenience of respective discoms under TP Odisha Discom

TP Odisha Discom at its sole discretion may terminate the contract by giving 30 days prior notice in writing or through email to the Associate. The respective discoms under TP Odisha Discom 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.

## 22.4 Work Instruction – Process for Sending Business Associates on Holiday

To implement a system for putting BA on holiday due to non-performance, unethical practices etc.

TP Odisha Discom reserves the right to put BA on holiday/ after which it can be reconsidered for reinstatement as per table below:

S. No.	Reason for putting BA on holiday	Period of holiday
1	Ethical grounds	Permanent
2	Quality	A period from 2 to 5 years depending upon the seriousness of the lapse on BA part
3	Safety	A period from 2 to 5 years depending upon the seriousness of the lapse on BA part
4	Non Performance	A period from 2 to 5 years depending upon the seriousness of the lapse on BA part
5	Any other	The period depending upon the seriousness of the lapse on BA part

The aforesaid table is also applicable for running orders

## 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

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party for resolution by the sole arbitrator to be appointed mutually by both the parties. Thearbitral proceedings shall be conducted in accordance with Arbitration and Conciliation Act 1996and the place of arbitration shall be Bhubaneswar. The language to be used at proceedings shallbe 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

arbitration proceedings unless otherwise directed in writing by the concerned TP Odisha Discom or suspended by the arbitrator. Further, respective TP Odisha Discom shall continue making such payments as may be found due and payable to the associate for such works.

### **23.1 Governing Laws and Jurisdiction**

The parties shall be subject to the jurisdiction of the courts of

- a) law in Bhubaneswar and any matter arising here from shall be subject to applicable law in force in India for TPCODL.
- b) law in Balasore and any matter arising here from shall be subject to applicable law in force in India for TPNODL.
- c) law in Berhampur and any matter arising here from shall be subject to applicable law in force in India for TPSODL.
- d) law in Sambalpur and any matter arising here from shall be subject to applicable law in force in India for TPWODL.

### **24.0 ATTRIBUTES OF GCC**

#### **24.1 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.

#### **24.2 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.

#### **24.3 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.

### **25.0 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 TP Odisha Discom or not. However any error in design/drawing arising out of any incorrect data/written information from TP Odisha Discom will not be considered as error and omissions on part of the Associate.

### **26.0 TRANSFER OF TITLES**

The title of ownership and property to all equipment, materials, drawings & documents shall pass to the TP Odisha Discom on acceptance of material by store/site after Inspection.

However, such passing of title of ownership and property to the TP Odisha Discom shall not in any way absolve, dilute or diminish the responsibility and obligations of the Associate under this Contract

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including loss or damages and all risks, which shall vest with the Associate.

## 27.0 INSURANCE

The Contractor shall take out the Insurance Policies which shall cover all risks including the following, as applicable:-

- a) The value of the policy shall cover the total value of all the items till they are handed over to the respective discom under TP Odisha Discom.
- b) The respective discom under TP Odisha Discom shall be the principal holder of the policy. The Associate shall be the loss payee under the policy. Associate / Sub-contractor of the Associate shall not be holders or beneficiaries in the policy nor shall they be named in the policy. The respective discom under TP Odisha Discom reserves the exclusive right to assign the policy.
- c) While the payment of premium may be phased in agreement with the insurance company, at no time shall goods and services required to be provided by the associate shall remain uninsured in accordance with (a) above.
- d) A copy of the Insurance policy shall be made available to The respective discom under TP Odisha Discom prior to first dispatch lot of any Equipment and policy shall be kept alive and valid at all times up to the stage of final acceptance.
- e) The respective discom under TP Odisha Discom reserves the right to take out whatever policy that is deemed necessary by him if the associate fails to keep the said policy alive and valid at all times and/or causes lapses in payment of premium thereby jeopardizing the said policy. The cost of such policy(s) shall be recovered / deducted from the amount payable to the associate.
- f) The policy shall ensure that the respective discom's decision under the respective discom under TP Odisha Discom regarding replacement of goods damaged, lost or rendered unusable shall be final.

In all cases, the associate shall lodge the claims with the underwriters and also settle the claims and shall also notify TP Odisha Discom of any filed claims. However, the associate shall proceed with the repairs and/or replacement of the equipment/components without waiting for the settlement of the claims. In case of seizure of materials by concerned authorities, the associate shall arrange prompt release against bond, security or cash as required. TP Odisha Discom, upon request by the associate, will extend all reasonable assistance to the associate in such a case.

All the insurance claims shall be processed and settled by the associate and the missing/damaged items shall be replaced/repared by them without any extra cost to the respective discom under TP Odisha Discom and without affecting the completion time.

## 28.0 SUGGESTIONS & FEEDBACK

We welcome all our Business Associates to write to us about their experience with TP Odisha discom; 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.

You may send your feedback to HOD / Head Contracts by filling up our Business Associate Feedback Form enclosed herewith as *Annexure-I*.

## 29.0 CONTACT POINTS

In case Business Associate needs information with respect to payments or has any grievances, he may contact to HOG / HoD-Contracts, Head / Chief -Contracts and Finance.

## 30.0 LIST OF ANNEXURES

S. No.	Subject	Annexure
1.	Performa for Bid Security Bank Guarantee	A
2.	Performa for Performance Bank Guarantee (CP cum EP)	B
3.	Performa for No Demand Certificate by Associate	C
4.	Performa For Application For Issuance of Consolidated TDS Certificate	D
5.	Business Associate Feedback Form	E
6.	Acceptance Form For Participation In Reverse Auction Event	F
7.	Form for RTGS Payment	G
8.	Vendor Appraisal Form	H
9.	Manufacturer Authorization Form	I
10	TATA Code of conduct (TCoC)	J
11	ESG FRAMEWORK FOR BUSINESS ASSOCIATES	K

**ANNEXURE-A**

**PROFORMA FOR BID SECURITY BANK GUARANTEE**

**A. Applicable for Central Contracts (CCG) & TPCODL's Tenders**

**The TP Central Odisha Distribution Limited  
Bhubaneswar**

**B. Applicable for TPNODL's Tenders**

**TP Northern Odisha Distribution Limited,  
Balasore**

**C. Applicable for TPSODL's Tenders**

**The TP Southern Odisha Distribution Limited,  
Berhampur**

**D. Applicable for TPWODL's Tenders**

**TP Western Odisha Distribution Limited  
Burla**

WHEREAS, (Name of the Bidder) \_\_\_\_\_  
(hereinafter called "the BIDDER") has submitted his bid dated \_\_\_\_\_ for the (Name of Contract) (hereinafter called "the BID").

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 The 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** .....

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**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 six month must be kept up
- c) The guarantee to be accompanied by the covering letter from the bank confirming the signature to the guarantee

-----  
**The 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 cum erection / civil work of \_\_\_\_\_ (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 contractand 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.
3. In consideration thereof, we, \_\_\_\_\_ hereby irrevocably and unconditionally guarantee to pay to you on demand but in any case before the end of five working days from the date of the claim and without demur and without reference to "the Vendor" such amount or amounts not exceeding the sum of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) being \_\_\_\_\_ % ( \_\_\_\_\_ percent) of the total value of the contract on receipt of your intimating that "the Vendor" has not fulfilled his contractual obligations. You shall be the sole judge for such non-fulfillment and "the Vendor" shall have no right to question such judgment.
4. You shall have the right to file / make your claim on us under BG Validity for a **further period of six months** 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 whichyou may have against "the Vendor" and to exercise the same in any covenant contained orimplied 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 any of your rights with reference to matters aforesaid or any of them or by reasonsof 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

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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( for TPCODL) / Balasore Branch (For TPNODL) / Berhampur Branch (TPSODL) / Sambalpur (TPWODL) and claim will also be payable at \_\_\_\_\_
- e) Bhubaneswar Branch (to be confirmed by Bhubaneswar Branch by a letter to that effect in case BG is from the branch outside Bhubaneswar) – **applicable for TPCODL.**
- f) Balasore Branch ( to be confirmed by Bhubaneswar Branch by a letter to that effect in case BG is from the branch outside Balasore) – **applicable for TPNODL.**
- g) Berhampur Branch ( to be confirmed by Bhubaneswar Branch by a letter to that effect in case BG is from the branch outside Berhampur) – **applicable for TPSODL.**
- h) Sambalpur Branch ( to be confirmed by Bhubaneswar Branch by a letter to that effect in case BG is from the branch outside Sambalpur) – **applicable for TPWODL.**
9. 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 \_\_\_\_\_ 20\_\_

Bank's rubber stamp

1. Banks full address

Designation of Signatory

2. Bank official number

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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 respective TP Odisha Discom’s 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 / TPNODL / TPSODL / TPWODL), in respect of our aforesaid Order No  
 \_\_\_\_\_ dated \_\_\_\_\_  
 including amendments, if any, issued by \_\_\_\_\_ (TPCODL / TPNODL / TPSODL / TPWODL),  
 to our entire satisfaction and we further confirm that we have no claim whatsoever pending with  
 \_\_\_\_\_ (TPCODL / TPNODL / TPSODL / TPWODL), 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 / TPNODL /  
 TPSODL / TPWODL), with full knowledge and with our free consent without any undue influence,  
 misrepresentation, coercion etc.

**Place**

**Name**

(Company Seal)

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**ANNEXURE-D**

**PROFORMA FOR APPLICATION FOR ISSUANCE OF CONSOLIDATED TDS  
CERTIFICATE**

To be printed on the letterhead. Please tick (✓) on concerned Discom

To,

The TP Central Odisha Distribution Limited

Bhubaneswar

or

The TP Northern Odisha Distribution Limited

Balasore

or

The TP Southern Odisha Distribution Limited

Berhampur

or

The TP Western Odisha Distribution Limited

Sambalpur

**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-E**

**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 / TPNODL / TPSODL / TPWODL) 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    More than 200 kms from Bhubaneswar

**Your nearly turnover with " \_\_\_\_\_ (TPCODL / TPNODL / TPSODL / TPWODL)**

- Less than 25 Lacs    25 Lacs to 1 Crore    More than 1 Cr.

**Additional Information**

<b>Your Name</b>	
<b>Your Designation</b>	
<b>Your Organization</b>	
<b>Contact Nos.</b>	
<b>Email</b>	

*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)*

**SECTION - A**

(Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement).

Discom Name:- \_\_\_\_\_(TPCODL/TPNODL/TPSODL/TPWODL)

S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
		Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	
1	You receive all relevant queries / tenders from us in timely manner.						
2	We provide you enough lead time to respond to our queries / tenders.						
3	We provide you adequate support (drawings, documents, clarifications, briefing etc.) to enable you meet our requirements.						
4	All following elements of our contract / purchase order are rational :						
4.1	Scope of Work						
4.2	Delivery / Execution Schedule						
4.3	Payment Terms						
4.4	Liquidated Damages						
4.5	Performance Guarantee						
5	Our purchase orders / contracts are simple, specific & easy to understand						
6	Discom demonstrate willingness to be flexible in administration of Contract / Purchase Order						
7	We provide timely responses / clarifications to your queries						
8	Discom representative you interact / coordinate with is adequately empowered to support you in meeting contractual obligations						
9	Discom provide you all necessary infrastructure support for timely and quality completion of work (including AMC)						
10	Discom Engineer-in-Charge timely certifies the jobs executed/ material supplied						
11	Discom Engineer-in-Charge efficiently supervises the job execution for timely completion of job						
12	BIRD (Bill Inward Receipt Desk) initiative has improved payment disbursement process						

S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
		Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	
13	Our approach for Inspection and Quality Assurance effective to expedite project completion?						
14	Discom never defaults on contractual terms						
15	In Discom Contracts closure is done within set time limit						
16	Our material receiving procedures are well defined and efficiently deployed to reduce mutual inconvenience						
17	Bank Guarantees are released in time bound manner						
18	Our processes related to payment / account settlement are effective.						
19	You get payments on time						
20	Discom Employees follow Ethical behaviour						

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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); Discom Name: - \_\_\_\_\_(TPCODL/ TPNODL/ TPSODL/ TPWODL)

S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
1	How do you rate courtesy/ empathy/ attitude level and warmth of Discom employees you interact with from following team?						
1.1	Project Engineering						
1.2	District / Zones						
1.3	Projects/HOG (TS &P)						
1.4	Inspection & Quality Assurance						
1.5	Stores						
1.6	Metering & Billing						
1.7	Accounts / Finance						
1.8	Administration						
1.9	IT & Automation						
2	How would you rate Discom in comparison to your other clients in terms of <b>fairness of treatment and transparency</b> with its Business Associates?						
3	How would you rate Discom in comparison to your other clients in terms of <b>processes and systems to manage partnership</b> with its Business Associates						
4	How would you rate Discom in comparison to your other clients in terms of <b>building long term &amp; mutually relationship</b> with its Business Associates						

**SECTION – C**

Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement. Discom Name:- \_\_\_\_\_(TPCODL/ TPNODL/ TPSODL/ TPWODL)

S. No.	Parameters	Certainly No	Probably No	Certainly Yes	Probably Yes	Remarks/ Suggestion
1	Based on your experience with Discom would you like to continue your relationship with Discom ?					
2	If someone asks you about Discom ? would you talk "positively" about Discom :					
3	Would you refer companies under Discom name to others in your community, fraternity and society as a professional & dynamic organization?					

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**SECTION - D**

**If we ask you to rate us on a scale of 1 to 10, how will you rate (TPCODL/ TPNODL/ TPSODL/ TPWODL), that truly represents your overall satisfaction with us (please tick appropriate box) -**

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

**SECTION - E**

Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.

Please spare your thoughts for TP Odisha Discom'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 TP Odisha Discom to adopt. Please give your valuable salient recommendations.

Please spare your thoughts for \_\_\_\_\_ (TPCODL/ TPNODL/ TPSODL/ TPWODL) improvement in particular areas of major concerns for you. We also welcome your suggestions to adopt any best practices, altitudes that you

Recommendation	<i>Please tick (✓) your top 5 expectations out of the following 10 points listed below -</i>	
(Please list down improvement you expect from TPCODL)	<i>Timely payment</i>	
1	<i>Flexibility in Contracts/PO</i>	
	<i>Clarity in PO,s &amp; Contracts</i>	
2	<i>Timely response to quarries</i>	
	<i>Timely certification of works executed</i>	
3	<i>Clarity in Specs, drawings, other docs etc.</i>	
	<i>Adequate information provided on website for tender notification, parties qualified etc.</i>	
4	<i>Timely receipt of material at site for execution</i>	
	<i>Performance Guarantee/EMD released intime</i>	
5	<i>Inspection &amp; quality assurance support for timely job completion</i>	

We thank you for your time and courtesy!!

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### **ANNEXURE-F**

#### **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, TP Odisha Discom intends to use the reverse auctions through SAP-Ariba 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. TP Odisha Discom 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. TP Odisha Discom will make every effort to make the bid process transparent. However, the award decision by TP Odisha Discom would be final and binding on the supplier.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TP Odisha Discom, 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 TP Odisha Discom.
6. In case of intranet medium, TP Odisha Discom shall provide the infrastructure to bidders. Further, TP Odisha Discom 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 TP Odisha Discom.
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/TPNODL/TPSODL/TPWODL) under TP Odisha Discom 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 TP Odisha Discom.
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.
13. Even after RA TP Odisha Discom reserves the right to negotiate further to optimize the prices in case Centralized Contract Group are unable to arrive at their benchmarked price or tender committee decided price.

**Signature & Seal of the Bidder**



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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/ TPNODL/ TPWODL/ TPSODL) well in time at our own. Further, we kept aforesaid Odisha Discom 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-H**  
**VENDOR APPRAISAL FORM**

<b>TO BE SUBMITTED BY VENDOR (To be filled as applicable)</b>		
<b>VENDOR:</b>		
<b>1.0</b>	<b>DETAILS OF THE FIRM</b>	
	1.1	NAME (IN CAPITAL LETTERS) :
	1.2	TYPE OF CONCERN (PROPRIETARY) Partnership, Pvt. Ltd., Public Ltd. etc. :
	1.3	YEAR OF ESTABLISHMENT :
	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 :
<b>2.0</b>	<b>PRODUCTS MANUFACTURED</b> :	
<b>3.0</b>	<b>TURNOVER DURING THE LAST 3 YEARS (TO BE VERIFIED WITH THE LATEST PROFIT &amp; LOSS STATEMENT).</b> :	
<b>4.0</b>	<b>VALUE OF FIXED ASSETS</b> :	
<b>5.0</b>	<b>NAME &amp; ADDRESS OF THE BANKERS</b> :	
<b>6.0</b>	<b>BANK GUARANTEE LIMIT</b> :	
<b>7.0</b>	<b>CREDIT LIMIT</b> :	
<b>8.0</b>	<b>TECHNICAL</b>	
	8.1	NO. OF DESIGN ENGINEERS (INDICATE NO. OF YEARS EXPERIENCE IN RELATED FIELDS) :
	8.2	NO. OF DRAUGHTS MEN :
	8.3	COLLABORATION DETAILS (IF ANY) :
		8.3.1 DATE OF COLLABORATION :
		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 / COLLABORATOR'S / :

		DOCUMENTS (CHECK WHETHER THESE ARE LATEST/CURRENT	
	8.5	TECHNICAL SUPPORT, BACK-UP GUARANTEE, SUPERVISION, QUALITY CONTROL BY COLLABORATOR (WHEREVER ESSENTIAL). (THIS CLAUSE IS RELEVANT WHEN VENDOR'S EXPERIENCE IS INADEQUATE)	:
	8.6	QUALITY OF DRAWINGS	:
<b>9.0</b>	<b>MANUFACTURE</b>		
	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	:
		9.3.4 HEAT TREATMENT	:
		9.3.5 BALANCING FACILITY	:
		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.)	:
	9.6	NO. OF SHIFTS	:
	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	:
<b>10.0</b>	<b>INSPECTION / QC / QA / TESTING</b>		
	10.1	NUMBER OF PERSONNEL (INDICATE NO. OF YEARS OF EXPERIENCE)	:
	10.2	INDEPENDENCE FROM PRODUCTION	:

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	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)	:
	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	:
		ii) CHECK AVAILABILITY OF CERTIFICATES AND REVIEW THESE WHEREVER POSSIBLE	:
<b>11.0</b>		<b>EXPERIENCE (INCLUDING CONSTRUCTION / ERECTION / COMMISSIONING) TO BE FURNISHED IN THE FORMAT INDICATED IN APPENDIX)</b>	:
<b>12.0</b>		<b>SALES, SERVICE AND SITE ORGANIZATIONAL DETAILS</b>	:
<b>13.0</b>		<b>CERTIFICATE FROM CUSTOMERS (ATTACH COPIES OF DOCUMENTS)</b>	:
<b>14.0</b>		<b>POWER SITUATION</b>	:
<b>15.0</b>		<b>LABOUR SITUATION</b>	:
<b>16.0 *</b>		<b>APPLICABILITY OF SC/ST RELAXATION (Y/N) IF YES, SUPPORTING DOCUMENTS TO BE ATTACHED</b>	:
<b>17.0</b>		<b>ORGANIZATIONAL DETAILS</b> 1. PF NO 2. ESI NO 3. INSURANCE FOR WORK MAN COMPENSATION ACT NO 4. ELECTRICAL CONTRACT LIC NO 5. ITCC / PAN NO 6. SALES TAX NO 7. WC TAX REG. NO	:
<b>18.0</b>		<b>DOCUMENTS TO BE ENCLOSED:</b>	:

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	<ol style="list-style-type: none"> <li>1. FACTORY LICENSE</li> <li>2. ANNUAL REPORT FOR LAST THREE YEARS</li> <li>3. TYPE TEST REPORT FOR THE ITEM</li> <li>4. PAST EXPERIENCE REPORTS</li> <li>5. ISO CERTIFICATE –QMS, EMS, OHAS, SA</li> <li>6. REGISTRATION OF SALES TAX</li> <li>7. COPY OF TIN NO.</li> <li>8. COPY OF SERVICE TAX NO.</li> <li>9. REGISTRATION OF CENTRAL EXCISE</li> <li>10. COPY OF INCOME TAX CLEARANCE.</li> <li>11. COPY OF PF REGISTRATION</li> <li>12. COPY OF ESI REGISTRATION</li> <li>13. COPY OF INSURANCE FOR WORK MAN COMPENSATION ACT NO</li> <li>14. COPY OF ELECTRICAL CONTRACT LIC NO</li> <li>15. COPY OF PAN NO</li> <li>16. COPY OF WC TAX REGISTRATION</li> <li>17. DOCUMENTS IN SUPPORT OF SC/ST RELAXATION AT S.NO.16.0</li> <li>18. GSTN CERTIFICATE</li> </ol>	
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**\* 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, Women from marginalized communities & Persons with Disabilities community. Governing document shall be Proprietorship Deed.
- **Partnership Firm:** Only such firms shall qualify which have SC/ST, Women from marginalized communities & Persons with Disabilities 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, Women from marginalized communities & Persons with Disabilities 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).

*NOTE: Certification from SC/ST Commission shall be required for deciding upon SC/ST status of a person and govt certificates required for Women from marginalized communities & Persons with Disabilities*

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**ANNEXURE-I**

**MANUFACTURER AUTHORIZATION FORM**

*(To be submitted on OEM's Letter Head)*

Date: .....

Tender Enquiry No.: .....

To,

Chief (Procurement & Stores)

The TP Central Odisha Distribution Limited,  
Bhubaneswar

Sir,

WHEREAS M/s. [name of OEM], who are official manufacturers of .....having factories at [address of OEM] do hereby authorize M/s [name of bidder] to submit a Bid in relation to the Invitation for Bids indicated above, the purpose of which is to provide the following Goods, manufactured by us

.....and to subsequently negotiate and sign the Contract.

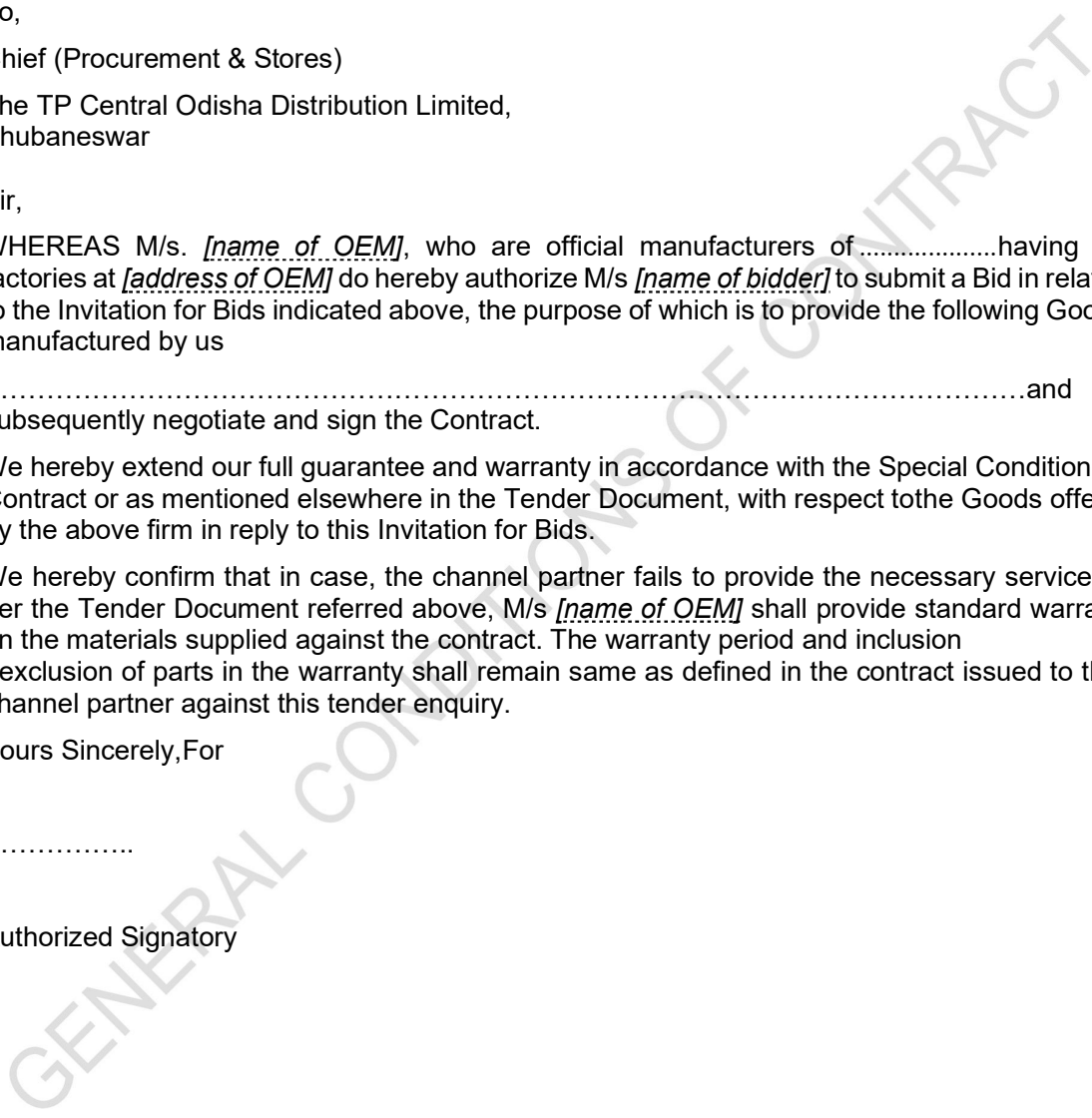
We hereby extend our full guarantee and warranty in accordance with the Special Conditions of Contract or as mentioned elsewhere in the Tender Document, with respect to the Goods offered by the above firm in reply to this Invitation for Bids.

We hereby confirm that in case, the channel partner fails to provide the necessary services as per the Tender Document referred above, M/s [name of OEM] shall provide standard warranty on the materials supplied against the contract. The warranty period and inclusion / exclusion of parts in the warranty shall remain same as defined in the contract issued to their channel partner against this tender enquiry.

Yours Sincerely, For

.....

Authorized Signatory



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## Annexure-J

### TATA CODE OF CONDUCT (TCoC)

Introducing Tata Code of Conduct (TCoC) in GCC, the following clause is proposed for inclusion as per suggestions from Chief Ethics Counsellor -

“TCoC is the overarching policy framework that applies to all TATA Group companies including TPNODL. TCoC provides for stakeholder-wise approach in each of the seven chapters.

The chapter “Our Value Chain Partners” states the policy as follows:

1. We shall select our suppliers and service providers fairly and transparently.
2. 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.
3. 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.
4. 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.

In case any Ethical Concern is faced during the course of your business dealings BA can write to Chief- Contracts & MM and CEO.

TP Odisha Discom is committed to follow Core Values and Core Principles mentioned in TCoC, cited below, in carrying out various activities as well as in discharge of bi-lateral and multi-lateral obligations involving other entities/organizations:

#### **Core Values:**

All six core values are already mentioned in GCC.

#### **Core Principles:**

1. **Zero tolerance to bribery or corruption** in any form.
2. Committed to **good corporate citizenship**
3. Contribute to the **economic development of the communities** of the countries & regions we operate in.
4. No compromise on **Safety**
5. Our conduct shall be **fair & transparent**
6. Respect the **human rights & dignity** of our stakeholders
7. **No unfair discrimination** of any kind
8. Statements made to stakeholders shall be **truthful** & made in **good faith**
9. Not engage in any restrictive or **unfair trade practice**
10. Provide avenues for our stakeholders to **raise concerns in good faith**
11. Environment **free from fear** of retribution to deal with concerns that are raised
12. Expect the leaders to be **role model**

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13. **Comply with the laws** of the countries in which we operate

**Gift Policy:**

**Principles for acceptance of gifts/benefits –**

A gift or benefit may be accepted only if it complies with all of the following principles:

- ✓ it does not influence,
- ✓ does not have the potential to influence, an employee in such a way as to compromise or appear to compromise integrity and impartiality
- ✓ does not create a conflict of interest or perception of conflict of interest;

**Principles for non-acceptance of gifts/benefits -**

The gift or benefit may not be accepted or given if any of the following principles apply:

- ✓ causes the recipient or donor **to act in partial manner** in the course of duty
- ✓ apprehension of the recipient becoming **obligated to the donor**
- ✓ it is **not offered openly**
- ✓ if is an **offer of money** or something readily convertible to money (e.g. Shares)

**Violation –**

1. Not abiding with this policy would constitute violation of “Our Employees” Stakeholder group Clause “Gifts and Hospitality” of the Tata Code of Conduct (TCoC) 2015. Prompt action will be taken against violations.
  2. Any deviation from this policy must be supported by appropriate rationale and must be duly approved by CEO who is also the Principal Ethics Officer. In any case, in dealing with such deviations, the spirit of the TCoC should in no case be compromised.
2. If it is determined that an employee / associate has violated this policy, appropriate action including termination of the employee’s / associate’s employment or association with TP Odisha Discom may be decided upon.

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## Annexure-K

### ESG FRAMEWORK FOR BUSINESS ASSOCIATES

TP Odisha Discom's Sustainability philosophy sits at the core of its Business Strategy. TP Odisha Discom Sustainability Model has an overarching objective of 'Leadership with care' with key elements of 'Care for the Environment'; 'Care for the Community'; 'Care for our Customers / Partners' and 'Care for our People'. These sustainability objectives encompass the Environmental, Social and Governance objectives driven as integrated elements.

TP Odisha Discom, together with its stakeholders is determined to achieve sustainable growth while creating shared value for all.

As a part of future ready roadmap, TP Odisha Discom has targeted following as our Environment, Social and Governance priorities:

- Being Carbon Net Zero before 2045
- Growing Clean capacity (80% by 2030)
- Customer centricity
- Becoming water neutral before 2030
- Achieving zero waste to landfill before 2030
- No net loss of biodiversity before 2030
- Positively impacting 80 million lives by 2027

In order to create a sustainable business ecosystem, TP Odisha Discom expects that all its Business Associates (BA) which includes its suppliers, vendors, consultants and service providers to align to its ESG and sustainability commitments.

TP Odisha Discom encourages improved efficiencies and scaling up of green initiatives through technology and innovation taking us farther on the journey of reducing carbon emissions and preparing the entire eco-system towards products and services that would have net positive impact on the environment and communities that we operate in.

The Vendors/ bidders wishing to associate with TP Odisha Discom are expected to share their own sustainability and ESG journey. We at TP Odisha Discom promote all Business Associates to have a sustainable procurement policy for their supplier and service providers to contribute to our integrated approach in achieving a sustainable supply chain. The BA is encouraged to carry out the assessment of their sub-contractors and sub-vendors on sustainability readiness so that they are aware of the expectation/ business requirement.

The Vendor/ Bidder shall fill-in the 'Environment, Social and Governance Compliance Screening Questionnaire for Business Associates' attached at Annexure-I and submit the same along with the Bid in Ariba online platform.

#### **Responsible Supply Chain Management:**

TP Odisha Discom is committed for a cleaner environment and respect of Human rights through its Responsible Supply Chain Management policy.

TP Odisha Discom Business Associate (BA) shall comply with all the environment & Human rights related laws, including emission norms, Labour and environmental regulations.

TP Odisha Discom encourages its BA to focus on green design, green supply, green production, green

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logistics and green packaging in performing their business obligations. The BA is expected to abide by the TP Odisha Discom Corporate Environment policy, Energy Conservation and Corporate Sustainability Policy (enclosed with this document as Annexure-II).

The BA is expected to:

- Strive towards Conservation of Energy, Water, Resources and optimize transportation of Men & Materials to minimize environmental impact and reduce carbon footprint.
- Carry out the assessment of materials used for construction, operation & maintenance, consumables and accordingly phase out those materials which are environmentally hazardous.
- Be cognizant that diversity in the workplace positively impacts business.
- Promote affirmative action by supporting people from SC/ ST background by engaging workforce from SC/ ST community under the contracts agreed herein.
- Share the commitment of 'No child labour', 'No forced labour', 'Non-discrimination on the basis of caste, colour, religion, gender, disability, maternity or pregnancy or any other factor unrelated to the requirements of the job
- Pay the wages or remuneration to the workforce, personnel deployed in compliance to all applicable laws and regulations.
- Provide its employees/ deployed labor with an employment environment that is free of physical or psychological harassment.
- Carry out the assessment of their Sub-contractors on their Sustainability Readiness so that they are aware of the above expectation/ standards
- To ensure usage of suitable package material which is more environmentally sustainable. Further the packing material shall be recycled to the extent possible. The material used for packing is expected to suit the mode of transport and to ensure its safe receipt at point of delivery.

#### **Waste Disposal:**

The BA is expected to follow best practices for disposal of waste, few of which are listed below:

- Have a detailed project plan that includes 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. 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.
- Have purchase policy to encourage the procurement of material with recycled and minimum packaging of goods during delivery and appropriate means for site-to-site transportation of materials to avoid damage and litter generation.
- Ensure that the residents living near the site are kept informed about proposed working schedule and timings/ duration of any abnormal noise full activity that is likely to happen.
- 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.

#### **Water Management:**

The BA is expected to follow best practices for water management, few of which include a management and monitoring system for water withdrawals and consumption, procedures to reduce water usage or reuse/recycle water, and pretreatment of wastewater before disposal.

#### **Compliance to Law:**

The BA shall adhere to responsible business practices and comply with the provision of all the Statutory

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Acts Applicable. Special attention of the BA is drawn towards the compliance of provision of the following statutes: (along with the latest amendments/additions, as applicable):

- The Child Labour (Prohibition and Regulation) ACT, 1986.
- The Contract Labour (Regulation and Abolition) ACT, 1970.
- The Employee's Pension Scheme, 1995.
- The Employee's Provident Funds and miscellaneous provisions Act, 1952.
- The Employees State Insurance Act, 1948.
- The Equal Remuneration Act, 1976.
- The Industrial Disputes Act, 1947.
- The Maternity Benefit Act, 1961.
- The Minimum Wages Act, 1948.
- The Payment of Bonus Act, 1965
- The Payment of Gratuity Act, 1972.
- The Payment of Wages Act, 1936.
- The Shops & Establishment Act, 1954.
- The Workmen's Compensation Act, 1923.
- The Employer's Liability Act, 1938.
- and any other applicable statutory act

#### **Social Accountability (SA 8000):**

TP Odisha Discom expects its BAs to follow guidelines of SA 8000:2014 on the following aspects

- Child Labour
- Forced or Compulsory Labour
- Health & Safety
- Freedom of Association & Right to Collective Bargaining
- Discrimination
- Disciplinary Practices
- Working Hours
- Remuneration
- Management System

#### **Health and Safety**

The BA is expected to ensure the health and safety of his and his Sub-contractor's staff and labour. The BA shall, in collaboration with and according to the requirements of the local health authorities, ensure that medical staff, first aid facilities, sick bay and ambulance service are available at the accommodation and on the Site at all times, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics. The BA shall maintain records and make reports concerning health, safety and welfare of persons deployed, and damage to property, as the Owner's Representative may reasonably require. The BA shall be responsible for the medical treatment / hospitalization of his and his Sub-contractor's staff/ labour.

The BA shall appoint a qualified Safety officer at the Site to be responsible for maintaining the safety, and protection against accidents, of all personnel on the Site. Such Safety officer shall have the authority to issue instructions and take protective measures to prevent accidents.

The BA shall comply in toto with the TP Odisha Discom's Contractor Safety Terms & Conditions, Health Safety & Environment Manual while working on TP Odisha Discom's Site/ Services/ Contracts.

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### **Grievance Mechanism**

The BA is expected to have grievance procedures that allow stakeholders to anonymously bring environmental and/or work-related violations and/or concerns to the attention of management. In addition, the BA is expected to have procedures for examining reports of environmental and/or work-related violations or concerns and/or privacy complaints.

### **Data Protection**

The BA is expected to have a formal process to address data security or privacy issues.

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