

**TAMIL NADU POWER DISTRIBUTION CORPORATION  
LIMITED**

**Tender Specification for Supply of  
11 KV, Single Bus, 25KA, 1250Amps Indoor Vacuum  
Circuit Breaker Panels**

**Through E-Tendering.**

**Specification No M.224/2025-26**

**OFFICE OF THE CHIEF ENGINEER  
MATERIALS MANAGEMENT  
144, ANNA SALAI  
CHENNAI-600 002  
TAMIL NADU.**

**E Mail: [cemm@tnebnet.org](mailto:cemm@tnebnet.org)**

**Website for online bid submission: <https://tntenders.gov.in>  
Service Provider: National Informatics Centre**

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### **INSTRUCTIONS FOR ONLINE BID SUBMISSION**

The bidders are required to submit soft copies of their bids electronically on the TAMILNADU GOVERNMENT E PROCUREMENT Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the TAMILNADU GOVERNMENT E PROCUREMENT Portal, prepare their bids in accordance with the requirements and submitting their bids online on the TAMILNADU GOVERNMENT E PROCUREMENT Portal. More useful information for submitting online bids on the TAMILNADU GOVERNMENT E PROCUREMENT Portal may be obtained at: <https://tntenders.gov.in>.

#### **A. REGISTRATION:**

Bidders are required to enroll on the e-Procurement module of the Tamil Nadu Government E procurement Portal (URL: <https://tntenders.gov.in>)

- 1) By clicking on the link "**Online bidder Enrollment**" on the TAMILNADU GOVERNMENT E -PROCUREMENT Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid e-mail address and mobile numbers as Part of the registration process. These would be used for any communication from the TAMILNADU E PROCUREMENT Portal.
- 4) Upon enrollment, the bidders will be required to **register their valid Digital Signature Certificate(DSC)** (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify /nCode/eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

#### **B. SEARCHING FOR TENDER DOCUMENTS:**

- 1) There are various search options built-in in the TAMILNADU GOVERNMENT E - PROCUREMENT Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to

Search for a tender published on the TAMILNADU GOVERNMENT E - PROCUREMENT Portal.

- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the TAMILNADU GOVERNMENT E PROCUREMENT Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender documents.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

#### **C. PREPARATION OF BIDS:**

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated. In the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with Black and White option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

#### **D. ELECTRONIC SUBMISSION OF BIDS:**

**The bidder shall submit online the requirements under qualification criteria and technical documents required and SCHEDULE OF PRICE /BOQ vide SCHEDULE -A. All the documents are required to be signed digitally by the bidder. After electronic online bid submission,**

**the system generates a unique bid reference number which is time stamped. This shall be treated as acknowledgment of bid submission.**

**E. PROCEDURE FOR SUBMISSION OF BIDS:**

- 1) Bidder should log - in to the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "online" to pay the tender fee / EMD as applicable and enter details of the instrument.
  - i. The online payment Gateway has been enabled for TNPDCLE (ERSTWHILE TANGEDCO) in TN Tenders portal ([www.tntenders.gov.in](http://www.tntenders.gov.in)). All the payments for the tenders like EMD will be carried out by the Bidders only through online payment mode.

**Note:** As the internet banking process (NEFT/RTGS) may take some time for confirming the receipt of EMD, bidders may plan such a way to pay the EMD accordingly to avoid any delay in bank confirmation. After getting success status of EMD payment only, the bidder can submit the bid.

- ii The EMD amount should be the exact amount and no excess or less amount should be transferred through **online payment gateway**. If excess or short, the tender status will be shown as invalid.

The bidder has to submit the tender document online well in advance before the Prescribed time to avoid any delay or problem during the submission process. . If there is any delay, due to other issues, bidder only is responsible.

- 4) Bidder should prepare the EMD as per the instructions specified in the tender Document.

After confirming the EMD paid amount / Exemption uploaded, then only the system will allow to submit the technical and financial bids.

- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by the bidder. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder etc). No other cells should be changed. Once the details have been

completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

- 6) **The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.**
- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys.
- 8) The uploaded bid documents become readable only after the tender opening by the authorized bid openers.
- 9) Upon the successful and timely submission of bids (ie after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.
- 11) In all cases, bidder should use their own ID and Password along with Digital Signature certificate at the time of submission of their bid.
- 12) During the entire e-tender process, the bidders will remain completely anonymous to one another and also to everybody else.
- 13) The e-tender floor shall remain open from the pre-announced date & time and for as much duration as mentioned above.
- 14) All electronic bids submitted during the e-tender process shall be legally binding

on the bidder. Any bid will be considered as the valid bid offered by that bidder and acceptance of the same by the Buyer will form a binding contract between buyer and the Bidder for execution of supply.

- 15) It is mandatory that all the bids are submitted with digital signature certificate otherwise the same will not be accepted by the system.
- 16) TNPDC(ERSTWHILE TANGEDCO) reserves the right to cancel or reject or accept or withdraw or extend the tender in full or in part as the case may be without assigning any reason thereof.
- 17) The server time shall be treated as final and binding. Bids recorded in the server before the bid closing time will only be treated as valid bid. Bidders are therefore, advised to submit their bids well before the closing time of e-tender. If any bid reaches the server after the bid closing time as per server time, the same will not be recorded and no complaint in this regard shall be entertained. The **Tender Inviting Authority (TIA)** will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues.
- 18) Bidders are advised to exercise caution in quoting their bids in e-tender and E - reverse auction as the case may be to avoid any mistake. Bids once submitted can't be recalled.
- 19) Any order resulting from this bidding process shall be governed by the terms and conditions mentioned in the tender documents.
- 20) No deviation to the technical and commercial terms & conditions are allowed.

#### **F. ASSISTANCE TO BIDDERS:**

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) A Any queries relating to the process of online bid submission or queries relating to TAMIL NADU GOVERNMENT E PROCUREMENT Portal in general may be directed to the 24x7 TAMIL NADU GOVERNMENT E PROCUREMENT Portal Help desk.

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**TAMIL NADU POWER DISTRIBUTION CORPORATION LIMITED**

(Erstwhile TANGEDCO)

Online e-bids are invited from eligible and prospective bidders for the supply of 11KV, Single Bus, 25KA, 1250Amps Indoor Vacuum Circuit Breaker Panels through e-tender portal of <https://tntenders.gov.in>.

1)	Tender Specification No.	<b>M.224/2025-26</b>
2)	Name of the work	E-tender for Supply of 11 KV, Single Bus, 25KA, 1250Amps Indoor Vacuum Circuit Breaker Panels.
3)	Tendered Quantity	As per Schedule
4)	Method of Tender	<b>e-Tender Two Part System</b> (Part I - Techno – Commercial and Part II - Price bid) through <a href="https://tntenders.gov.in">https://tntenders.gov.in</a> .
5)	(a) Earnest Money Deposit (EMD)	<b>Rs.9,00,000/- (Rupees Nine lakh only)</b>
	<p>i)The Online payment Gateway has been enabled for TNPDC in TN Tenders Portal. (<a href="http://www.tntenders.gov.in">www.tntenders.gov.in</a>) All the payments for the tenders like EMD will be carried out by the Bidders only through online payment mode.</p> <p>ii) The EMD amount should be the exact amount and no excess or less amount should be transferred through <b>online payment gateway</b>. If excess or short, the tender status will be shown as invalid.</p>	
	(b) Bank Guarantee	<b>Bank Guarantee for the above amount for One year.</b>
	(c) Permanent EMD	<b>PEMD holders of Rs.40 lakhs and above at TNPDC Head quarters held on or after 03.12.2021 are eligible to participate in the tender.</b>
	(d) SSI Units	SSI units located within the State of Tamil Nadu are eligible for exemption of EMD against submission of documents as detailed in Section-I.
6)	URL for online bid submission for e-tender.	<a href="https://tntenders.gov.in">https://tntenders.gov.in</a> .
7)	Date of closing of online e-tender for submission of Techno Commercial Bid & Price Bid.	<b>21.01.2026 @ 14:00 Hrs</b>
8)	Date & time of opening of tender electronically	<b>22.01.2026 @ 14:30 Hrs</b>



9)	Specification at website	TNPDCL web site (www.TNPDCL.gov.in) & <a href="https://tntenders.gov.in">https://tntenders.gov.in</a> . The prospective bidders may download the same.
10)	Documents to be duly filled & uploaded by the Tenderers during e-submission	EMD documents, BQR evidences, Price bid (Filled up BoQ), Technical & Commercial documents, Schedules (B to H), Annexures and other documents whichever is applicable.
11)	Tenderers during e-submission Clarification to be sought for from	Chief Engineer/Materials Management, 4 <sup>th</sup> Floor/ Western Wing, NPKRR Maaligai, 144,AnnaSalai,Chennai-600002 Email: <a href="mailto:cemm@tnebnet.org">cemm@tnebnet.org</a>
12)	Place at which tenders will be opened	The Superintending Engineer, Material Management-III/Schemes, 4 <sup>th</sup> Floor/Eastern Wing, NPKRR Maaligai, 144 Anna Salai, Chennai-600002.

**Remarks:** If the due date for opening the tenders happens to be declared holiday, then the tender will be opened on the next working day, for which no prior intimation will be given.

-/Sd/-  
**CHIEF ENGINEER**  
**MATERIAL MANAGEMENT**

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**SPECIFICATION. NO. M.224/2025-26****E-TENDER FOR SUPPLY OF 11 KV Indoor VCB PANELS**

Sl. No.		DESCRIPTION
1	SECTION – I	EARNEST MONEY DEPOSIT
2	SECTION – II	BID QUALIFICATION REQUIREMENTS
3	SECTION – III	REJECTION OF TENDERS
4	SECTION – IV	INSTRUCTIONS TO THE TENDERERS
5	SECTION – V	COMMERCIAL
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7	SECTION – VII	SCHEDULES (A TO H)
8	SECTION – VIII	ANNEXURES (I TO X)

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**SECTION – I**  
**EARNEST MONEY DEPOSIT**

- 1.0. Tenderer should pay the specified amount towards Earnest Money Deposit as follows :

**Earnest Money Deposit: Rs.9,00,000/- (Rupees Nine lakh only)**

- 2.0. **Mode of Payment: through "ONLINE ONLY"**

i. The online payment Gateway has been enabled for TNPDC in TN Tenders portal ([www.tntenders.gov.in](http://www.tntenders.gov.in)). All the payments for the tenders like EMD will be carried out by the Bidders only through online payment mode.

ii. The Earnest Money Deposit payment to be made only as a single payment.

iii. The EMD amount should be the exact amount and no excess or less amount should be transferred through **online payment gateway**. If excess or short, the tender status will be shown as invalid.

**OR**

**b) Tenderer should furnish a Bank Guarantee for the specified EMD amount** with a validity for a period of one year, obtained from the Nationalised or Scheduled Bank as per the format enclosed in **ANNEXURE-XIV**.

The bank details of TNPDC are furnished as below:

Account Name : Chief/Financial Controller/TNPDC

Account No. : 0911201003004

Name of Bank : CANARA BANK

Bank Branch Address : 800, Electricity Avenue, Mount road,  
Anna Salai, Chennai-2.

IFSC Code : CNRB0000911.

The scanned copy of the BG shall be uploaded in the EMD document. **The original Bank Guarantee for the EMD amount should be submitted within 3 working days after tender opening, through speed post or courier or in person to the office of SE/MM-III in addition to uploading it in the portal .**

- 2.1 **EMD Exemption:**

If submitting EMD as BG/PEMD/Udayam(SSSI) (as mentioned in the specification), then select the exempted from EMD payment as "YES". Then upload the EMD exemption documents only in "pdf/jpg" files.

- 3.0 **PEMD holders of Rs.40 Lakhs and above with TNPDC Head Quarters, held on or after 03.12.2021, are eligible to participate in this tender.**

Firms who have PEMD in TNPDC less than that specified above are not eligible to participate on the basis of the PEMD even for lesser quantity and value. If the

tenderer desires to become a Permanent E.M.D. holder, he is advised to deposit the required amount with the TNPDCCL as Permanent E.M.D. well in advance, obtain a certificate from the Financial Controller / Purchase and upload copy of the same along with the tender. PEMD of TANTRANSCO will not be considered for TNPDCCL tenders.

The scanned copy of proof of EMD with an undertaking in lieu of EMD shall be uploaded along with the tender.

- 3.1 Scanned copy of proof of PEMD with an undertaking in lieu of EMD shall be uploaded along with the tender.
- 4.0 The EMD will not carry any interest.

## **5.0 EXEMPTION FOR PAYMENT OF EARNEST MONEY DEPOSIT (EMD) :**

5.1 The following categories of Industries are exempted from payment of EMD:

- i) SSI Units located inside the state of Tamil Nadu registered under Udyam portal for the tendered item (clearly mentioning the 5 digit NIC code)
- ii) Departments of the Government of Tamil Nadu.
- iii) Undertakings and Corporations owned by the Government of Tamil Nadu.
- iv) Labour Contract Co-operative Societies of Tamil Nadu
- v) The Tenderers who are having valid Permanent EMD with TNPDCCL.

5.2 Micro/SSI units located **within the state of Tamil Nadu** are exempted from payment of EMD, only against production of **UDYAM** registration and shall upload Udyam Registration Certificate as proof of eligibility for exemption from payment of EMD.

5.3 **The SSI Units located outside the state of Tamil Nadu are not eligible for exemption from payment of EMD** even though registered in udyam portal for tendered items.

- 5.4 a) Micro / SSI units having provisional registration certificate are not eligible for exemption.
- b) Bidders who are the Licensed/ Authorized Channel partner are not eligible for exemption.

5.5 Those tenderers who are exempted from payment of EMD either against PEMD or SSI units located within state of Tamil Nadu shall furnish an undertaking in lieu of EMD and shall upload a scanned copy of the undertaking in lieu of EMD in the form as per **Annexure-I** to the effect to pay as penalty an amount equivalent to EMD in the event of non-fulfillment or non-observance of any of the conditions stipulated in the contract consequent to such breach of contract.

The State Government, Public Sector Undertakings who are exempted from payment of EMD shall also pay as penalty an amount equivalent to the amount

fixed as EMD in the event of non-fulfillment or non-observance of any of the conditions stipulated in the contract.

a) **TENDERS RECEIVED WITHOUT THIS UNDERTAKING WILL BE SUMMARILY REJECTED.**

b) Tender will be rejected if the undertaking is not signed /authenticated in all pages of undertaking.

c) Signature of witnesses should be affixed at the end of undertaking along with details of name and address.

5.6. The Tenderer is deemed to accept to pay the amount equivalent to EMD immediately when a demand is raised by Board against the Tenderer without any demur in the event of the following.

1. If he withdraws his tender or backs out after acceptance of the tender or fails to remit the Security Deposit.
2. If he revises any of the terms quoted during the validity period.
3. If he violates any of the conditions of the tender specification.

**6.0. Government of India, Ministry of MSME Notification :**

6.1. Government of India, Ministry of MSME, vide notification No.S.O.2119(E) dated 26.06.2020 has notified certain composite criteria for classifying the enterprises as Micro, Small and Medium Enterprises and insisted Udyam registration in Udyam Registration Portal to obtain an e certificate Viz. Udyam Registration certificate calculation of turnover, calculation of investment, Registration of existing Enterprises and Updation and transition period in classification. The above notification may be adhered to by the tenderers and TNPDCIL will adopt the guidelines issued therein in evaluation of bids submitted by the tenderers.

**6.2 Composite Criteria:**

A composite criteria of investment in Plant and Machinery or equipments and turnover has been specified to classify an enterprises as Micro, Small and Medium. The composite criteria stipulated in the said notification are to be complied by the micro and small industries for claiming EMD exemption and purchase preference.

6.3. **Classification of Enterprises:** MSME Ministry vide Notification No.S.O.1364(E) dated 21.03.2025 had increased the limits stipulated on the composite criteria of investment in plant and machinery or equipment from 01.04.2025 onwards as below:

An enterprise shall be classified as a micro, small or medium enterprises on the basis of the following criteria, namely:

- i) A micro enterprise, where the investment in plant and machinery or equipment does not exceed Two crore and Fifty lakh rupees and turnover does not exceed ten crore rupees;
- ii) A small enterprise, where the investment in plant and machinery or equipment does not exceed twenty five crore rupees and turnover does not exceed hundred crore rupees; and
- iii) A medium enterprise, where the investment in plant and machinery or equipment does not exceed One hundred and twenty five crore rupees and turnover does not exceed five hundred crore rupees.

**Calculation of Turnover:** In calculation of turnover of an enterprises, Exports of goods or services or both, shall be excluded while calculating the turnover of any enterprise whether micro, small or medium, for the purposes of classification. However, it is suggested to insist a certificate from Chartered Accountant, along with the bid from the bidders whose turnover includes export proceeds, for ascertaining the turnover achieved on export of goods or services or both and included in the total turnover.

**Calculation of Investment:** The Plant and Machinery shall have the same meaning as assigned to the plant and machinery in the Income Tax Rules, 1962 framed under the Income Tax Act, 1961 and shall include all tangible assets (other than land and building, furniture and fittings). The cost of certain items specified in the Explanation I to sub-section (1) of section 7 of the Act shall be excluded from the calculation of the amount of investment in plant and machinery. The investment value in Plant and Machinery for the purpose has to be certified by a Chartered accountant and the same is to be uploaded in the bid in case the bidder claims EMD exemption.

#### 6.4. **Registration of existing enterprises:**

- i) All the existing enterprises shall register under Udyam Registration.
- ii) An enterprise registered with any other organization under the Ministry of Micro, Small and Medium Enterprises shall also register itself under Udyam Registration.

#### 7.0. Others viz. Central and other State Government Departments / Undertakings and Corporations other than those in Tamil Nadu shall have to pay Earnest Money Deposit.



- 8.0. The MSME units of Micro and Small category within Tamil Nadu shall upload Photocopy of UDYAM Registration certificate for the tendered item, as a proof of eligibility for exemption from payment of EMD.
- 9.0. The firm registered in Udyam Portal under Medium Scale is not eligible for exemption of EMD.
- 10.0. The tenderers shall upload the audited, attested copy of Profit and Loss account/ Balance Sheet and Investment value in Plant and Machinery certified by a Chartered accountant along with the proof for exemption from payment of EMD. If the above documents are not furnished along with the proof of exemption of EMD and Undertaking, the tenders will not be evaluated.

**11.0 REFUND OF EMD:**

- (i) The Earnest Money Deposit will be automatically refunded to the unsuccessful tenderers after technical evaluation.
- (ii) The EMD for successful tenderer who happens to be other than L1, then EMD will be automatically refund after issue of AOC (Award of contract).
- (iii) The EMD will be retained in the case of successful tenderer and will not carry any interest.
- (iv) The Earnest Money Deposit will be refunded to the successful tenderer on application to the Superintending Engineer/ Materials Management-III with pre-stamped receipt, after intimation of their tender through tender portal on receipt of detailed Purchase Order and also after submission of Security cum Performance Guarantee.
- (v) The EMD deposit will be adjusted in the Security cum Performance Guarantee for the successful tenderers.

**12.0.** The following documents as applicable shall be uploaded by the bidder during submission of Techno-commercial bid for payment of EMD failing which the offer will be SUMMARILY REJECTED:

- (i) The scanned copy of Bank Guarantee.
- (ii) The proof for PEMD with TNPDCI with an undertaking in lieu of EMD.
- (iii) The proof of exemption of EMD with an undertaking in lieu of EMD with documents in support of investment held in plant and machinery and Annual turnover.
- (iv) In case of submission of Bank Guarantee for payment of EMD, the original

Bank Guarantee towards EMD amount should be submitted within three working days after tender opening.

**13.0. The Earnest Money Deposit (EMD) furnished by the tenderer will be forfeited after e-tender opening if:**

- (a) They withdraw the tender or backs out after acceptance.
- (b) They withdraw the tender before the expiry of validity period stipulated in the Specification or fail to remit the Security Deposit cum performance Guarantee.
- (c) They violate any of the provisions of these regulations contained herein.
- (d) They revise any of the terms quoted during the validity period.
- (e) The documents furnished with the offer is found to be bogus or the documents contain false particulars, the EMD paid by the tenderers will be forfeited in addition to blacklisting them for future tenders/contracts in TNPDC.
- (f) If the tenderer participating with PEMD backs out, an amount equivalent to EMD of this tender will be forfeited.
- (g) If it is found at later stage that the bidder has availed EMD exemption by hiding facts, it will be construed that such a bidder has not complied with the EMD requirements, as mentioned in Section III, Clause-I (a) and suitable action deemed fit will be taken including summarily rejection of offer, blacklisting/ banning the firm from participating in future TNPDC tenders.

**-/Sd/-  
CHIEF ENGINEER  
MATERIAL MANAGEMENT**

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**SECTION-II**  
**BID QUALIFICATION REQUIREMENTS**

The Bidders shall become eligible to bid on satisfying the following “Bid Qualification Requirements” and on production of the required documentary evidences along with the Tender.

- 1) The bidder shall be a manufacturer of the tendered material having manufacturing facility in India (or) Licensed /Authorised Channel Partner of the Original Equipment Manufacturer (OEM) having manufacturing facility in India. In case of manufacturer, the Documentary evidence to establish as manufacturer such as Manufacturing License , Udyam Registration Certificate, ISO certificate, BIS License, MOA as applicable shall be uploaded. In case of Channel Partner, proof for manufacture by the OEM, agreement executed between OEM and Channel Partner / Authorized dealership certificate from OEM with validity till expiry of guarantee period issued by the OEM shall be uploaded. Undertaking for backup guarantee issued by the OEM with period of coverage of backup guarantee till the expiry of guarantee period as in **Annexure-X** shall also be uploaded.
  
- (2) The bidder shall have supplied a minimum of **20 Nos** of 11KV and/or higher KV rating Indoor Vacuum Circuit Breaker panels of any make during the preceding ten years as on the date of tender opening to State Electricity Boards/Public Power Utilities/Central/State Public Sector undertaking in India. Copies of purchase orders along with end user’s certificates for satisfactory completion of supply shall be furnished in proof of the above.
  
- (3) At least **10 Nos.** of 11KV and/or higher KV rating Indoor Vacuum Circuit Breaker panels of offered make supplied by the manufacturer or through any Channel Partner during the preceding ten years as on the date of tender opening to State Electricity Boards/ Public Power Utilities/Central/State Public Sector undertaking in India **should have been in satisfactory continuous operation for a minimum period of two years.** Copies of purchase orders along with end user’s certificate for satisfactory performance, duly mentioning the make of ID VCB, shall be furnished in proof of the above.

(4) The bidder should have an annual financial turnover of more than **Rs.3.00 Crores (Rupees Three Crores only)** during any one of the last 3 financial years (i.e.,) 2022-2023, 2023-2024 & 2024-25. Audited financial statements like Profit and loss A/c statement and balance sheet pertaining to above three years (or) Annual turnover certified by the practicing Chartered Accountant along with their **UDIN** for the above three years are considered as a proof of annual turnover. The Bidder should upload the Annual Turnover details for all the three years.

(5) The copy of the Type Test Certificates for the tests prescribed as per Schedule-G conforming to relevant IS/IEC of latest issue and as amended upto date, for the Tendered material/ equipment at any one of the NABL accredited Government/ Government recognized Laboratories (or) accredited foreign Laboratories issued not earlier than 5 years as on the date of Tender opening shall be uploaded along with the tender.

The above type test certificates should accompany the drawings of the material/ equipments, duly signed under seal by the Institution who had issued the type test certificate. The type test reports as per the list furnished in Schedule-G shall be uploaded in proof of the above.

**Note:**

If the type tests conducted on the tendered item is more than 5 years as on the date of opening of tender (or) if the type tests has been conducted on higher voltage rating, then the tenderer has to conduct the Type tests on the 1<sup>st</sup> unit at free of cost, if purchase order is placed on them and offers of such bidders may be considered subject to furnishing of an undertaking in a Non-judicial stamp paper of value not less than **Rs.500/-** stating that Type Test Report for the **tendered material /equipment** as per requirement /specification of TNPDCCL will be furnished before offering the 1<sup>st</sup> lot of materials for inspection, in case an order is placed on them.

**(6) NEW ENTRANT:**

The TNPDCCL has right to place order on New entrant(s) upto 60% of tendered quantity provided,

1. (i). A tenderer shall be declared as "New entrant" who has no previous experience of supply for the tendered items or no satisfactory period of service or no financial turnover but have infrastructure/manufacturing facility as per the inspection report of Third party inspection or TNPDCCL or TANTRANSCO Engineers.  
ii. The tenderer who have lesser quantity of supply experience or lesser satisfactory period of service or lesser financial Turn-over criteria than prescribed in the tender document may also be considered under New entrant category.
2. The tenderer is eligible to be considered for placement of orders under New Entrant category if the bidder is the evaluated and negotiated L1 tenderer.
3. The tenderers who have been considered under New Entrant category shall satisfy all technical, commercial and BQR conditions except BQR condition of quantity of previous experience of supply (or) satisfactory period of service (or) financial turnover criteria.
4. TNPDCCL have right to place order on New Entrant bidder, who is evaluated L1, for the entire offered quantity, i.e., without any restriction of placing order for 60 % of the tendered quantity. In case more than one L1 new entrant exists having offered for the entire tendered quantity, the quantity allocation among them will be made equally. In other cases the quantity allocation will be made in proportion to the offered quantity i.e.,  $(\text{Total tendered quantity} / \text{sum of offered quantities by more than one L1}) \times \text{offered quantity of respective L1 New Entrant}$ .

**NOTE:** The offer of the bidders who have stated to be previous suppliers to TNEB /TNPDCCL (ERSTWHILE TANGEDCO) /TANTRANSCO will be considered for further evaluation, even though they have not enclosed copies of purchase orders or End user certificate etc., after ensuring with the purchase orders placing authorities. However, the tenderer has to furnish the Purchase Order No. and Date of Issue along with the details of Purchase Order issuing authority in **Schedule-E**.

**The bidder shall upload documentary evidence for the Bid Qualification Requirements along with the Tender, failing which their offer will be summarily rejected.**

**The offers of Bidders not satisfying the above "Bid Qualification Requirements" will be summarily rejected.**

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MATERIAL MANAGEMENT**

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**SECTION – III**  
**REJECTION OF TENDERS**

- I. Tenders will be **SUMMARILY** rejected if;
  - a. The EMD requirements are not complied with.
  - b. If the bids are received through Consortium or Joint venture, the same will not be considered and the bids will be rejected. Tenders received from Agents/Dealers will not be considered.
  - c. The Bid Qualification Requirements (**BQR**) as per **Section-II** of this Specification are not satisfied.
  - d. Not providing documentary evidence in support of Bid Qualification Requirements.
  - e. If it is found that there is no adequate infrastructure facilities to carry out manufacturing activities of tendered material during the factory inspection carried out by TNPDC, in case of new entrants
  - f. The offer of bidder who have quoted a quantity lesser than the minimum quantity or not mentioned the offered quantity prescribed in **clause 5.4 under section IV** of the specification.
  - g. The documents furnished with the offer are found to be bogus or the documents contains any false particulars, the EMD paid by the tenderer will be forfeited in addition to blacklisting them for future tenders in TNPDC.
  - h. The BOQ (Price bid) file is found to be modified by the bidder.
  - i. If the copy of the BG uploaded in the Techno-commercial bid differs from the original BG submitted at the office of SE/MM-III.
  - j. If the original Bank Guarantee towards EMD is not furnished at the office of SE/MM-III within three working days after tender opening.
- II. Tender is **LIABLE** to be rejected, if it is:
  - a. Not covering the entire scope of supply of materials.
  - b. If the declaration as specified in Schedule D is not signed and enclosed.**
  - c. With validity period offered is less than that stipulated in this specification.
  - d. Not in conformity with TNPDC's Commercial terms and Technical Specifications (**Section - V & VI**).
  - e. Received from a tenderer who is directly or indirectly connected with Government service or Board Service or services of local authority.
  - f. From any black listed Firm or Contractor.
  - g. Received by Telex / Telegram / E-Mail/ Fax.
  - h. From a tenderer whose past performance / Vendor rating is not satisfactory.
  - i. Not containing all required particulars as per Schedule **A to H**.
  - j. Questionnaire A & B as per **Schedule-H** is not duly filled up and properly signed by the tenderer.
  - k. The offer of bidders who have not furnished the GSTIN Number.

-/Sd/-

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**MATERIAL MANAGEMENT**



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## **SECTION – IV**

### **INSTRUCTION TO TENDERERS.**

- 1.1 The tender is in **Two Part System** with (i). Technical Bid with Commercial terms & conditions and (ii). Price Bid (BOQ). All the tenders shall be prepared and uploaded strictly in accordance with the instructions set forth herein.
- 1.2. The Tamil Nadu Transparency in Tender Act 1998 and the Tamil Nadu Transparency in Tender Rules 2000 and subsequent amendments thereof are applicable to this tender.
- 1.3. **THE TENDERERS WHO DO NOT FULLFILL THE "BID QUALIFICATION REQUIREMENT" AS PER SECTION-II NEED NOT PARTICIPATE IN THE TENDER. OFFERS NOT SATISFYING THIS "BID QUALIFICATION REQUIREMENTS" WILL NOT BE CONSIDERED AND WILL BE SUMMARILY REJECTED.**
- 1.4. All the documents submitted by the tenderer shall be serially numbered.

#### **2.0. SCOPE OF SUPPLY :**

- 2.1. The Scope of supply of materials (described in Schedule-A) includes design, manufacture, inspection, testing, packing, forwarding, and delivery of the materials detailed herein, at TNPDCCL stores anywhere in Tamil Nadu.(Approx. 90% of requirement in and around Chennai)
- 2.2 The quantity indicated in schedule of requirement is approximate. The indent will be placed subsequently as and when there is requirement, upto the last date of validity of contract. The quantity finally ordered may vary to the extent of 25% either way of the approximate quantity indicated in the Schedule of requirement. The purchaser reserves the right to issue any number of indents for supply of materials during the contract period.

#### **3.0. SUBMISSION OF TENDER OFFER:**

The tenderer is expected to examine all instructions, Schedules and Annexures detailed in the Specification and submit the Schedule of Prices and other required particulars in the Schedules and Annexures called for in this Specification, only as per the formats prescribed herein.

#### **3.1. TWO PART E-TENDER:**

1. The e-tender shall have Techno-Commercial Bid and Financial Bid.
2. Techno-Commercial Bid shall contain Technical Bid with Commercial Terms (i.e.) BQR document and other documents (PAN, GSTIN, etc.,) called for in this

specification except Price Schedule.

3. Financial Bid shall contain the Financial Bid (BOQ format).

4. The Tenderers are requested to quote price & HSN code only in the BOQ template available in the e-tender. The bidder shall download the same and upload after filling relevant columns. The BOQ template should not be modified/replaced by the bidder, else the bid is summarily to be rejected. Bidders are allowed to enter the Bidder Name and rates only.

#### 4.0. **QUESTIONNAIRE FILLING:**

A Questionnaire is appended as **Schedule-H** -Questionnaire in this specification for Bid Qualification Requirements, Commercial and Technical details. It is obligatory on the part of the tenderer to furnish all details as per the "Questionnaire". In case, this is not filled up and signed at the bottom of each page of the questionnaire and enclosed with the offer, the Bid will be liable for rejection.

#### 5.0. **SUBMISSION OF TENDERS: -**

- 5.1 The Tender Offer consisting of **Schedules- B to H** should be filled up and signed by the Tenderer or any person holding Power of Attorney authorizing him to sign on behalf of the Tenderer before submission of the Tender. The date of signature should invariably be indicated. The tender shall contain the name, residence and place of business of person or persons submitting the tender.
- 5.2 In the event of tender being submitted by other than a firm, it must be signed by a partner (copy of partnership deed should be enclosed) and in the event of the absence of any Partner, it shall be signed on his behalf by a person holding a Power of Attorney authorising him to do so, Certified copies of which shall be enclosed.
- 5.3 Tender submitted on behalf of companies registered under the Indian Companies Act, shall be signed by person duly authorised to submit the tender on behalf of the company and shall be accompanied by certified true copies of the resolutions, extracts of the Articles of Association, special or general Power of Attorney etc. to show clearly the title, authority and designation of persons signing the tender on behalf of the company.
- 5.4 **The tenderer shall quote not less than 10% of the tendered quantity i.e. 2 sets. The offer of the bidders who have quoted for lesser quantity than the minimum quantity prescribed above or not mentioned the offered quantity shall be summarily rejected.**
- 5.5 The tenderer should furnish the GSTIN numbers in the offer.

- 5.6. Bidders are not required to sign in each page of the tender specification. Instead bidders are required to sign a declaration document as specified in **Annexure-V** of the specification.

**6.0. Modifications / Clarifications to Tender Documents:**

- 6.1. At any time after the commencement of e-Tender and before the closing of the event, TNPDCCL may make any changes, modifications or amendments to the tender documents and same will be intimated to the concerned Vendors through corrigendum which can be downloaded from the Vendor login.
- 6.2. In case any tenderer asks for a clarification to the tender documents before 48 hours of opening of tenders, the Chief Engineer /Material Management / TNPDCCL/ Chennai-2 will clarify the same.
- 6.3. If any tenderer raises clarifications after the opening of the tender, the clarified reply issued by the Chief Engineer/Material Management, TNPDCCL, Chennai- 600 002 on the clarifications will be final and binding on the Tender.
- 6.4. All tender offers shall be prepared by typing or printing in the formats enclosed with this specification.
- 6.5. All information in the tender offer shall be in ENGLISH only. It shall not contain interlineations, erasures or overwriting except as necessary to correct errors made by the tenderer. Such erasures or other changes in the tender documents shall be attested by the persons signing the tender offer.

**7.0. QUOTATION OF RATES:**

- 7.1. Rates should be quoted in the BoQ only (Price schedule in NIC portal)
- 7.2. Offers giving lump sum price, without giving their breakup as per details required in the attached Price **Schedule-A** (BoQ) shall be liable for rejection.

**8.0. PRINTED TERMS AND CONDITIONS IN TENDERS:**

Supplier's printed terms and conditions will not be considered as forming part of the tender under any circumstances.

**9.0. INCOMPLETE TENDERS:**

Tender, which is incomplete, obscure or irregular is liable for rejection.

**10.0. AMBIGUITIES IN CONDITIONS OF TENDERS:**

In the case of ambiguous or contradictory terms / conditions mentioned in the bid, interpretation as may be advantageous to the purchaser may be taken without any reference to the Tenderer.

**11.0 DISQUALIFICATION OF TENDERS:**

- 11.1. The tender offer shall contain full information asked for in the accompanying schedules and elsewhere in the specification.
- 11.2. Tenderers shall bear all costs associated with the participation in the e-Tender and the **purchaser** will in no case be responsible or liable for these costs.
- 11.3. No offer shall be withdrawn by the Tenderer in the interval between the deadline for submission and the expiry of the period of validity specified / extended validity of the tender offer.
- 11.4. Attempt by any tenderer to bring to bear extraneous pressure on the Tender Accepting Authority shall be sufficient reason to disqualify the tender as per Rule 27 (3) of Tamil Nadu Transparency in Tenders Rules 2000.
- 11.5. **Only Original Equipment Manufacturer (OEM) (or) Licensed/ Authorised Channel Partner of OEM must quote.** If the bids are received through Consortium, the same will not be considered and the bids will be rejected.
- 11.6. The Tenderers are requested to furnish the exact location of their factories with detailed postal address and pin code, contact person, Phone, Mobile, Fax Nos. etc. in their tenders so as to arrange inspection by the TNPDC, if considered necessary.
- 11.7. Telex/Fax/E-Mail offers will not be entertained and will be rejected.

**12.0 CHANNEL PARTNER:**

A Channel Partner is a company that partners with a manufacturer to market and sell manufacturer's products, services or technologies. Channel partners may be Distributors, Dealers, Vendors, retailers, System Integrator (or) Value-added resellers and other such organizations.

**13.0. DESTINATIONS-WHERE MATERIALS ARE REQUIRED:**

- 13.1 The prices quoted should be on FOR Destination basis for delivery to the circles anywhere in Tamil Nadu as per the Despatch Instruction.(90% of the requirement will be in and around Chennai)

**14.0. TENDER OPENING:**

**14.1 OPENING OF COMMERCIAL & TECHNICAL BIDS WITHOUT PRICE:  
(PART –I)**

The Tender offers except price Bid will be **opened electronically on the date & time notified, at the Office of the Superintending Engineer / Material Management-III, 4<sup>th</sup> Floor, Eastern Wing, NPKRR Maaligai, 144, Anna Salai, Chennai-600 002, through <https://tntenders.gov.in>.**

- 14.2 If the opening date happens to be a holiday, the tenders will be opened on the succeeding working day without any changes in the timings indicated.
- 14.3. In all cases, the amount of bid security and validity of the bid shall be scrutinized. Thereafter, the bidder's name and such other details as the Tender Inviting Authority may consider appropriate, will be recorded as bid opening summary and the same will be uploaded on the e-procurement portal.
- 14.4. **OPENING OF THE PRICE BIDS : (PART –II)**  
**The date and time of opening of Price Bids shall be later notified through tender portal to the Bidders who full fill the BQR criteria and whose bids are found to be commercially and technically acceptable.**

#### **15.0. INFORMATION REQUIRED AND CLARIFICATIONS:**

- 15.1. In the process of examination, evaluation and comparison of tender offers, the TNPDCCL may at its discretion, ask the Tenderer for a clarification of his offers. All responses to requests for clarifications shall be in writing to the point only. No change in the price or substance of the offer shall be permitted.
- 15.2. The TNPDCCL will examine the tender offers 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 offers are generally in order.
- 15.3. Prior to the detailed evaluation, the TNPDCCL will determine the substantial responsiveness of each offer to the Bidding Documents.
- 15.4. The Tender offers shall be deemed to be under consideration immediately after they are opened and until such time official intimation of award / rejection is made by the Tender Accepting Authority to the tenderers. **The Tenderers shall not make attempts to establish unsolicited and unauthorized contact with the Tender Inviting Authority, Tender Accepting Authority or Tender Scrutiny Committee after the opening of the tender and prior to the notification of the award and any attempt by any tenderers to bring to bear extraneous pressures on the Tender Accepting Authority shall be sufficient reason to disqualify the tenderer.**
- 15.5. After acceptance of the tender by the Tender Accepting Authority, the details will be arranged to be published in the Tender Bulletin of Tamil Nadu Government.

- 15.6. Mere submission of any Tender offer connected with these documents and Specification shall not constitute any agreement. The tenderer shall have no cause of action or claim, against the TNPDCCL for rejection of his offer. The TNPDCCL shall always be at liberty to reject or accept any offer or offers at its sole discretion and any such action will not be called into question and the Tenderer shall have no claim in that regard against the TNPDCCL.

#### **16.0. EVALUATION AND COMPARISON OF THE TENDER OFFERS:**

- 16.1. The tenders will be evaluated strictly as per the Tamil Nadu Transparency in Tenders Act, 1998 and the Tamil Nadu Transparency in Tender Rules, 2000 and its subsequent amendments till date.
- 16.2. The tender offers received will be examined to determine whether they are in complete shape, all required Data have been furnished, properly signed and generally in order and conforms to all the terms and conditions of the Specification without any deviation.
- 16.3. For the purpose of evaluation of tender offers, the following factors will be taken into account for arriving the evaluated price:
- a) The quoted price will be corrected for arithmetical errors.
  - b) In case of discrepancy between the price quoted in words and figures lowest of the two will be considered.
  - c) The rate of CGST, SGST and IGST as applicable both in percentage and amount shall be indicated in the offer along with HSN code.
  - d) The evaluated price shall be arrived in compliance with the provisions of GST on the Transaction value ie. (Ex works price + P&F +Freight and Insurance) + GST. In case of import of goods would be treated as interstate supplies and would be subject to IGST in addition to applicable Customs duty.
  - e) Since GST is enacted wherein all taxes & duties are subsumed price evaluation shall be inclusive of applicable GST in all cases , i.e. even if the bidders are only within the state or bidders are within the state and outside TN.
  - f) The bidders should have registered under GST Act and furnish GSTIN.
  - g) In the event of bidder is within TN, SGST & CGST shall apply and if the bidder is outside TN, IGST shall apply.'
- 16.4 Evaluation of the tender will be done for the set i.e., (2 Nos. Transformer Panel + 8 Nos Feeder Panels + 1 No. Bus Coupler Panel with bus raiser).
- 16.5 The unit FOR (D) value of each set will be arrived and evaluation will be carried out as detailed above. From these arrived rates, the lowest offer (L1 Tenderer) will be arrived.

- 16.6. The rates quoted by the eligible lowest tenderer in the open tender shall be compared with the prevailing market rate and the rates of previous period and if the Tender Accepting Authority is of the view that the quoted rates are too high, the rates will be negotiated and the rate will be determined. All eligible bidders who accept the rate shall be enlisted.

In the event of L1 bidder offered a quantity less than the tendered quantity, the quantity allocation will be made as per the provisions specified in the Tamil Nadu Transparency in Tender rules 2000.

**Tie breaker:**

When more than one bidder have quoted same value during bid submission and accepted in Finance Evaluation, Evaluator is allowed to select any one combination of bidder value (i.e.the L1 bidder) to initiate for Financial bid resubmission for Tie break.

**Online negotiation:**

Provision to go for on line negotiation has been provided for the Tender Evaluator. The online negotiation process in the portal is similar to the process for negotiation under tie breaker process. However, financial rebid submission can be invited from only one bidder.

- 16.7. As per the provisions of Tamil Nadu Transparency in Tender Rules 2000, the bidder should not alter the quantity offered in the bid during price negotiation/ matching.
- 16.8. No changes, amendments which materially alter the tendered prices shall be permitted after the opening of the tender, except as per the procedure prescribed in sub-section (3) of section 10 of the Act the Tamil Nadu Transparency in Tender ACT 1998.
- 16.9. The TNPDCCL also reserves the right to allocate the quantity as per Cl. No. 31.4 of Tamil Nadu Transparency in Tender rules, 2000.

**17.0. PURCHASE PREFERENCE:**

- 17.1. Purchase preference may be extended to the Domestic enterprises, Government departments, Public Sector Undertakings, Statutory Boards and other similar institutions as per the provisions in 30-A & 30-B of Tamil Nadu Transparency in Tender Rules 2000.

**17.2. PURCHASE PREFERENCE TO DOMESTIC ENTERPRISES :**

In case of procurement of goods or services, where it is possible for the procuring entity to divide the award of tenders to more than one supplier or service provider, the tender document shall clearly indicate that up to **twenty five percent** of the total requirement in the procurement may be awarded to domestic enterprise, not being the lowest tender, in respect of only goods manufactured or produced or services provided or rendered by them, if the



following conditions are satisfied-

- (a) the lowest tender is not a domestic enterprise;
- (b) the preferential award shall extend only to the lowest tender among the domestic enterprises who are substantially responsive and technically qualified; and
- (c) Such domestic enterprise is willing to match the price of the lowest tender:

Provided that where the Tender Inviting Authority is of the view that in the interest of the participation of domestic enterprise in the tender to avail the above benefit, a less stringent set of technical qualification parameters are required, he shall specify a separate set of technical qualifications for domestic enterprises in the tender documents with the approval of the Government.

#### 17.3 **PURCHASE PREFERENCE TO GOVERNMENT DEPARTMENTS, PUBLIC SECTOR UNDERTAKINGS, STATUTORY BOARDS AND OTHER SIMILAR INSTITUTIONS:**

In case of procurement of goods or services, where it is possible for the procuring entity to divide the award of tenders to more than one supplier or service provider, the tender document shall clearly indicate that up to **forty percentage** of the total requirement in the procurement may be awarded to Government departments, Public Sector Undertakings, Statutory Boards and other similar institutions as may be notified by the Government, in respect of only of goods manufactured or produced or services provided or rendered by them, if such tenderer is willing to match the price of the lowest tender."

#### 17.4 **PURCHASE PREFERENCE TO SCHEDULED CASTE AND SCHEDULED TRIBES:**

In case of procurement of goods, services, where it is possible for the procuring entity to divide the award of tenders to more than one supplier or service provider, the tender document shall indicate that **Five Percent** of the total requirement shall be awarded to enterprises owned by persons belonging to the Scheduled Castes or Scheduled Tribes in respect of only of the goods manufactured or service rendered by it, if the following conditions are satisfied, namely:

- (a) the lowest tenderer is not in enterprise owned by persons belonging to the Scheduled Castes or Scheduled Tribes and
- (b) such enterprises are willing to match the price of the lowest tenderer.

In order to claim purchase preference for domestic enterprises belonging to Scheduled Castes and Scheduled Tribes, the supporting documents necessary

to evidence the same in respect of each type of domestic enterprise owned by SC/ST are specified below.

In case of such domestic enterprise been a sole proprietary firm having registered in Udyam portal located within Tamil Nadu, Udyam Registration Certificate contains the social category of enterprise. However, in order to ensure that no change in social category of enterprise has happened consequent of having registered in Udyam portal, an undertaking from the sole proprietor may be insisted.

In case of such domestic enterprise is partnership firm been registered in Udyam portal, social category of enterprise can be ascertained from the community certificate of not less than three-fourths of the partners belong to the Scheduled Castes or Scheduled Tribes along with copy of registered partnership deed. However, a certificate from chartered accountant may also be obtained certifying that no change in social category of enterprise has happened consequent of the said registered partnership deed.

In case domestic enterprise is a company having its registered office and place of business in the State, a certificate from practicing company secretary may be obtained certifying that more than fifty per cent of the ordinary shareholdings pertain to persons belonging to the Scheduled Castes or Scheduled Tribes and the control of the company, as defined in section 2 (27) of the Companies Act, 2013 (Central Act 18 of 2013) vests with persons belonging to the Scheduled Castes or Scheduled Tribes and the same is duly confirmed for the purpose of submission of bid against the provisions of tender specification No.M. /2025-26.

Note: "Scheduled Castes" and "Scheduled Tribes" shall have the meanings assigned to them respectively under clauses (24) and (25) of Article 366 of the Constitution. "State" means the State of "Tamil Nadu".

#### **18.0. VALIDITY:**

- 18.1. Tender offer shall be kept valid for acceptance for period of **180 days** from the date of opening of offers. The offers with lower validity period are liable for rejection.
- 18.2. Further, the tenderer shall agree to extend the validity of the Bids without altering the substance and prices of their Bid for further periods, if any, required by the TNPDC.

- 18.3. **The rejected bidders shall furnish a consent stating that they are accepting for revocation of rejection by the TNPDCCL within the validity period, if insisted.**

**19.0. RIGHTS OF THE TNPDCCL:**

**19.1. Rights to reject the tenders:**

- 19.1.1. After negotiation with the Tenderer and before passing the order accepting a tender, if the Tender Accepting Authority decides that the price quoted by such tenderer is higher by the percentage as may be prescribed over the schedule of rates or prevailing market rates, the tender shall be rejected.
- 19.1.2. The Tender Accepting Authority before passing the order accepting a tender, may also reject all the tenders for the reasons such as changes in the scope of procurement, lack of anticipated financial resources, court orders, accidents or calamities and other unforeseen circumstances.
- 19.2. Notwithstanding anything contained in this Specification, the TNPDCCL reserves the rights:
- (a) to vary the quantity finally ordered to the extent of 25% either way of the quantity indicated in the Tender document, as the quantity indicated in the schedule of requirement is approximate.
  - (b) to split the Tendered Quantity and place orders on one or more than one firm as per the Tamil Nadu Transparency in Tender Rules 2000 since the tendered material is so vital in nature and the failure in supply would affect the public interest.
  - (c) to recover losses , if any, sustained by TNPDCCL, from the supplier who pleads his inability to supply and backs out of his obligation after award of contract. The security deposit paid shall, be forfeited.
  - (d) to cancel the orders for not keeping up the delivery schedule
  - (e) to vary the delivery period based on the requirement and contingencies at the time of placing of order.
  - (f) to accept the lowest eligible tender.
  - (g) to reject any or all the tenders or cancel without assigning any reasons therefore.
  - (h) to relax or waive or amend any of the conditions stipulated in the tender Specification wherever deemed necessary in the best interest of the TNPDCCL.

- (i) To cancel the order along with the forfeiture of EMD if SD cum Performance guarantee is not furnished within **30 days** from the date of receipt of PO. In that event, the award may be made to subsequent L2 tenderer. The belated payment of Security Deposit shall not be accepted.
  - (j) To evaluate for set and to place orders accordingly.
- 19.3. The purchaser reserves the right to request for any additional information and also reserves the right to reject or accept the proposal of any tenderer, if in the opinion of the purchaser, the qualification data is incomplete or in the opinion of the TNPDCCL the bidder is found not qualified to satisfactorily perform the contract.

## **20.0 DEVIATIONS:**

- 20.1 The offers of the Tenderers with Deviations in Commercial terms and Technical Terms of the Tender Document are liable for rejection. Such deviations if any may be furnished in the **Schedule – C1 & C2.**
- 20.2 No alternate offer will be accepted.

## **21.0. BAR OF JURISDICTION:**

Save as otherwise provided in the Tamil Nadu Transparency in Tenders Act 1998, taken by any officer or authority under this Act shall be called in question in any court, and no injunction shall be granted by any court in respect of any action taken or to be taken by such officer or authority in pursuance of any power conferred by or under this Act.

## **22.0. APPEAL:**

Any Tenderer aggrieved by the order passed by the Tender Accepting Authority under Section-10 of the Tamil Nadu Transparency in Tenders Act 1998 may appeal to the Government within 10 (Ten) days from the date of receipt of order.

## **23.0. TENDER DOCUMENT:**

"All the intending e-tenderers are informed that in the event of the documents furnished with the offer being found to be bogus or the documents contain false particulars, the EMD paid by such tenderers will be forfeited in addition to blacklisting them for future tenders / contracts in TNPDCCL" and also cancelling the award of contract issued to them."

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**SECTION - V**

**COMMERCIAL**

**1.0. SCOPE:**

The scope of supply includes manufacture, inspection, testing, packing, forwarding, insuring and delivery of the Equipments detailed herein, at TNPDCCL Stores **anywhere in Tamil Nadu. (Approx. 90 % of requirement in and around Chennai).**

**2.0. PERIOD OF CONTRACT:**

The period of contract is **12 Months** from the date of receipt of contract.

**3.0. DETAILS OF CONSTITUTION OF FIRM:**

The tenderers shall furnish documentary evidence for the constitution of the firm such as Memorandum and Articles of Association, Partnership Deed etc. with details of Name, Address, Telephone, FAX Nos. E-Mail, Electricity Board Service Connection No., etc. of the manufacturing plants.

**4.0. LEGAL STATUS OF THE FIRM:**

The tenderer should furnish necessary document evidencing their legal status of the firm along with their offer.

**5.0. DETAILS OF PURCHASE ORDERS ALREADY EXECUTED:**

The tenderers shall furnish documentary evidence with details of various Purchase Orders placed on them by other State Electricity Boards/Power Utilities/Central/State Public Sector etc., and executed during the last **ten years** as on date of tender in the **Schedule-E**.

**6.0. PLACING OF ORDERS:**

- 6.1 It is not binding on the TNPDCCL to accept the lowest or any tender. The TNPDCCL reserves the right to split and place orders for the items with different tenderers and for revising the quantities at the time of placing the orders for sustained supply. The TNPDCCL reserves the right to vary the quantity finally ordered to the extent of 25% either way of the requirement indicated in the tender documents.
- 6.2 The award of contract will be issued to the successful tenderer with all TNPDCCL's terms and conditions, duly indicating the approved unit rates and the approximate quantity allotted to them. The approved rates will be Firm and valid for one year from the date of award of contract.
- 6.3 During the period of the contract, TNPDCCL will send indent to the supplier

indicating the quantity to be supplied and the delivery schedule according to TNPDC's requirement.

## **7.0. PRICE:**

- 7.1 The Tenderers are requested to quote **FIRM** price only, valid for **one year** from the date of award of order. The unit price for supply of goods shall remain valid during the entire period of one year from the date of award of order Contract till supply completed.
- 7.2 The Tenderer's shall quote the Ex-works price, Packing & Forwarding charges and Freight & Insurance charges with applicable rate of GST separately for Delivery to TNPDC Stores anywhere in Tamil Nadu. A format for price is given in Schedule 'A'.
- 7.3 The split-up details of price as above shall be entered online in the appropriate boxes provided in the BOQ.
- 7.4 The Freight and Insurance charges shall be applicable for delivery to any stores of TNPDC in Tamil Nadu and shall be firm throughout the Contract period. Unloading the equipments/materials at destination stores should be done by the supplier at his own cost.
- 7.5 It is the responsibility of the tenderer to make sure about the correct rates of duty/tax leviable on the materials at the time of tendering. If the rates assumed by the Tenderers are less than the current rates prevailing at the time of tendering, the TNPDC Ltd will not be responsible for the same. If the rates assumed by the tenderer are higher than the current rates prevailing at the time of tendering, the GST prevailing at the time of tendering will only be paid.
- 7.6 All Type Tests and other tests specified shall be conducted at TENDERER'S COST.
- 7.7 Unloading the equipments/materials at destination Stores should be done by the supplier at his own cost.

## **7.12 INPUT TAX CREDIT :**

- 7.12.1. **The benefit of Input Tax Credit (ITC) if any availed by the bidder shall be passed on to TNPDC.** Necessary GST ITC undertaking as per **ANNEXURE-IV** shall be submitted by the L1 tenderer after evaluation for compliance with section 171 of GST Act by the bidder.
- 7.12.2. In the event of eligible evaluated bidders submitting the declaration as NIL ITC benefit, a certificate from Chartered Accountant has to be submitted certifying the same since the bidder may be ignorant of provisions of GST Act.

7.12.3 TNPDCCL cannot avail input tax credit from suppliers whose turnover exceeds Rs.5 crores without an e-invoice or e-invoiced debit note or e-invoiced credit note. E-Invoice is a system in which B2B invoices are authenticated electronically by GSTN for further use on the common GST portal. Under the electronic invoicing system, an identification number will be issued against every invoice by the Invoice Registration Portal (IRP) to be managed by the GST Network (GSTN). The bidders having annual turnover exceeding Rs.5 crores shall claim payment by raising e invoice only.

7.13. **PERMANENT ACCOUNT NUMBER AND GSTIN NUMBER:**

The Tenderer shall indicate the Permanent Account No. in **Schedule 'H'** of the specification and should enclose the details of PAN issued by Government of India, Income Tax Department and **GSTIN number** of the firm with proof with the tender.

**8.0. GOODS AND SERVICES TAX [GST]:**

- 8.1. i. Goods and Services Tax [GST] as a modern law, has been brought after Article 366(12A) of the Constitution as amended by 101st Constitutional Amendment Act, 2016. GST is an indirect tax system, commonly used by both the Central Government and the State/UT to final consumption with credit of taxes paid at previous stages available as set off. In a nutshell, only value addition will be taxed and burden of tax Governments on goods and services. GST is a destination based tax on consumption of goods and services. It is proposed to be levied at all stages right from manufacture up to be borne by the final consumer. GST has been rolled out w.e.f. 01.07.2017, across India.
- ii. The GST to be levied by the Centre on intra-State supply of goods and /or services would be called the Central GST (CGST) and that to be levied by the States/ Union territory would be called the State GST (SGST)/ UTGST. Similarly, Integrated GST (IGST) will be levied and administered by Centre on every inter-state supply of goods and services.
- iii. Any supplier of goods and service Provider of services who makes a taxable supply with an aggregate turnover of over Rs.20 lakhs in a financial year is required to obtain GST registration. In special category states, the aggregate turnover criteria are set at Rs.10 lakhs. In simple words every business whose taxable supply of goods or services under GST (Goods and Service Tax) and whose turnover exceeds the threshold limit of Rs. 20 lakhs / 10 Lakhs as applicable will be required to register as a normal taxable person.
- iv. **GST Registration Number:**  
TNPDCCL has migrated into GST regime on 15.06.2017 by duly uploading various mandatory data as required by the GST portal. The provisional ID



issued to TNPDC is 33AADCT4784E1ZC. The details are also posted in TNPDC web portal.

- v. GST Registration Number or GSTIN is 15 Digit identification number which is allotted to each applicant who applied for GST Registration. GST Number is completely based on the Pan Number and State code. First two digits represent the state code and another 10 digit represent the PAN number of the client, one digit represent the entity code (Like proprietorship or partnership etc), one digit is blank and last one is representing check digit.
- vi. **Transaction Value:** The value of supply of goods or services or both shall be the transaction value, which is the price actually paid or payable for the said supply of goods or services or both where the supplier and the recipient of the supply are not related and the price is the sole consideration for the supply. Sec 15(1) states that value of supply of goods and service shall be the transaction value i.e. the price actually paid or payable.  
  
The conditions for accepting the transaction value are –  
a) Supplier and the recipient of the supply are not related.  
b) Price is the sole consideration for the supply.
- vii. **Composition Scheme:** Composition scheme specifies that registered person whose turnover in the preceding financial year is below certain specified limit (Currently RS.75 lakhs) may intimate the proper officer to pay in lieu of tax payable by him an amount calculated at such rate may be specified.  
Eligibility for composition scheme: Sec.10(2) of the central Goods and Services Tax Act, 2017 states that the registered person shall be eligible to opt under sub- section (1), if-
  - He is not engaged in the supply of services other than supplies referred to in clause (b) of paragraph 6 of Schedule II;
  - He is not engaged in making any supply of goods which are not leviable to tax under this Act;
  - He is not engaged in making any inter-State outward supplies of goods;
  - He is not engaged in making any supply of goods through an electronic commerce operator who is required to collect tax at source under section 52; and
  - He is not a manufacturer of such goods as may be notified by the Government on the recommendations of the Council.
- viii. **SUPPLY OF SERVICE AND GOODS :**When there is a combined supply of many goods / services, it has to be determined whether it is a Composite supply or mixed supply of goods or services
  - (a) **COMPOSITE SUPPLY:** A composite supply is one where all the goods or services or a combination has to be supplied together i.e., naturally bundled and there would be a Principal Supply that could be identified (Ex. Supply of Machinery with packaging, insurance and freight – the

principal supply is machinery). In this case, the rate of principal supply will be applied on entire value.

- (b) **MIXED SUPPLY:** A mixed supply is one where the goods or services or a combination thereof which could be individually supplied (like Pizza and Coke) but sold together at a single price. In this case, the highest rate to the good in that mix is applied on all the goods. The GST shall be applicable at appropriate prevailing rates as notified by GST Act. In the event of delay in execution of contract, the GST rate prevailing on the scheduled period or on the actual date of execution, whichever is less only will be admitted.

The bidders should have registered under GST Act and furnish GSTIN. In the event of Supplier/contractor is within TN, SGST & CGST shall apply and if the supplier/contractor is outside TN, IGST shall apply.

- 8.2. The Goods and Services Tax will be paid extra as applicable. The amount of CGST, SGST, and IGST as applicable shall be indicated in percentage payable and amount separately in the tender offer.

- 8.3. The TNPDCCL has been registered as a dealer under GST Act 2017 (Registration No. 33AADCT4784E1ZC)

In case of delayed delivery, the GST prevailing on the date of despatch or on the last day of the contractual delivery period whichever is LESS will be admitted. For both the cases, the supplier shall furnish documentary evidence while submitting the bills for payment.

It is the responsibility of the tenderer to make sure about the correct rates of duty leviable on the material at the time of tendering. If the rates assumed by the Tenderer are less than the current rates prevailing at the time of tendering, the TNPDCCL Ltd will not be responsible for the mistake. If the rates assumed by the tenderer are higher than the current rates prevailing at the time of tendering, the GST prevailing at the time of tendering will only be paid.

- 8.4. Any Variation in GST due to statutory Variation within the contract delivery date shall be considered by the TNPDCCL Ltd.

- 8.5. In case of delayed delivery, the GST prevailed on the date of actual delivery applicable on the date of contractual date of delivery whichever is less shall be admitted.

- 8.6. **GSTR-2A** of TNPDCCL will be verified to ensure the remittance of GST to Govt., by the supplier in respect of this PO. If the GST remitted by the supplier is found lesser than that claimed from TNPDCCL, the excess GST paid by TNPDCCL will be recovered from the supplier, duly adhering regular procedures. The supplier is requested to file the GST returns promptly to avoid delay in processing/payment of invoices. In case of non-filing of GSTR1 by supplier, the SD, EMD and other payments, if any, due to the supplier may be withheld.

## **E-Invoice:**

The suppliers / contractors, whose annual turnover exceeds Rs.5 crores, to raise e invoices, so that TNPDCCL could avail Input Tax Credit under GST. E-Invoice is a system in which B2B invoices are authenticated electronically by GSTN for further use on the common GST portal.

Under the electronic invoicing system, an identification number will be issued against every invoice by the Invoice Registration Portal (IRP) to be managed by the GST Network (GSTN). The bidders having annual turnover exceeding Rs.5 Crores shall claim payments by raising e - invoice only.

### **8.7. GST – E-Way Bill:**

The Government of TamilNadu had notified that e-way bill is required to be generated for intra-state movement (within the state of TamilNadu) for consignment value exceeding Rs.1,00,000 with effect from 2<sup>nd</sup> June 2018. It may kindly be noted that E-Way bill on interstate movement of goods had been introduced with effect from 1<sup>st</sup> April 2018 and is required to be generated for movement of goods having consignment value exceeding Rs.50,000. (please refer webpage portal <http://ewaybillgst.gov.in>. for procedure and generation of E-way bill).

### **8.8. TDS under GST as per Section 51 of the CGST Act, 2017: -**

The Central Government vide Notification No.50/2018 dated 13<sup>th</sup> September 2018 has notified 1<sup>st</sup> day of October, 2018 as the date from which the provisions of Tax Deducted at Source (TDS) under GST as per Section 51 of the CGST Act, 2017 shall come into force.

Accordingly, Tax at the rate of 2% ( i.e. CGST 1% and SGST 1% ) or (IGST 2%) will be deducted from the payment made or credited to the supplier (i.e. deductee) of taxable goods or services or both from the invoices raised by the suppliers or service providers.

The Standard Operating Procedure (SOP) issued by CBIC is available in [www.cbic.gov.in/resources/htdocs-cbec/gst/28092018\\_SOP\\_ON\\_TDS.pdf](http://www.cbic.gov.in/resources/htdocs-cbec/gst/28092018_SOP_ON_TDS.pdf) which can be referred to for further clarification.

### **8.9. GST on Forfeiture of Security Deposit: -**

GST @18% shall be applicable on forfeiture of Security Deposit (SD) and shall be recovered additionally from the Supplier/Contractor.

### **8.10. Releasing GST portion to Suppliers / Contractors :-**

The guidelines for releasing GST portion is attached as **Annexure- VIII**

### **8.11. Provision of Section -194Q of IT Act :**

1. Any person, being a buyer, who is responsible for paying any sum to any resident for purchase of goods of value (or) aggregate value exceeding Rs.50 lakhs in any previous year, shall, at the time of credit of such sum to the account of the seller (or) at the time of payment, whichever is earlier, shall deduct an amount equal to 0.1% of such sum exceeding Rs.50 Lakhs as TDS under Section-194Q of IT Act. The supplier of goods is required to furnish the PAN to TNPDCCL for making the payment. In case the suppliers do not have PAN, TNPDCCL is required to deduct tax at higher rate as per the provisions of section 206AA. In case of specified person i.e., Any person who has not filed Income Tax return for two previous years immediately before the previous year in which TDS is required to be deducted and the time limit for filing of income tax return u/s 139(1) of the Income Tax Act, 1961 has expired provided the total TDS & TCS in INR is Rs.50,000 (or) more in each of the two previous years the TDS rate u/s 194Q will apply at higher rate u/s.206AB.
2. The provisions of this section shall not apply to the transactions on which tax is deductible under any other provisions of the Income Tax Act 1961 and also on the transactions in which Tax is collectible under the provisions of Section 206C.
3. On purchase of goods/materials, TNPDCCL shall have the primary and foremost obligation to deduct Tax at source and no tax shall be collected on such transaction u/s.206C(1H). TDS u/s 194Q is also applicable on the Advance paid for purchase of goods.
4. The above provisions comes into effect from 01.07.2021 onwards and hence no TCS under Section 206C(1H) has to be paid by TNPDCCL on purchase of Goods. Accordingly, TNPDCCL will deduct TDS under section 194Q on all the purchase of goods exceeding the threshold limit i.e. aggregate credit (or) payment exceeds Rs.50 Lakhs. It is mandatory for vendor to submit the declaration format in **Annexure IX** to determine the applicability of TDS rate u/s 206 AB.
5. In case any procurement of goods/materials are made by TNPDCCL from overseas supplier and the payment is not taxable to the overseas supplier in India, the TDS under section 194Q will not apply.

#### **9.0. FREIGHT & INSURANCE:**

The tenderer shall quote Freight and Insurance component separately which shall be kept firm during the contract period. Contracting firms shall arrange to pay Freight & Insurance for the equipment and all its accessories being supplied by them, through any of the carriers and Nationalised Insurance Companies. The equipment shall be insured to cover transport (from Warehouse) and 60 days storage risk at site. It will be the responsibility of the supplier to replace the defective/damaged materials and make good the shortages and

other losses in transit, free of cost, lodge and recover claim from insurance Under writers/Carriers.

## **10.0 PACKING AND FORWARDING :**

- 10.1 The equipment and all its accessories shall be securely packed and despatched, freight paid, duly insured, at supplier's risk and cost. The packing may be in accordance with the manufacturer's standard practice. The supplier is responsible for ascertaining the facilities that exist for Road Transport to site. Each package shall be clearly marked and contain detailed packing list, such as gross weight, net weight etc. The supplier is solely responsible for any loss or damage during transport.
- 10.2 The despatch of materials shall be made only after the approval of test certificates by the TNPDCCL for the materials concerned.
- 10.4 The supplier shall be responsible for any damage to the equipment during transit due to improper and inadequate packing.
- 10.5 Only packages constructed out of sound material and of dimensions proportional to the size and weight of contents shall be used.
- 10.6 Loose material eg. Bolts, Nuts etc., shall be packed in gunny bags and sealed in polythene bags with proper tagging.
- 10.7 Components containing glass fragile materials shall be carefully covered with shock absorbing protective material such as expanded polystyrene (Thermocole).
- 10.8 All openings in the equipment shall be tightly covered, plugged or capped to prevent foreign material from entering.
- 10.9 In the case of large and bulk equipment, the vendor shall be responsible for ascertaining transport limitations and supply the equipment in the minimum number of components or sub-assemblies, within the frame work of transport limitations.
- 10.10 Wherever necessary, proper arrangements for attaching slings for lifting shall be provided.
- 10.11 The contents of the packages shall be sealed in thick polythene sheets and all the inside walls of the packages shall be lined with waterproof paper to protect the equipment from damage due to dust and moisture.
- 10.12 All equipment shall be protected for the entire period of Dispatch, storage and erection against corrosion, incidental damage due to vermin, sunlight, rain, high

temperature, humid atmosphere, rough handling in transit and storage in the open including possible delays in transit.

- 10.13 Each crate or package shall contain a packing list, in a waterproof envelope. Copies of the packing list, in triplicate, shall be forwarded to the consignee prior to despatch. All items of material shall be clearly marked for easy identification against the packing list.
- 10.14 All spare parts shall be packed and treated for long storage conditions.
- 10.15 Any material found short inside the intact packing cases shall be supplied by the SUPPLIER at no extra cost to the PURCHASER, including transportation upto stores/site.
- 10.16 All packing cover and packing material shall become the property of the PURCHASER.
- 10.17 All packages shall be clearly, legibly and durably marked with uniform block letters (preferably with waterproof paint) on at least three sides with:
- Destination address as communicated
  - Purchase order reference
  - Dimensions
  - Net and Gross Weights
  - Sign showing 'Side Up'
  - Sign showing 'fragile' marks in case of delicate equipment
  - Sign showing slinging and sling position
  - Any handling and unpacking instructions, if considered necessary.
- 10.18 The packing shall conform to relevant packing standards. The contractor should however, ensure that the packing is such that the materials reach their destination without damage/loss during transit by Rail or Road and subsequent storage. The words "Handle with care" should be printed on the cartons.

#### **11.0. DELIVERY :**

- 11.1 The scope of the delivery shall cover the following:
- Delivering the complete equipment and accessories from the date of receipt of purchase order upto delivering at our stores anywhere in Tamilnadu as per Indents issued from TNPDC.
- 11.2 The delivery schedule is as follows:

Submission of Drawings	:	Within 3 weeks from the date of receipt of Purchase order
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Approval of drawings	:	Within 3 weeks from the date of receipt of drawing.																																			
Delivery	:	<p>25 % of the ordered quantity shall be delivered within 2 months/8 weeks from the date of drawing approval.</p> <p>Balance 75% of the purchase order quantity shall be delivered tentatively in the subsequent 5 indents as below:</p> <table><tr><th>LOT No.</th><th>LV</th><th>FEEDER</th><th>BC</th><th>Due date</th></tr><tr><td>I</td><td>9</td><td>36</td><td>5</td><td>2 months from the date of drawing approval</td></tr><tr><td>II</td><td>6</td><td>22</td><td>3</td><td>in next 45 Days</td></tr><tr><td>III</td><td>6</td><td>22</td><td>3</td><td>in next 45 Days</td></tr><tr><td>IV</td><td>5</td><td>22</td><td>3</td><td>in next 45 Days</td></tr><tr><td>V</td><td>5</td><td>21</td><td>2</td><td>in next 45 Days</td></tr><tr><td>VI</td><td>5</td><td>21</td><td>2</td><td>in next 45 Days</td></tr></table>	LOT No.	LV	FEEDER	BC	Due date	I	9	36	5	2 months from the date of drawing approval	II	6	22	3	in next 45 Days	III	6	22	3	in next 45 Days	IV	5	22	3	in next 45 Days	V	5	21	2	in next 45 Days	VI	5	21	2	in next 45 Days
LOT No.	LV	FEEDER	BC	Due date																																	
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IV	5	22	3	in next 45 Days																																	
V	5	21	2	in next 45 Days																																	
VI	5	21	2	in next 45 Days																																	

- ii) The indents will be issued by the Chief Engineer/ MM based on the actual requirements. The quantity and due date for delivery will be appropriately indicated in the indent to be issued by TNPDC. The minimum time period between two subsequent indents will be 45 days. However, the indents for the balance quantity (II Lot to VI Lot) shall be issued based on the requirement, timeliness of supply by the supplier and feedback on performance from the field. This is purely at the discretion of Chief Engineer / MM. The delivery schedule as above shall be guaranteed by the supplier under liquidated damages clause governed by this specification.
- 11.3 It is the responsibility of the supplier to give advance information on inspection, despatch of materials and other obligations under the terms and conditions of this specification in order to deliver the unit within the contractual delivery period.
- 11.4 The delivery period will not normally be extended. Hence all efforts shall be taken to deliver the materials within contractual delivery period.
- 11.5 If any other delivery period is indicated, then the tender is liable for rejection. The date of receipt of materials at stores/site in good condition will be treated as date of delivery for all purpose.
- 11.6 Based on the requirements and contingencies, TNPDC has right to advance/postpone the Delivery Schedule at the time of placing Order.
- 11.7 TNPDC reserves the right to cancel the quantities not supplied as per delivery schedule.

- 11.8 To ensure sustained supply without any interruption, TNPDCCL reserves the right to place orders among more than one tenderer.
- 11.9 The TNPDCCL will be at liberty to cancel the contract if the supply is not made as per the delivery schedule specified in the order without any further notice to the supplier, notwithstanding its right to claim liquidated damages for the belated supplies and the quantity outstanding to be supplied as on the date of cancellation. The defaulting contractors will be liable to pay to the TNPDCCL in addition to the liquidated damages for delay, the actual difference in price whenever the TNPDCCL orders the delayed quantity to be supplied / executed by other agencies at higher rate.
- 11.10 The date of receipt of last component of the main equipment will be reckoned as the date of delivery for the purpose of calculation of liquidated damage for delay in delivery, when the main equipment and accessories are delivered in piece meal.
- 11.11 The delivery period will not normally be extended. Hence all efforts shall be taken to deliver the materials within the contractual delivery period.
- 11.12 After the issue of Despatch Instruction, if any delay is caused by the supplier in arranging timely despatches, their poor performance will be taken note of while ordering in future.
- 11.13 The above delivery shall be guaranteed under liquidated damages clause governed by **Clause No.17** of the specification.

## **12.0 GENERATION OF E-WAY BILL:**

- 12.01 E - Way Bill is an electronic document to be generated to cover movement of goods more than Rs.1,00,000 and such generation needs to be done in e way bill portal. Consequently, transporters of goods are required to carry an e way bill under GST provisions for the movement of such goods. The value of goods shall be the value declared in an invoice, a bill of supply or a delivery challan and also includes the Central tax, State or Union territory tax, Integrated tax and cess charged, if any. But it will not include value of freight charges for the movement charged by the transporter.
- 12.02 It is the responsibility of Supplier/Contractor to ensure the delivery at the destination stores/sites of TNPDCCL. Therefore, it is the responsibility of the Supplier/Contractor or their transporters to generate e way bill before transporting goods for delivery at TNPDCCL's premises.

## **13.00 QUANTITY ALLOCATION:**



- 13.01 At the time of issuing indent for supply of materials, TNPDCCL reserves the right to allocate the quantity after ensuring the manufacturing capacity, ability to supply, quantity offered and past performance.
- 13.02 The quantities mentioned in this specification are only tentative. The purchaser reserves the right to revise the quantities at the time of placing the orders, to the extent of 25% either way of the requirement indicated in the tender document as per the Tamil Nadu Transparency in Tenders Act 1998 and the Tamil Nadu Transparency in tender rules 2000 and subsequent amendments thereof as applicable to this Tender.
- 13.03 The Circle wise quantity will be allotted at the time of issuing Despatch Instruction.

**14.0. PAYMENT:**

- 14.1 Payments will not be made for equipments /materials damaged during transit. All defective materials shall be replaced by the supplier on free of charge/cost.

**14.2 MODE OF PAYMENT:**

The payment will be made to the supplier by Central Payment against passing of bills by concerned Superintending Engineer/EDCs/CDCs based on submission of claims to the accounts branch of EDCs/CDCs.

The payment for the supplies will be made by e-payment / cheque on any one of the Nationalised Banks / Scheduled Banks approved by Reserve Bank of India in Tamil Nadu based on the dispatch instruction. The Bank charges involved in making the payment will be to the account of the Supplier.

The Supplier has to furnish the following details of the Bank account to which the payment be credited.

- i. Name of the Account Holder
- ii. Name of the Bank
- iii. Name of the Branch
- iv. Account No.
- v. IFSC code of the Branch

**14.3 (a) For the Equipments / materials delivered within the contractual delivery period :**

100% of the All-inclusive price (including GST) of the materials of each consignment will be paid within reasonable time on receipt of materials in good condition at stores and submission of bills with required documents against the passing of bills by the Superintending Engineer/ EDCs / CDCs concerned based

on the copy of the SRB received from the respective consignee EDC Stores after deducting recoveries, if any.

(b) For the Equipments/materials delivered beyond the contractual delivery period, if accepted by the purchaser:

**100%** payment of the All-inclusive price (including GST) of the materials of each consignment will be paid within reasonable time on receipt of materials in good condition at stores and submission of bills required documents after deducting LD and other recoveries, if any.

14.4 In case of delay in supply beyond the contractual delivery period, the materials will be accepted subject to the following conditions.

(a) There should be no declining trend in prices.

(b) Payment will be restricted to the FOR(D) rates of the purchase order (or) FOR(D) rates of the recent purchase order/FOR(D) rates of the lowest offers recently opened if PO not yet issued whichever is less, subject to levy of liquidated damage for belated supplies.

(a) TNPDCCL reserves the right to accept or reject the delayed supplies without assigning any reason there for and take action as per the other terms and conditions of this specification.

14.5. Payments will not be made for materials damaged during transit. All defective materials shall be replaced by the contractor free of charge. Payments will not be made unless test certificates are approved by the purchaser.

14.6. The bills for payment will be passed only after the approval/acceptance of the following:

14.6.1 **Acceptance / Approval of PO issuing Authority**

(a) Security Deposit cum Performance Guarantee for 5% value of the order.

(b) GST Registration Certificate.

(c) Undertaking towards jurisdiction for legal proceedings

(d) Guarantee Certificate for the ordered quantity

(e) Undertaking towards Input tax credit benefit passed on to TNPDCCL

(f) Test Certificate furnished along with offer for supply /Inspection reports after carrying out inspection for the offered quantity of material.

**14.6.2 Acceptance of Bill Passing Authority.: ( SE / EDCs or CDCs)**

- (a) Invoices/Bills
- (b) Guarantee Certificate for the supplied materials against DI issued by CE/MM
- (c) e-way bill as per GST norms for the transport of material against DI issued by CE/MM

14.6.3 The tenderers are requested to contact CFC/General/TNPDCL in regard to the release of payment.

**15.0. SECURITY DEPOSIT CUM PERFORMANCE GUARANTEE :-**

The successful tenderer will have to pay the Security Deposit cum Performance Guarantee as detailed below:

- 15.1. The successful tenderer/ Supplier will have to furnish 5% of the Purchase order value (All incl. price) as Security Deposit cum Performance Guarantee after deducting paid EMD amount. In case of EMD exemption availed/furnished BG towards EMD, 5% of the purchase order value to be remitted in the form of Electronic Mode (NEFT/RTGS) of Payment or DD / Banker's Cheque / Irrevocable Bank guarantee **within 30 days** from the date of receipt of Purchase order. If the successful tenderer / supplier fails to remit the amount / furnish the Security Deposit cum Performance Guarantee within the above stipulated time, the EMD paid by the tenderer / supplier shall be forfeited and Purchase Order will be cancelled without any further reference and order will be placed on the next eligible bidder.
- 15.2. Bank Guarantee should be a single irrevocable Bank Guarantee for a period of **36 months** from the anticipated date of receipt of last consignment of goods/materials at site in good condition. In case of delay in supply, the Security Deposit cum Performance Bank Guarantee should be extended suitably.
- 15.3. The Security Deposit cum Performance Guarantee will not carry any interest.
- 15.4. The Security Deposit Cum Performance Guarantee shall be valid for a period of **36 months** from the date of receipt of last consignment of materials at site. In case of delay in supply, the security deposit cum performance bank Guarantee should be extended suitably to cover the guarantee period for its validity without break in period till the completion of guarantee. The Security Deposit Cum Performance Bank Guarantee will be released on expiry of guarantee period after ensuring that defects/damages during the guarantee periods are rectified/replaced.
- 15.5. The Security Deposit Cum Performance Bank Guarantee will be refunded to the supplier only if the contract is completed to the satisfaction of the purchaser. If

the purchaser incurs any loss or damages on account of breach of any of the clauses or any other amount arising out of the contract becomes payable by the supplier to the purchaser, then the purchaser will in addition to such other dues that he shall have under the law, appropriate the whole or part of the security deposit cum performance bank guarantee and such amount that is appropriated will not be refunded to the supplier.

**15.6. The successful tenderers, who is having Permanent EMD backs out from the payment of security deposit, an equivalent amount of EMD shall be forfeited from their PEMD amount.**

15.7. The Security Cum Performance Guarantee shall guarantee the following:

- (a) Satisfactory completion of supply of the material.
- (b) The equipment supplied is free from all defects in design, material and workmanship.
- (c) The supplier shall repair/replace the material that become defective under normal use within the guarantee period specified in the specification.
- (d) The validity period of the above bank guarantee should be extended suitably to cover the additional guarantee period in case of repairing of defects/ failures within guarantee period as per the guarantee clause.  
For non-compliance of the above, the purchaser has the right to invoke the above bank guarantees.

15.8. In case of the requirement arising for extension of the Bank Guarantee, the extended Bank Guarantee shall have to be submitted to TNPDCCL within the date of expiry of the existing Bank Guarantee. In case of failure to submit such extended Bank Guarantee within the due date (expiry date), TNPDCCL shall invoke the Bank Guarantee by addressing the Bank directly.

**16.0 LOSS OR DAMAGE :**

16.1 External damages and/or shortages that are prima facie, the results of rough handling in transit or due to defective packing will be intimated within one month from the date of receipt of the materials at site. Internal defects, damages or shortages of integral parts which cannot ordinarily be detected on a superficial visual examination, though due to bad handling in transit or defective packing, would be intimated within 2 months from the date of receipt of materials. In either case, the defective materials shall be replaced/rectified by the supplier, free of cost as per Clause 20.

- 16.2 If during the period of supply, it is found that goods already supplied are defective in material or workmanship or do not conform to specification or are unsuitable for the purpose for which they are purchased, then it will be open to the purchaser either to reject the goods or repudiate the entire contract and claim such loss that the purchaser may suffer on that account or require the supplier to replace the defective goods, free of cost.
- 16.3 Similarly, if during the guarantee period any of the goods found to be defective in materials or workmanship or do not conform to specification, it will be open to the purchaser either to repudiate the entire contract and claim damages or accept such parts of the goods that are satisfactory and require the supplier to replace the balance or to claim compensation for the entire loss sustained by the purchaser on that account.
- 16.4 In the event of supplies being received damaged or any shortages at the destination stations, the cost of such materials, excise duty and sales tax (if payable) and other charges payable thereof will be paid only proportionate to the value of materials received in good condition, unless the damaged goods or short supplies are made good free of cost by the suppliers.
- 16.5 For all legal purposes, the materials shall be deemed to pass into the TNPDC's ownership at the destination substation, where they are to be delivered and accepted.

#### **17.0. LIQUIDATED DAMAGES:**

- 17.1 The delivery as specified should be guaranteed by the supplier under the liquidated damages clause given below:
- (a) If the supplier fails to deliver the equipments/materials within the time specified in the contract or any extension thereof, the purchaser shall recover from the supplier as liquidated damages, a sum of HALF PERCENT (0.5%) of the contract price of the undelivered equipments/materials for each completed week of delay. The total liquidated damages shall not exceed TEN PERCENT (10%) of the contract price of the equipments/materials so delayed. Only the date of actual receipt of materials with all its accessories in good condition at site will be reckoned as date of delivery for this purpose. It is the responsibility of the suppliers to arrange for inspection, despatch etc., in time to keep up the delivery schedule.

- (b) The defaulting contractors will be made liable to pay to the TNPDC, in addition to liquidated damages for delay, the actual difference in price, wherever TNPDC orders the delayed quantity to be supplied/executed by other agencies at a higher rate. This is without prejudice to other rights under the terms of contract.
- 17.2 Equipment will be deemed to have been delivered only when all its component parts and its accessories are also delivered. If certain components and accessories are not delivered in time the whole equipment will be considered as delayed unless, the missing parts are delivered. The Liquidated damages will also be levied for the quantity not supplied as is done for the delayed supplies. If supplies effected in part could not be beneficially used by the TNPDC (due to such incomplete supply), liquidated damage will be worked out on the basis of contract price of such equipments/materials which could not be beneficially used and not on the value of delayed portion.
- 17.3 If supplies to be rendered are made by the supplier beyond the period of delivery and they are accepted by the TNPDC, such acceptance is without prejudice to TNPDC's right to levy liquidated damages for the delay in supply.
- 17.4 If the ordered materials are not delivered, the purchaser shall recover from the supplier, as liquidated damages a sum equal to TEN PERCENT (10%) of the contract price of the equipments/materials undelivered besides forfeiture of Security Deposit cum Performance Guarantee.
- 17.5 The suppliers are liable to pay the amount of loss sustained by the TNPDC in the event of non-execution of orders, if any placed on them either in full or part to the satisfaction of the TNPDC under the terms and conditions of contract and in the event of placing orders for such quantities on some others at a higher price.
- 17.6 Tenderers not giving clear and specific acceptance to the above clauses are liable for rejection.
- 17.7 If there is any downward trend in prices on account of belated supplies, the tenderers have to accept the same with the levy of liquidated damages, for belated supplies.
- 17.8 The TNPDC will also be at liberty to cancel the order if the supply is not completed within the accepted delivery period, notwithstanding the liquidated damages clause applicable for the belated supplies. Any charge for canceling the contract will not be accepted under any circumstances.
- 17.9 In the event of cancellation of contract or non-completion of supply by the suppliers, then the short supplied items may be ordered fresh. The excess price if any between the original and new contract will be recovered from the original

supplier from the amount due to the original supplier either from this contract or from any other source.

### **18.0. FORCE MAJEURE:**

18.1. The supplier shall not be liable for delay in performing his obligations resulting directly or from any force majeure conditions herein defined as:

- (a) Any cause which is beyond the reasonable control of the supplier or purchaser as the case may be.
- (b) Natural phenomena such as floods, drought, earthquakes and epidemics.
- (c) Act of any Govt. Authority, domestic or foreign, such as wars declared or undeclared quarantines, embargoes licensing control on production or distribution restrictions.
- (d) Accident and disruptions such as fire, explosion, break down of essential machinery or equipments etc.
- (e) Strikes, slow down and lockouts.
- (f) Failure or delay in the supplier's source of supply due to force majeure causes enumerated at 'b' to 'e' above shall be considered, provided the supplier produces documentary evidence to show that there were no other alternative source of supply available to him or if available the lead time required was likely to be longer than the duration of the force majeure at the normal source of supply.

All the provisions of this clause shall apply whether the disruption cause is total or partial in its effect upon the ability of the supplier to perform.

**NOTE:** The cause of force majeure condition will be taken into consideration only if the supplier notifies such delays within 15 days from the occurrence. The purchaser shall verify the facts and grant such extension as the facts justify. For extension due to force majeure conditions, the supplier shall submit his representation with documentary evidence for scrutiny by the purchaser and decision of the purchaser shall be binding on the firm.

18.2. Provided that if the performance in whole or part by the supplier on any obligation under this contract is prevented or delayed by reasons of any eventuality for a period exceeding 60 days, the TNPDC may at its option terminate the contract by a notice in writing.

18.3. The Power cut shall not be considered under force majeure condition. The period of extension shall be decided only by the authority who placed the order, after verifying the evidence for the cause of delay.

### **19.0. GUARANTEE:**

- 19.1 The entire equipments should be guaranteed for satisfactory operation , good workmanship free of defects at least for a period of **36 (Thirty six) months** from the date of receipt of last consignment of materials at site in good condition.
- 19.2 Any defects noticed during this period shall be rectified free of cost to the TNPDCCL within **60 Days (Sixty Days)** from the date of intimation of defect/ failure. Irrespective of number of failures and repairs, the suppliers are responsible for replacement of defective materials till the completion of guarantee period. If they are not replaced within this period the contractor shall pay the liquidated damages as per the liquidated damages clause in the contract for the delay from the date of receipt of intimation for the defects or failures. Any expenditure incurred in the transportation of equipment/material for rectification or replacement will be to the suppliers account. **Such replaced components shall serve for a continuous period of 12(twelve) months from the date of re-commissioning and this shall be in addition to the guarantee provided for the equipment.**
- 19.3 A written guarantee guaranteeing the TNPDCCL against defects in the materials supplied, either in materials or workmanship, should be furnished preferably along with the initial bill for payment. The guarantee shall be operative for a period of **36 (Thirty six) months** from the date of receipt of materials at site in good condition.
- 19.4 The incidental expenses, transport and freight charges for rectification/ replacement of defective equipments/materials within the guarantee period may also be borne by the supplier till such time it serves a continuous period of 12 months as said above.
- 19.5 **The tenderers who quote from outside Tamil Nadu may indicate whether any service centers are available inside Tamil Nadu, so as to rectify/ repair the equipments/materials that are defective/failed within guarantee period without delay. The complete postal address, GST No. and details of infra structure available in the service centre shall be furnished.**
- 19.6 The tenderers shall guarantee among other things, the following.
- (i) Quality and strength of materials used.
  - (ii) Safe electrical and mechanical stresses on **all parts of the equipments** under all specified conditions.
  - (iii) Performance figures given by the tenderers in the Schedule of Guaranteed technical particulars.

## **20.0 REPLACEMENT OF DEFECTIVE / DAMAGED MATERIALS:**



- 20.1. Not with standing anything contained in the above liquidated damages clause, when the whole or part of the materials supplied by the supplier are found to be defective/damaged or are not in conformity with the specification or sample, such defects or damages in the materials supplied shall be rectified within two months from the date of intimation of defect/damage either at the point of destination or at the supplier's works, at the cost of supplier, against proper security and acknowledgement. In the alternative, the defective or damaged materials shall be replaced at free of cost within two months from the date of receipt of the intimation from the purchaser of such defects or damages.
- 20.2 If the defects or damages are not rectified or replaced within this period, the supplier shall pay a sum towards liquidated damages as per liquidated damages clause given above, for the delay in rectification/replacement of the defects or damages from the date of receipt of intimation of the defect or damages.
- 20.3. If even after such rectification or replacement of the damaged or defective part, if the equipment ordered is not giving the satisfactory performance as per the contract, then it will be open to the purchaser to reject the goods and recover the entire cost of such goods and also claim such loss sustained by the TNPDCCL.
- 20.4. Notwithstanding any other remedies available, the purchaser shall be entitled to dispose of the defective/damaged materials in 'as is where is condition' without further notice, if the contractor/supplier fails to rectify the defect and/or replace the damaged materials within such period as may be notified by the purchaser through notice and the sale proceeds of such disposal shall be appropriated towards the dues to the TNPDCCL such as liquidated damages, ground, rent, etc. as may be determined by the purchaser.
- 20.5. Similarly if during the guarantee period stipulated under guarantee clause subsequent to the date of receipt of goods, any of the goods be found defective in materials or workmanship, or do not conform to the specification or unsuitable for the purpose for which they are purchased, then it will be open to the TNPDCCL either to repudiate the entire contract and claim damages or accept such part of the goods that are satisfactory and require the supplier to replace the balance or pay compensation to the extent of the loss sustained by the TNPDCCL on that account.

#### **21.0. FAILURE TO EXECUTE THE CONTRACT:**

Suppliers failing to execute the order placed on them to the satisfaction of the TNPDCCL under the terms and conditions set-forth therein, will be liable to make good the loss sustained by the TNPDCCL, consequent to the placing of fresh orders elsewhere at higher rate, i.e. the difference between the price accepted in the contract already entered into and the price at which fresh orders have been placed. This is without prejudice to the imposition of penalty under the Liquidated Damages clause and forfeiture of security deposit

cum performance guarantee etc., The tenderer will be recommended for black listing with due notice.

**22.0. NON-ASSIGNMENT:**

The supplier shall not assign or transfer the contract or any part thereof to others without the prior approval of the Purchaser.

**23.0 RECOVERY OF DUES TO TNPDC:**

- 23.1 Any loss, arising due to non-fulfillment of this contract or any other contract, will be recovered from the Security Deposit held and or any other amount due to the supplier from the TNPDC from the Contract as well as from other contracts.
- 23.2 The TNPDC is empowered to recover any dues against this contract in any bills/ Security Deposit cum Performance / Earnest Money Deposit/PEMD due to the contractor either in this contract or any other contract with TNPDC/TANTRANSCO/TNEB Ltd.
- 23.3 The TNPDC is empowered to recover any dues against any other contracts of the contractor with TNPDC/TANTRANSCO/TNEB Ltd, with the available amount due to the contractor against this contract. The successful Tenderer shall furnish an undertaking as per **ANNEXURE-VI** in a non judicial stamp paper of Rs.500/- agreeing to the above condition.

**24.0 RAW MATERIALS:**

It is the responsibility of the tenderer to make his own arrangement to procure the necessary raw materials required for the manufacture.

**25.0 INCOME TAX PERMANENT ACCOUNT NUMBER & GST NUMBER:**

- 25.1 The tenderers should furnish the Permanent Account number issued by Income Tax Department with the Tender.
- 25.2 The tenderers are requested to furnish their GSTIN number along with the proof in the tender.

**26.0 PATENT RIGHTS ETC., :**

The supplier shall indemnify the purchaser against all claims, actions, suits and proceedings for the infringement or alleged infringement of any patent, design or copy right protected either in the country of origin or in India by the use of any

equipment supplied by the supplier other than for the purpose indicated by or reasonably to be inferred from the specification.

## **27.0 ARBITRATION ACT NOT TO APPLY:**

The TNPDCCL will not accept any arbitration in case of disputes arising in any respect under this contract. Any dispute arising out of this contract shall not be subject to arbitration under the provisions of Arbitration and Conciliation Act 1996 in the event of any dispute between the parties.

## **28.0 RESPONSIBILITY:**

28.1 The tenderer is responsible for safe delivery of the materials with all its accessories at the destination stores. The tenderer should include and provide for packing and secured protection of the materials with all its accessories as per relevant packing standards so as to avoid damages or loss in transit. All risks connected with the supply of these materials should be borne by the supplier.

28.2 The supplier is responsible to make sure about the facilities that exist for Road and Rail transport to stores, the maximum packages which can be conveyed by the railways and crane lift available at the destination railway station. The supplier is also responsible for any loss or damage during transport and storage for 60 days.

28.3 Each case or package should be clearly marked and should contain detailed packing list.

## **29.0 INSPECTION:**

29.1 The authorised representatives of the purchaser shall have access to the supplier's works at any time during working hours, for the purpose of inspecting the manufacturing of the materials and for testing the selected samples from the materials covered by the specification. The suppliers shall provide necessary facilities for such inspection.

29.2 Tenderers are requested to furnish in their tenders the exact location of their factory with detailed address to enable inspection by TNPDCCL if considered necessary.

29.3 For New entrants, factory inspection will be done by the Board's officers to assess the genuineness in manufacturing the tendered materials and to assess whether the firm has infrastructural facilities to manufacture the same.

29.4 Not less than 15 days advance intimation shall be given about the quantity of materials that will be ready for inspection by the TNPDCCL's officers. The arrangement for inspection shall be made by supplies in such a way that the delivery schedule is kept up. The materials shall not be despatched without instruction from TNPDCCL.

29.5 The supplier shall provide all the documents which is necessary to complete the

inspections. TNPDC's representatives shall be allowed to inspect the Supplier's / Contractor's Quality assurance standards, procedures and records.

- 29.6 The Purchaser's right to inspect and test the materials whenever necessary to reject the materials after arrives at purchaser's site, shall no way be limited by the reason for having tested and passed already by the Purchaser's representative prior to materials despatch.
- 29.7 The material for final inspection shall be offered by the Supplier only under packed condition. The Owner shall select samples at random from the packed lot for carrying out acceptance tests.
- 29.8 The acceptance of any quantity of material shall in no way relieve the Supplier of his responsibility for meeting all the requirements of the specification and shall not prevent subsequent rejection, if such materials are later found to be defective.
- 29.9 The manufacturer shall offer to the inspector representing the purchaser all the reasonable facilities for inspection and testing at free of cost to satisfy him that the material is being supplied in accordance with this specification. The TNPDC representative/Engineer attending the above testing will carry out testing on suitable number and additional acceptance test as per this specification.

### **30.0 DESPATCH INSTRUCTION**

- 30.1 The supplier should dispatch the materials only after getting the dispatch instructions. The details of allotment to consignee and destination stores will be furnished at the time of issue of Despatch Instructions.
- 30.2 If the supplier despatches the materials without the prior approval of the purchaser, then the purchaser shall not be responsible for any demurrage or wharfage or both and only the supplier should bear any expenditure arising out of such unapproved despatches.

### **31.0 COMPLETENESS OF TENDER:**

The tender should be complete with all details of illustrative and descriptive literature and drawings. The tenderers shall furnish the complete technical details of the equipment. Information regarding the country of manufacture or origin of materials used in the manufacture of the articles should be furnished. The tenderer should include all minor accessories even though not specifically mentioned in this specification but which are essential for the completeness of the

materials ordered. The tenderer shall not be eligible for any extra charges in respect of such minor accessories though not included in the tender.

**32.0 INTERCHANGEABILITY:**

All similar parts and removable parts of similar items shall be interchangeable with each other.

**33.0 ELECTRICITY RULES :**

All works shall be carried out in accordance with the latest provisions of the Indian Electricity Act/Electricity Supply Act and the Indian Electricity Rules there-under unless modified by this specification.

**34.0 MATERIALS AND WORKMANSHIP:**

- 34.1 All materials, equipments and spare parts thereof shall be new, unused and originally coming from manufacturer's plant to the destination stores. Those including used, rebuilt or overhauled materials/equipments will not be accepted.
- 34.2 All the materials shall be of best class and capable of satisfactory operation in the tropics with humid atmospheric condition. Unless otherwise specified, they shall conform to the requirements of appropriate Indian Standards. Where these are not available, IEC and American/British Standards shall be followed.
- 34.3 The equipment should be designed to facilitate inspection and repair and to ensure satisfactory operation under atmospheric conditions prevailing at site and under sudden variations of load and voltages as may be met with under working conditions in the system including those due to faulty synchronizing and short circuits within the rating of the apparatus.
- 34.4 The design shall incorporate every reasonable precautions and provisions for the safety of all those concerned in the operation and maintenance of equipment.
- 34.5 All the equipments should operate without undue vibration and with the least practicable amount of noise.

**35.0 PAST PERFORMANCE:**

- 35.1 The intending tenderers shall furnish the documentary evidence with details of various purchase orders/placed on them during the last **ten years** as on the date of tendering in the proforma enclosed to the tender specification and also proof for having manufactured the tendered item and for their satisfactory performance from State Electricity Board/Power utilities in India.

- 35.2. The Bidders shall furnish documentary evidence for the constitution of the firm such as Memorandum and Articles of Association, Attested copy of Registered partnership deed with details of name, address, telephone, Electricity Board Service Connection No. of the manufacturing plants.
- 35.3. The details furnished by the tenderers shall be in complete shape and if it is found that any information is found omitted, suppressed, incomplete or incorrect, the same will be taken note of while dealing with the Tenderers in future.
- 35.4 The bidder should have completed the supplies upto the date of Technical bid opening of this tender against all previous purchase orders of similar items irrespective of size/rating placed by TNPDCCL whose delivery period has already expired with maximum penalty, failing which the bid shall be treated as non-responsive and the price bid shall not be opened.

### **36.0 ERECTION AND COMMISSIONING :**

The Panels will be erected departmentally. The supplier shall render necessary assistance in erection & commissioning of one number Panel in each consignee circles at free of cost, if required.

### **37.0 STORAGE CHARGES :**

Storage charges for storing the equipment at the suppliers premises will not be paid to the supplier, under any circumstances.

### **38.0 CLIMATIC CONDITIONS:**

The materials are for use in Tamil Nadu and should be satisfactory for operation under tropical conditions in Tamil Nadu.

- a) The ambient temperature will be within the range of +10°C to +50 °C.
- b) The altitude will be less than 1000 meters.
- c) The maximum atmospheric humidity will be in the range of 95%.
- d) Average Number of thunder storm days per annum is 65.
- e) Average Number of dust storm days per annum is 5.
- f) Average Number of rainy days per annum is 65.
- g) Average annual rainfall is 100 cm.
- h) The climatic conditions are prone to wide variation in ambient condition and equipments offered under this specification shall be suitable for installation at any of the Sub-Stations in Tamil Nadu.
- i) All electrical devices shall be given tropical and fungicidal treatment. Fog, smoke and mild acids are also present in the atmosphere.

**39.0 MAXIMUM WEIGHTS AND DIMENSIONS OF PACKINGS:**

39.1 The supplier is responsible to make sure about the facilities that exist for Road and Rail transport to site, the maximum packages which can be conveyed by the railways and crane lift available at the destination railway station. The supplier is also responsible for any loss or damage during transport and storage.

39.2 Each case or package should be clearly marked and should contain detailed packing list containing the following information:

- i) Purchase Order No. & Date
- ii) Name of Consignee
- iii) Details of Consignment
- iv) Destination
- v) Total weight of consignment
- vi) Handling and Packing instructions
- vii) Bill of material indicating contents of each package.

**40.0 STORAGE CHARGES :**

Storage charges for storing the equipment at the supplier's premises will not be paid to the supplier, under any circumstances.

**41.0 INCOME TAX:**

41.1 As regards the Income Tax, Surcharge on Income Tax and any other Corporate Tax, the Owner shall not bear any Tax liability whatsoever. The Bidder shall be liable and responsible for Payment of such Taxes as mandated under the provisions of the Law.

41.2 The Owner shall have the right to make deduction at Source from the amounts payable to the Contractor against this Contract in respect of any Tax liability as may be Mandatory in terms of the Law. The Owner shall not bear any liability in this regard but shall issue necessary TDS Certificate in respect of such deductions made.

41.3 TNPDCCL will deduct an amount equal to 0.1 % of such sum exceeding Rs.50 lakhs as TDS under section 194Q of IT Act on all the purchase of goods exceeding the threshold limit i.e. aggregate credit (or) payment exceeds Rs.50 Lakhs. It is mandatory for vendor to submit the declaration format in Annexure-IX to determine the applicability of TDS rate u/s 206 AB.

41.4 Supplier shall furnish their Permanent Account Number (PAN) and GST Number (GSTIN) details or other relevant documents without fail.

**42.0 REJECTION:**

- 42.1. The Owner will reject any Material/Equipment supplied by the Contractor if, during Tests or Service, any of the following conditions arise:
- i. Material/Equipment, including its Components, are proved to have been manufactured not in accordance with the agreed Specifications.
  - ii. Material/Equipment fails on any Test indicated in the Technical Specification.
- 42.2 The Owner reserves the right to retain the rejected Equipment and take it into service until the Bidder replaces, at no extra Cost to the Owner, the defective Material by a new Material. Alternately, the Bidder shall Repair or Replace the Equipment within a reasonable period to the satisfaction of the Owner at no extra Cost to the Owner.

**43.0 DEVIATIONS FROM SPECIFICATION:**

No deviations in commercial and technical terms shall be acceptable.

**44.0 TEST CERTIFICATES:**

- 44.1 The test certificates in triplicate for the materials furnishing the results of the tests as per latest issue of IS/IEC shall be forwarded and got approved before the materials are despatched. In addition to the tests called for in the specification, the purchaser reserves the right of having such tests carried out at its own expenses to satisfy itself that the materials conform to the requirement of this specification. The materials may be rejected if the test results are not satisfactory.
- 44.2 The original type test certificates shall be furnished for verification on request.

**45 JURISDICTION FOR LEGAL PROCEEDINGS : (After award of contract)**

No suit or any proceedings in regard to any matter arising in respect of this contractor shall be instituted in any court, save in the High Court, Madras, City Civil court at Chennai or at the Court of small causes at Chennai. It is agreed that no other court shall have jurisdiction to entertain any suit or proceedings, even though, part of the cause of action might arise within their jurisdiction. In case, any part of cause of action might arise within the jurisdiction of any of the Courts in Tamil Nadu and rest within the jurisdiction of courts outside the Tamil Nadu, then it is agreed between the parties that such suits or proceedings shall be instituted in a court within the State of Tamil Nadu and no other Court outside the state of Tamil Nadu,



shall have jurisdiction even though any part of the cause of action might arise within the jurisdiction of such courts.

The successful tenderer shall furnish an undertaking in a non-judicial Stamp paper of value not less than Rs.500/- agreeing to the above condition.

**46.0. STATUTORY LEVIES :**

Any statutory variations within the stipulated contractual delivery period are to TNPDC's account. In the event of delay, whichever less shall be admitted.

**-/Sd/-  
CHIEF ENGINEER  
MATERIAL MANAGEMENT**

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## **SECTION – VI**

### **TECHNICAL SPECIFICATION**

#### **TECHNICAL SPECIFICATION FOR 11 kV INDOOR SWITCHGEAR**

1.0	SCOPE OF WORK.....
2.0	CODES & STANDARDS .....
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4.0	CIRCUIT BREAKER .....
5.0	FUNCTIONAL REQUIREMENTS .....
6.0	SURGE SUPPRESSOR .....
7.0	CURRENT TRANSFORMER .....
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9.0	COMPATABILITY WITH SCADA SYSTEMS .....
10.0	EQUIPMENT EARTHING .....
11.0	METERS .....
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13.0	SELECTOR SWITCHES & PUSH BUTTONS .....
14.0	INTERNAL WIRING .....
15.0	TERMINAL BLOCKS .....
16.0	RELAYS .....
17.0	SPACE HEATERS .....
18.0	SOCKETS, SWITCHES & ILLUMINATION LAMPS .....
19.0	NAMEPLATES AND MARKING .....
20.0	SURFACE TREATMENT & PAINTING .....
21.0	APPROVED MAKES OF COMPONENTS .....
22.0	INSPECTION AND TESTING .....
23.0	DRAWINGS & DATA SUBMISSION .....
24.0	PACKING .....
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ANNEXURE – A - TECHNICAL PARTICULARS (DATA BY PURCHASER) .....

**SECTION - VI**  
**TECHNICAL SPECIFICATION**  
**TECHNICAL SPECIFICATION FOR 11KV INDOOR SWITCHGEAR**

**1.0 SCOPE OF WORK:**

1.1 The scope of bid envisages the Design, Engineering, Manufacture, stage testing, Final Inspection and testing before supply, Supply and Delivery at site/stores of 11kV, Single Bus, 25KA, 1250 Amps Indoor Vacuum Circuit Breaker (VCB) panels suitable for Feeder, Transformer and Bus coupler with bus raiser control and all accessories, auxiliary equipments and mandatory spares described herein and required for the satisfactory operation at various stores of TNPDC (90% in and around Chennai). The panels shall be integratable towards remote monitoring and control using local HMI SCADA and shall be compatible with the existing HMI SCADA in TNPDC.

1.2 The Switch gear Panel shall conform in all respects to high standards of engineering design, workmanship and latest revisions of relevant standards at the time of offer. The purchaser shall have the right to reject any work or material which in his judgment is not in full accordance therewith.

1.3 The breakers should be as per the enclosed, specification, GTP and single line diagram furnished in annexure.

1.4 Base channel frame of the switchgears with hardware if necessary as per supplier design. (The offered panel having inbuilt MS channel base frame are accepted and shall be as per type tested design. Grouting arrangements shall be provided. All hardware required for erection shall be supplied).

1.5 Programming software and communication cord for numerical relays.

1.6 Bidder should indicate the special tools and tackles (if any) required for maintenance of switchgear and its components and supply same at free of cost.

1.7 Bidder should supply the mandatory spares listed in the Technical specification at free of cost.

1.8 All relevant drawings, data and instruction manuals.

## 2.0 CODES & STANDARDS

The Indoor Vacuum Circuit Breakers and its accessories like Instrument Transformers etc shall conform to the following standards with latest revisions and amendments there of .

1	IEC-62271-100/IS13118	High voltage Switchgear and Control Gear High voltage alternating current circuit breakers.
2	IEC-62271-200/IS3427	Metal Enclosed Switchgear and Control Gear for rated Voltages above 1KV and up to and including 52KV
3	IEC-60060-22010	High voltage test techniques
4	IEC-60071	Insulation co-ordination
5	IEC-60270:2000	Partial discharge measurements.
6	IEC60529:2001	Degree of protection provided for enclosures(IP code).
7	IS-996	Single-phase a.c. industrial motors for general purpose
8	IS-5578:1984, IS-1353:1985	Marking and arrangements for switchgear bus bar, Main connections and auxiliary wirings
9	IS-16227:2016/IEC61869-2	Instrument Transformers-Current Transformers
10	IS-162273&5/IEC61869-3	Instrument Transformers-Potential Transformers
11	IS-2629	Recommended practice for hot dip galvanized iron &steel
12	IEC60255	Numerical relays
13	IEC60898	MCB
14	IS1248/2003	Measuring instruments and their accessories
15	IEC60282/IS:9385/1979	High Voltage HRC Fuses
16		Indian Electricity Act 2003 and latest amendments
17	IEEE693	Recommended practice for Seismic design of substation.
18	IEC62271-300	Guide for Seismic qualification of High voltage alternating current circuit breakers
19	IS6005	Code of practice for phosphating of Iron and Steel
20	IS5	Colours for ready mixed paints and enamels
21	IEC62271-304	Additional requirements for enclosed Switchgear and Control Gear from 1KV to 52 KV to be used in severe climatic condition.

22	IS13947 Part5:2004	Control switches for voltage sup to and including 1000 Volt AC and 1200Volt DC (switching devices for control and auxiliary circuits including contactor relays)
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Equipment meeting with the requirements of any other authoritative standards, which ensures equal or better quality than the standards mentioned above shall also be acceptable. If the equipments, offered by the Bidder conform to other standards, salient points of difference between the standards adopted and the specific standards shall be clearly brought out in relevant schedule. Two copies of such standards with authentic English Translations shall be furnished along with the offer.

### 3.0 PANEL CONSTRUCTION

3.1	Enclosure Type	Free standing, Indoor ,Fully compartmentalised, Metal clad and Vermin proof
3.2	Enclosure degree of Protection	IP 4X for HV Compartment IP5X for LV compartment
	Note: As per Schedule-G of specification IP4X type test report for degree of protection is accepted.	
3.3	Enclosure material	CRCA steel/ Aluminium Zinc sheet.
3.3.1	Thickness	Load bearing members 3 . 0 mm thickness Doors and covers 2.5mm thickness
3.3.2	Gland plate	3.0 mm MS for 3 core and 5.0 mm Aluminium for single core cables. All gland plates should be detachable type with gasket
3.4	Height of the panel	Maximum 2400mm (preferred).Operating height Maximum 1600mm (mandatory).
	Note:Offered equipment with height/operating height more than the specified height, necessary Platform/Portable ladder shall be provided without disturbing VCB rackout arrangement for easy access of the panel.	
3.5	Top cover	Adequate stiffness should be provided so that minimum 2 persons could walk on top during erection and inspection.4nos lifting hooks are required.
3.6	Extensibility	On either side
3.7	Compartments	Separate for Busbar, Circuit Breaker, cable and LV instruments & relays. Necessary louver arrangement shall be provided for Bus Bar, Circuit Breaker, cable Compartments to have proper ventilation arrangements for exchange of air between the interior and exterior of the enclosure to avoid electrical fault inside the panel due to moisture and condensation.

3.8	Breaker compartment door	Separate, with lockable handle. Door of one panel should not cause hindrance for opening of adjacent panel.
3.9	Inter compartmental connections	1) Breaker to bus bar compartment Through seal- off bushings. 2) Breaker to cable compartment Through seal-off Bushings
3.10	Pressure relief devices	To be provided for each HV compartment
3.11	Bus support insulator	Non-hygroscopic, track-resistant, high strength, Epoxy insulators (Calculation for validating dynamic force with stand capability to be submitted during detailed engineering)
3.12	Fixing arrangement	Doors-Concealed hinged, door greater than 500mm shall have minimum three sets of hinges, Covers-SS/Zinc cadmium plated bolts, Gasket-Neoprene (Nuts Bolts) used for bus bar connections shall be of non magnetic high tensile of minimum of 10.9 Grade. Only Belleville type washers shall be provided for each nut bolt.
3.13	Cable termination	750mm High tensile of minimum
	Note: In case of height of cable termination less than the specified height, Cable pan to be provided to cover the end termination.	
3.14	Cable box and termination	There shall be suitable MS channel with adequate holes for cable clamping arrangement in All Feeders and Transformer panels. Adequate number of aluminum spring loaded clamps shall be supplied. No live part shall be exposed and all shall be covered with suitable voltage class HV insulation. 1) Transformer panel shall have provision to connect 2 runs of 1 X 630 sq. mm. XLPE aluminium cable of rated voltage per phase. 2) 11 kV outgoing feeder panel shall have provision to connect 1 run of 3X300sq.mm XLPE aluminium cable.  The required termination kits shall be supplied along with the panel free of cost.

3.15	Panel Base Frame	Steel Base frame as per manufacturers standard.
	Note: The offered panel having in built MS channel base frame are accepted and shall be as per type tested design. Grouting arrangements shall be provided. All hardware required for erection shall be supplied.	
3.16	Handle	Removable bolted covers with handle for cable chamber and busbar chamber. Panel no./identification to be provided on cable box Cover also. Operating handle, circuit breaker draw out handles and Spring charge handles are to be supplied at the rate of one set each for two panels supplied. Additional handle shall be supplied as and when required by TNPDC
3.17	Technical particulars	As per Annexure–A of technical specification

#### 4.0 CIRCUIT BREAKER

4.1	Type	Floor mounted truck type only. Cassette trolley mounted truck is not acceptable.
4.2	Mounting	Horizontally drawn out truck with locking facility in service position.
4.3	Switching duty	As mentioned in the Type Test
4.4	Interrupting medium	Vacuum
4.5	Breaker operation	Three separate identical single pole units operated through the common shaft
4.6	Operating Mechanism	Re-strike free, Trip free, with electrical anti-pumping feature.
4.6.1	Type	Motor wound, spring charged, stored energy type with manual charging facility
4.6.2	Rated operating duty Cycle	O-0.3s-CO-3min-CO. Duty Cycle
4.6.3	Operation on supply Failure	One O-C-O operation possible after failure of power Supply to the spring charging motor
4.7	Breaker indications & push buttons	
4.7.1	Manual ON/OFF Emergency trip & manual ON and OFF push button shall be possible to operate when front door of VCB is in closed condition	Manual/ Mechanical. a. Emergency Trip operation shall be mechanical only.



4.7.2	Mechanical ON –OFF indication	On breaker front
4.7.3	Operation counter	On breaker front
4.7.4	Test-service position indicator	Mechanical Test/Service Position indication shall be Provided in the breaker itself on front in addition to Electrical indication through LED lamps at LT Chamber.
4.7.5	Spring Charge Spring charge/ discharge indicator	On breaker front
4.8	Breaker positions	Service and Test
4.9	Interchangeability	Should be possible for all panels.
4.10	Breaker Control	On panel front only
4.11	Handle	Breaker shall be provided with handles for easy handling, rack in–out operation and manual spring charging as applicable
4.12	Technical particulars	As per Annexure–A of technical specification

## 5.0 FUNCTIONAL REQUIREMENTS

5.1	Interlocks	
5.1.1	The movement of the Switch gear truck should be defeated	When Breaker is in service position and is in ON position.
5.1.2	Racking in of the Switchgear truck should be defeated	If the control plug is not plugged in on to the VCB truck
5.1.3	The closing of the breaker either electrical or mechanically should be defeated	If the breaker is not locked in the service position fully. It should be possible when the breaker is outside the panel.
5.1.4	Closing pulse can be Given to the breaker.	Only after spring charging is completed through spring charge limit switch, trip circuit supervision relay close permissive and service position limit switch.
5.1.5	Movement of switchgear truck to be prevented	Mechanical & the breaker chamber door is open condition, when the circuit breaker is in the ON position

5.1.6	Movement of the switchgear truck from service to test position	Shall be possible only when the breaker is in OFF position and Breaker chamber door is closed.
5.1.7	Opening of front door of the switch gear compartment	Shall be possible only when the breaker is in test position.
5.1.8	Rear cable chamber cover shall not be opened	Unless and otherwise the breaker in OFF and in test position. Rear cover shall be provided with mesh protection
5.1.9	Closing of the Breaker to be prevented	When the trip circuit failure signal has been activated. Electrical interlock shall be provided to prevent closing of circuit breaker in the event of trip circuit failure
5.1.10	The movement of the Switch gear truck should be defeated	When the rear covers are not closed.
5.2	Potential transformer Connection	The primary of the potential transformer should be connected such a way that on energising the Power transformer the voltage of the LV side shall be read by the voltmeter without switching on the Transformer LV breaker.
5.3	Control Plug and Socket	Interlock should be provided for VCB Truck Movement.
5.4	Line indication	To be provided in all panel by using Capacitor Cable divider.
5.5	Heater circuit healthy indication (one lamp with 3 push buttons)	To be provided in Transformer, Bus Coupler & feeder panel.
5.6	DC surge protection device	-
5.7	Power Devices like drive Motors	230V, 1 Phase 2 Wire 50Hz, AC and above neutral grounded.
Detailed drawings / write ups on the operation of the above interlocks shall be provided Along with the Technical offer.		
5.8	Safety Devices	

5.8.1	Exposure to live parts	In case the breaker panel door is required to be opened the personnel should not be exposed to any live part. Suitable shrouds/ barriers/ insulating sleeves should be provided.
5.9	Operation of breaker	In Both service and test position
5.9.1	Closing from Local	Only when local/remote selector switch is in local Position
5.9.2	Closing from remote	Only when local/remote selector switch is in remote
5.9.3	Tripping from local/remote	Irrespective of position of local/remote switch
5.9.4	Tripping from protective relays	Irrespective of position of local/remote switch
5.9.5	Testing of breaker	In test or isolated position keeping control plug
5.10	Safety shutters	Automatic Insulated safety shutter to fully over contacts when breaker is withdrawn to test.
5.10.1	Warning label on shutters	Clearly visible label "Isolate elsewhere before earthing" be provided
5.11	Breaker electrical operation features	
5.11.1	Trip circuit supervision	To be given for breaker close & open condition
5.11.2	Trip circuit supervision relay contact	For indication, alarm, SCADA & to inhibit closing of breaker
5.11.3	Emergency trip push button contact	Wired directly to trip coil. Second trip coil wired to Master trip relay and also wired to inhibit closing of Breaker
5.11.4	Master trip relay contact	Wired to inhibit closing of breaker
5.13	PT supply in all panels	Fed PT supply normally to respective panels by the respective incomer line PT. Both incomer line PT secondary voltages shall be wired and made available in Bus coupler panel with manual change over switch to feed PT supply to other panels when one incomer line PT fails.

## 6.0 SURGE SUPPRESSOR

6.1	Provision	To be provided in all panels except bus coupler
6.2	Type	Gapless, metal oxide type
		Polymer type surge arrester shall be provided in the cable chamber class II, 10KA

## 7.0 CURRENT TRANSFORMER

7.1	Type	Window type, indoor resin cast, three core for transformer LV & bus coupler and two cores for Outgoing feeder.
7.2	Rating and technical particulars	As per Annexure-A of Technical Specification. Insulation Class E or above

## 8.0 POTENTIAL TRANSFORMER

8.1	Type	Cast resin type to be provided in the transformer panel may on line side.
8.2	Rating and technical particulars	As per Annexure-A of Technical Specification. Insulation Class E or above
8.3	Mounting	It shall be floor mounted on a with draw able carriage. Mounting of PT on the breaker truck is not acceptable. PT shall be draw out type only and shall be draw in/draw out from panel front side.
8.4	Neutral	The HV neutral connection to earth shall be easily accessible for disconnection during HV test.

## 9.0 COMPATABILITY WITH SCADA SYSTEMS

The following features should be incorporated in the Indoor Vacuum Circuit Breaker panels so as to be compatible with the SCADA system.

SI No	Feature	Provision to be made available	Terminal Mark (X1-SCADA) Terminal Block Number	Type of contact
9.1	Wiring (All panels) for routing status signals to SCADA	1 –TCUnhealthy 2 –CBAutotrip - CBAutotrip 3 – CB Open –CBOpen 4–CBClose –CBClose 5 –CBinservice 6 –CBinTest 7 –SpringCharged 8 –L/Rswitch(local) -L/Rswitch(Remote) 9 –ACfail 10 – Adjacent Panel DC Fail/DC MCB Trip	1 2 3 4 5 6 7 8 9 10 11 12 13 14	NO NO NC NO NC NO NC NO NO NO NO NO NO NO
		11 – Adjacent Panel Protection Relay fail 12 – PT MCB trip (metering for incomer panel only) Sequence should be followed strictly as mentioned above. Change in sequence will Not be acceptable.	15 16	NO NO
9.2	Current	Additional disconnecting TB to be provided in the metering circuit for connecting external MFT	The external MFT/Meter etc should be able to be connected without CT circuit getting open-circuit.	

9.3	Transfer of Data from the Trivector Meter	Static Trivector Meter capable of storing load survey for 35days and RS485 Port with MOD BUS confirming IEC Protocol	The Meter communication standard and MOD BUS address register mapping will be given by TANGEDCO
9.4	In Transformer HV panel	In addition to the above, the following trip and alarm commands should be wired from Auxiliary relays(DC) spare contacts (contactors will not be accepted) a. Buchholz trip b. OSR trip <b>c. PRV main tank trip</b> d. Differential Trip e. WTI Trip <b>f. OTI Trip PRV OLTC trip</b> g. Buchholz Alarm h. Low oil level alarm i. OTI Alarm j. WTI Alarm.	All Contacts shall be NO  Differential Trip provision is to be given for wiring differential trip command from auxiliary relay (DC) spare contact
NOTE: There should be terminal blocks specifically marked for SCADA systems. Separate terminal block for connecting the SCADA wiring in the control panel shall be provided in one single channel for all panels.			

## 10.0 EQUIPMENT EARTHING

10.1	Material of earthing bus	Tinned copper flat provision shall be made Minimum 240 Sq.mm
10.2	Earth bus joints	All bolted joints in the bus should be made by connection of two bolts.
10.3	Enclosure & non – current carrying part of the switchboard /components	Effectively bonded to the earth bus.
10.4	Hinged doors	Earthed through flexible copper braid

10.5	Circuit breaker frame /carriage	Earthed before the main circuit breaker contacts
10.6	Metallic cases of relays, instruments and other LT panel mounted equipment	Connected to the earth bus by independent copper wires of size not less than 4 sq. mm with green colour insulation. For this purpose LT compartment should have a clear designated earth bus to which earth connections from all components are to be connected.
10.7	CT and PT neutral	Earthed at one place at the TB through links.

### 11.0 METERS

11.0	Mounting	Flush mounted
11.1	Ammeter	Analog
11.1.1	Size	Size 96 X 96mm
11.1.2	To be provided	All panels
11.1.3	Ammeter selector switch	To be provided in all panels with 6 position.
11.1.4	Accuracy	Class1.0
11.2	Voltmeter	Analog
11.2.1	Size	Size 96 X 96mm
11.2.2	To be provided	In transformer panels with 7 position
11.2.3	Accuracy	Class1.0
11.3	Static Trivector Meter	Compatibility with HMI SCADA with MODBUS protocol and TANGEDCO HT metering, DLMS with ABT features, 0.2S accuracy Type A (MFT not in scope of supplier)
11.3.1	To be provided	All panels except bus coupler panel
11.4	Technical particulars	As per ANNEXURE – A of Technical Specification

### 12.0 INDICATION, ALARMS & ANNUNCIATION

12.1	Indications	Flush mounted, High intensity, clustered LED type. Lamps must be replaced from the front end.
12.1.1	Breaker ON	Red
12.1.2	Breaker Off	Green
12.1.3	Spring Charged	Blue
12.1.4	DC control supply fail	Amber
12.1.5	AC control supply fail	Amber(Preferably some other colour)
12.1.6	Auto trip	Amber(Preferably some other colour)
12.1.7	Test Position	White
12.1.8	Service Position	White(Preferably some other colour)

12.1.9	Heater circuit healthy	Yellow(Indication with integrated push button for checking)
12.1.10	Trip circuit healthy	White
12.1.11	PT supply as applicable	R,Y,B
<b>12.2</b>	<b>Annunciator</b>	
12.2.1	Type	Static type along with alarm. Annunciations shall be repetitive type and shall be capable of registering the fleeting signal. Fascia test facility should also be provided.
12.2.2	To be provided for	Auxiliary relays, flasher, hooter / bell for indicating tripping of the feeders, DC fail and discontinuity of the trip circuits of all panels
12.2.3	Wiring	All the panels shall have the inter connection for accepting / resetting the alarms with push button arrangements from the respective panels.
12.2.4	Mounting	Flush mounted
12.2.5	Fascia	8 window in Feeder & Bus Coupler panel & 16 window in transformer.
12.2.6	Signals to provided on Fascia	Feeder & Bus coupler LV 1. Auto Trip 1. As per list in specification 2. Trip circuit fail 3. Main DC fail 4. O/L & E/L relay operated 5. O/L Relay fault.
12.2.7	Push Buttons	For test, accept and reset
12.2.8	Potential Free Contacts	To be provided for event logger
12.3	Alarm scheme with Isolation switch	For all signals wired to annunciator.
12.4	Rating and Spec	As per latest standard and necessary type test reports should be submitted for surge protection of 4kv or above



Sequence of operation of the annunciator shall be as follows-

SNo.	Alarm Condition	Fault Contact	Visual Annunciation	Audible Annunciation
a.	Normal	Open	Off	Off
b.	Abnormal	Close	Flashing	On
c.	Accept	Close	Steady on	Off
d.	Return to normal	Open	Steady on	Off
e.	Reset	Open	Off	Off
f.	Reset before return to normal	Close	Flashing	On

### 13.0 SELECTOR SWITCHES & PUSH BUTTONS

13.1	Selector switches	Flush mounted on LV compartment door, With shrouded terminals
13.1.1	TNC switch with pistol grip	Lockable, spring return to normal position should make and break the close & trip coil current
13.1.2	Local/SCADA selector switch	2 pole
13.1.3	Rotary ON/OFF switches	For heater, illumination circuit, Ammeter & Voltmeter
13.1.4	Rating	8 A DC
13.2	Push Button	Flush mounted on LV compartment door, With shrouded terminals
13.2.1	Emergency trip push button	Red colour with stay put
13.2.2	Accept push buttons	Trip alarm/DC fail alarm
13.2.3	Reset push buttons	Trip alarm/DC fail alarm
13.2.4	Rating	6A DC

### 14.0 INTERNAL WIRING

14.1	Internal wiring	1100volt Grade single core multi stranded flexible copper Conductor wires with P.V.C insulation and shall be flame retardant low smoke type (FRLS).
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14.2	Size	4.0Sq.mm. for entire CT circuits, 2.5Sq.mm. for PT Entire AC Power & DC Control circuits and 1.5 sq.mm for Scada
14.3	Colour code	CT & PT circuits - Red, Yellow, Blue for phase and Black for neutral. DC circuits - Grey for both positive and negative. 250V AC circuits -Black for both phase & neutral. Earthing – Green.
14.4	Ferrules	At both ends of wire with number as per approved drawing.
14.5	Ferrule type	Interlocked type. The wire number shown on the wiring shall be in accordance with the IS.5578/11353. All wires directly connected to trip circuits of breaker or devices shall be distinguished by addition of a red colour un lettered ferrule.
14.6	Lugs	Solder less crimping type tinned copper lugs, pre- insulated, ring type, fork type and pin type as applicable. CT circuits should use ring type lugs only.
14.7	Spare contacts	At least 20% of total terminals. Wiring shall be done for all the contacts available in the relay and other equipment and brought out to the terminal blocks for spare contacts.
14.8	Wiring enclosure	Plastic channels, The cables shall be uniformly bunched and tied by means of PVC belts and carried in a PVC carrying trough. Inter panel wiring through PVC sleeves grommets. Duct covers shall be provided With welded nuts.
14.9	Inter panel wiring	Wires with ferrule to be terminated in the adjacent Shipping section should be supplied with one end terminated and the other end bunched and coiled.
14.10	Auxiliary supply	Auxiliary bus wiring for AC and DC supplies, voltage transformer circuits, annunciation circuits and other common services shall be provided on the same set of Terminals in all the panels with proper segregation.

**15.0 TERMINAL BLOCKS**

15.1	Rating and Type	Shall be of clip-on design made out of non-trackable Insulating material of 1100V grade.
15.2	Suitability	For termination of minimum 6 sqmm flexible copper conductor.
15.3	Marking and covers	White fibre markings strip with clear plastic, slip-on /clip-on terminal covers to be provided.
15.4	Disconnecting Facility	To be provided in CT and PT terminals
15.5	Shorting & Earthing Facility	To be provided in CT terminals
15.6	Spare Terminals	20% in each T Brow
15.7	TB shrouds & separators	Moulded non-inflammable plastic material. Separate TB shall be used for AC control, DC control, CT & PT circuits. All spare contacts shall be wired to a separate TB. All TBs shall be labelled according to their purpose.
15.8	Clearance between 2 sets of TB	100 mm min
15.9	Clearance between AC/DC set of TB	100 mm min
15.10	Test terminal blocks	Screw driver operated stud type for metering circuit

**16.0 RELAYS**

<b>16.1</b>	<b>Protection Relays–General Features</b>	
16.1.1	Technology and Functionality	Numerical with 3 OL & 1 EL with instantaneous tripping feature. Relays shall be able to reset remotely. There shall not be any loss of data due to self/ remote reset. Full drawout type only
16.1.2	Mounting	Flush Mounting, IP5X
16.1.3	Architecture	Hardware and software architecture shall be modular and disconnect able to adapt the protection and control unit to the required level of complexity as per the application.

16.1.4	SCADA Interface port	The relay should have MODBUS RTU protocol communication port (RS 485) for communication with existing SCADA and RJ 45 port compatible for IEC 61850 Protocol for future.
16.1.5	PC Interface port	Front port (preferably serial) for configuration/data download using PC including licensed software and communication cord required for programming of offered protection relays should be included.
16.1.6	User Interface	An alpha numeric key pad and graphical LCD Display with back light indicating measurement values and operating messages. It should be possible to access and change all settings and parameters without the use of PC.
16.1.7	Event and Faultrecords	Relay shall have the facility of recording of Various parameters during event / fault with option to set the duration of record through settable pre fault and post fault time. Relay shall store records for last 100 events and 10 faults with magnitude of fault current and phase indication with time stamping (minimum). It should be possible to download records locally to PC or to Remote SCADA.
16.1.8	Self diagnosis	Relay shall be able to detect internal failures. A watch dog relay with change over contact shall provide information about the failure.
16.1.9	Time synchronization	All relays shall be capable of being synchronized with the system clock using SCADA interface and PC.
16.1.10	Operation	LEDs with push button for resetting.
16.1.11	Test Facility	All relays shall be installed with Test block of LLGO type with plug to facilitate relay calibrating / testing / replacing without any interruption of power supply.
<b>16.2</b>	<b>Protection Relays</b>	
16.2.1	3-phase Over current and Earth fault protection with IDMT, Definite time and instantaneous Characteristics.	To be provided in Transformer, Bus coupler, feeders and incomer panel.

16.2.2	PT sync check relay	To be provided in Bus coupler panel, with 2 PT supervision (fuse failure monitoring) for Line PT. May be provided as integral Feature of relay
<b>16.3</b>	<b>Auxiliary Relays – General Features</b>	
16.3.1	Relays for auxiliary, supervision, trip and timer Relays	Electro mechanical type only.
16.3.2	Reset mechanism for auxiliary relays	Self reset contacts only for Master trip Relay(86). Hand reset from local.
16.3.3	Operation indicators	With hand-reset operation indicators (flags) or LEDs with pushbuttons for resetting.
16.4	Auxiliary relays–Requirement	
16.4.1	Anti pumping(94), Master Trip Relay(86) and trip circuit supervision (95) relays	Separate relays for Anti pumping (94), Master trip relay(86) and the Trip Circuit Supervision (95) shall be provided for each breaker. Separate one No single element Master relay for feeder panels and bus coupler panel and two Nos single element Master relay for Transformer panels shall be provided. Separate Trip circuit Supervision relay shall be provided in all panels and it shall have features to supervise trip circuit for pre close and post close of circuit breaker.
16.4.2	PT selection relays	To be provided for selection between PTs
16.4.3	Auxiliary Relays, contact multiplication relays etc.	To effect interlocks and to exchange signals of status & control
16.5	General Requirements for all relays/ contactors	Auxiliary supply will 110/30 V DC based on requirement. All relays/contactors shall be suitable for continuous operation at 15% overvoltage.
16.6	Relay Characteristics	As per ANNEXURE –A of Technical Specification

**17.0 SPACE HEATERS**

17.1	Type	3Nos. 100Watts, PTC (Positive Temperature co-efficient) heaters with Hygostat control and with switch for isolation.
17.2	Location	One in cable compartment and shall be provided after cable termination. Another in the breaker chamber shall be provided with breaker racked-in and the third one in the Busbar chamber. All hygostat shall be accessible

**18.0 SOCKETS, SWITCHES & ILLUMINATION LAMPS**

18.1	Illumination lamp with switch	3 no 5 W LEDs to be provided in the Busbar, L.V.chamber and cable compartments.
18.2	Universal type (5/15 A) Socket with Switch	In all Panels.

**19.0 NAME PLATES AND MARKING**

19.1	Name plates	To be provided as per the following Description.
19.1.1	Equipment Name plates	<p>a. All equipment mounted on front side as well as equipment mounted inside the panels shall be provided with individual name plates with equipment designation engraved.</p> <p>b. All front mounted equipment shall be also provided at the rear with individual name plates engraved with tag numbers corresponding to the one shown in the panel internal wiring to facilitate easy tracing of the wiring.</p>
19.1.2	Feeder Name plates	<p>a. Large and bold name plate carrying the feeder identification/numbers shall be provided on the top of each panel on front as well as rear side. On rear side, name plate should be provided on frame.</p> <p>b. Front of each panel shall have a name plate clearly indicating the following: Customer Name –TNPDC; PO No.&amp; date; Drawing Reference No. etc.</p>

19.1.3	Rating Plate	a) Name of manufacturer b) Type, design and serial number c) Rated voltage and current d) Rated frequency e) Rated symmetrical breaking capacity f) Rated making capacity g) Rated short time current and its duration h) Purchaser Order number and date i) Month and Year of supply j) Rated lighting impulse with stand voltage k) D.C. component of current. l) Guarantee period.
19.1.4	Material	Non-rusting metal or 3 ply lamicoid. Nameplates shall be black with white engraving lettering. Stickers are not allowed.
19.1.5	Fixing	All name plates/rating plates shall be riveted to the panels at all four corners. Bolting/screwing is not acceptable.
19.2	Markings	Each switch shall be are clear inscription identifying its function. Similar inscription shall also be provided on each device whose function is not otherwise identified. If any switch or device does not bear this inscription separate nameplate giving its function shall be provided for it. Switch shall also have clear inscription for each position indicating e.g. Trip-Neutral close, ON-OFF etc.

## 20.0 SURFACE TREATMENT & PAINTING

20.1	Surface Treatment	Sand blasting or by seven tank process.
20.2	Paint type	C5 Paint with structure finish for both interior and exterior as per ISO 12944-2:2017
20.3	Paint shade	RAL7032 for external & internal surface
20.4	Paint thickness	Minimum 70 microns

**21.0 APPROVED MAKES OF COMPONENTS**

21.1	Numerical Relays	Siemens/GE/ABB make Numerical relays shall be used incomplete switchboard of same make. Use of two different makes of relays in a switchboard is not acceptable. Relay shall be got approved by TNPDCCL during drawing approval.
21.2	Electromechanical Relays	GE/Schneider/Siemens/ABB
21.3	Contactors	ABB/Siemens/Schneider/Eaton
21.4	MCBs	Siemens/Schneider/ABB/Eaton
21.5	Control switches	Switron/Kaycee/Recom
21.6	Test terminal blocks for Metering	IMP/DEEPL/DAV/Alstrom
21.7	Terminal blocks	ESBEE/L&T/Connectwell/Allen Bradely /Imp
21.8	Indicating lamps LED	Kaycee/Alstom/Vaishno/Technik/ C&S(RAAS controls)
21.9	Surge suppressors	Oblum/Tyco/Ovenge
21.10	Meters	AE/Meco/IMP/Secure/Rishab
21.11	Panel wiring	Finolex/Phoenix/Havells/Polycab/RR cable
21.12	CT/PT	Crompton Greaves/ECS/ Pragati /Narayanan & power/Plastofab/BMC
21.13	Trivector meter	Secure/L&T/HPL/Genus
21.14	Vacuum interrupter	Crompton Greaves/ BEL/ ABB/Siemens/Schneider
21.15	Annunciator	JVS, Bharani, Seco,EAPL,Alam
21.16	LED lamp for illumination	Philips/CGL/Bajaj/Havells
21.17	Termination Kits	Raychem/3M/Denson

**Note: Other than recommended make proposed by the tenderers shall be accepted on approval from the TNPDCCL testing authorities.**

**22.0 INSPECTION AND TESTING**

22.1	Type Tests	Type tests as per latest IEC/ IS must have been performed and the certified copies of Test reports shall be enclosed along with technical bid.
	Mandatory Type tests	As per Schedule-G



22.1.1	Type test report validity Period	Ten years as on the date of bid opening.
22.1.2	Pressure relief device operation	Test certificate for panel to be submitted
22.2	Acceptance & Routine tests	All acceptance and routine tests as Stipulated in the latest IEC/IS.
	In addition to these tests, following tests have to be carried out as acceptance tests	
22.2.1	Primary injection test	To be carried out on panels selected for Testing
22.2.2	Temperature rise test	One panel per Purchase order (PO with minimum 10panels) without any commercial implication to TNPDC. In- house testing is acceptable.
22.2.3	Paint Thickness/Peel off	To be carried out on panels selected for testing.
22.3	Inspection	Acceptance/routine testing tests inspection will be witnessed by the officers (two) nominated by TNPDC. The entire cost towards travel, stay and other expenses in connection with that inspection shall be borne by the supplier. Atleast three weeks advance notice shall be given to the purchaser for conducting tests/inspection.
	<b>A) Acceptance Tests</b> The following tests constitute acceptance tests. However tests as per the approved QA plan shall be carried out. <ol style="list-style-type: none"> <li>1. Operational (electrical and mechanical tests on all components)</li> <li>2. Dielectric test in accordance with IEC 60694.</li> <li>3. Insulation resistance test applying a 5kV Megger, between each phase against earth with two remaining phases connected to earth (ensure that VT is isolated during the Megger and tested separately).The insulation test shall be carried out with all manually operated and latched type</li> <li>4. Switching devices in the service and closed position and all main fuses installed.</li> <li>5. Protection operation by primary injection of current and voltage as agreed.</li> <li>6. Verification of availability and correct operation of all protection, interlocks , control functions and others.</li> </ol>	

**B)Routine tests**

All the routine shall be carried out by the manufacture as per relevant IEC standards. The following routine tests may be carried out in the factory. Necessary certificates pertaining to this shall be submitted before dispatch of the material. The Routine tests should be conducted on end product

22.1.1 Power frequency withstand voltage

22.1.2 Auxiliary and control circuits voltage test

22.1.3 Principal circuit ohm-metric test

22.1.4 Mechanical operation test

22.1.5 Electrical auxiliary device test

22.1.6 Wiring check

The purchaser will witness the tests as identified in the approved QA plan.

Acceptance tests inspection shall be carried out on the complete assembled switchgear will be witnessed by not less than 2 (Two) persons nominated by TANGEDCO. The entire cost towards travel, stay and other expenses in connection with that inspection shall be borne by the supplier.

Inspection and acceptance of any equipment shall not relieve the supplier of his obligation of furnishing equipment in accordance with the specification and shall not prevent subsequent rejection if the equipment is found to be defective. The supplier shall keep the purchaser informed in advance, about the manufacturing program so that arrangement can be made for inspection. The purchaser reserves the right to insist for witnessing the acceptance/routine testing of the bought out items. No material shall be dispatched from its point of manufacture unless the material has been satisfactorily inspected and tested /unless the same is waived by the purchaser in writing.

The details step by step erection procedure with foundation drawings and method statement shall be submitted to TNPDC.

22.4	Test reports before dispatch for approval	Six (6) copies of acceptance and routine test reports
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### 23.0 DRAWINGS & DATA SUBMISSION

23.1	Submissions along with the bid	
23.1.1	Duly filled GTP and copy of specification	
23.1.2	GA drawing and Cross sectional drawings	
23.1.3	Panel wise Bill of Material	
23.1.4	Catalogues and Manuals for all major equipments	
23.1.5	Type test report for type, size and rating of equipment offered.	
23.1.6	Deviations from this specification	To be provided in writing.
23.1.7	Reference List of customers	For last five years with units of similar Design and rating
23.1.8	Recommended spares and consumables	If any spares suggested (in addition to mandatory spares list in technical specification)for five years of operation along with pricelist.
23.1.9	Manufacturers quality assurance plan	To be provided as per enclosed Annexure A:10
23.2	Submissions after award of Tender	
23.2.1	Duly filled GTP	1copy+softcopy
23.2.2	Panel wise Bill of Material	1copy+softcopy
23.2.3	GA and Cross sectional	1copy+softcopy
	Drawings	
23.2.4	Single line diagrams	1copy+softcopy
23.2.5	Schematic drawings	1copy+softcopy
23.2.6	Calculations for sizing of Various equipment	1copy+softcopy
23.2.7	Catalogues and Manuals for all equipments	1copy+softcopy
23.2.8	Foundation Plan	1copy+softcopy
23.2.9	Calculations for sizing of various components	1copy+softcopy
23.2.10	Type test report for type, size and rating of equipment offered.	1copy+softcopy

23.1.11	Manufacturers quality assurance plan	1copy+softcopy
23.2.12	Deviations from this Specification	Approved in writing before award of Tender.
23.3	Submissions prior to dispatch	
23.3.1	Inspection and test reports/ compliance report by manufacturer	1copy+1softcopy
23.3.2	Test certificates for all bought out items	1copy+1softcopy
23.3.3	GTP and As Built drawings consisting of GA ,Cross sectional, SLD and schematic drawings	6 copies+1soft copy Panels supplied without as built drawing will be treated as short supply.
23.3.4	Catalogues and Manuals for all equipments/relays	3copies+1soft copy.
23.3.5	Field quality plan/ Installation, erection and commissioning manual for switchgear	3copies+1soft copy.
23.4	Drawing and document sizes	Standard size paper A3 and A4 respectively.

## 24.0 PACKING

24.1	Packing Protection	Against corrosion, dampness, heavy rains, breakage and vibration. During transportation/ transit and storage, panels may be subjected to outdoor conditions. Hence, packing of each panel shall be Weather proof.
24.2	Packing for accessories and spares	Robust wooden non returnable packing case with all the above protection & identification Label.
24.3	Packing Identification Label to be provided on each packing case with the following details	
24.3.1	Individual serial number	
24.3.2	Purchaser's name	
24.3.3	PO number (along with item code, if any) & date	
24.3.4	Equipment Tag no.(if any)	

24.3.5	Destination
24.3.6	Project Details
24.3.7	Manufacturer/Supplier's name
24.3.8	Address of Manufacturer/Supplier/its agent
24.3.9	Description and Quantity
24.3.10	Country of origin
24.3.11	Month & year of Manufacturing
24.3.12	Case measurements
24.3.13	Gross and net weights in kilograms
24.3.14	All necessary slinging and stacking instructions

## **25.0 -SHIPPING**

25.0	Shipping	<p>The bidder shall ascertain at an early date and definitely before the commencement of manufacture, any transport limitations such as weights, dimensions, road culverts, Over head lines, free access etc. from the Manufacturing plant to the project site. Bidder shall furnish the confirmation that the proposed Packages can be safely transported, as normal or over size packages, upto the site. Any modifications required in the infrastructure and cost thereof in this connection shall be brought to the notice of the Purchaser.</p> <p>The seller shall be responsible for all transit damage due to improper packing.</p>
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## **26.0 HANDLING AND STORAGE**

Manufacturer instruction shall be followed.

## **27.0 QUALITY ASSURANCE**

27.1	Vendor quality plan	To be submitted for purchaser approval
27.2	Inspection points	To be mutually identified & agreed in quality plan

## **28.0 PROGRESS REPORTING**

28.1	Outline Document	To be submitted for purchaser approval for outline of production, inspection, testing, inspection, packing, dispatch, documentation programme.
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**29.0 DEVIATION**

29	Deviation	Deviations from this Specification shall be stated in writing with the tender by reference to the Specification clause/GTP/Drawing and a description of the alternative offer. In absence of such a statement, it will be assumed that the bidder complies fully with this specification.
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**30.0 ACCESSORIES & TOOLS**

30.1	Type and Quantity	Bidder to indicate
30.2	Breaker operating rod, door opening key, interlock key spring charge rod etc., shall be given.	For every 2 Nos. of breakers. End covers shall be provided as per the request of TNPDCCL to suit site conditions
30.3	Special tools & tackles required for erection, testing, commissioning and maintenance of the switchboard	Shall be indicated. One set per 10 panels shall be given at free of cost along with panels

**31.0. Mandatory spare parts to be supplied for every 10 panels is as follows:**

- (i) Vacuum interrupter–2 nos.
- (ii) Feeder CT – 2nos.
- (iii) Trip Coil – 2nos.
- (iv) Close Coil – 2Nos

**32.0 COMMISSIONING SUPPORT**

Erection and commissioning will be done by TNPDCCL inclusive of all testing. Vendors shall extend all necessary assistance during Erection testing and commissioning.

## ANNEXURE – A - TECHNICAL PARTICULARS(DATA BY PURCHASER)

1.0	<b>SWITCHGEAR</b>	
1.1	Type	Air insulated with VCB type circuit breaker
1.2	Service	Indoor
1.3	Mounting	Free standing, floor mounted
1.4	System Voltage	11 kV
1.5	Voltage variation	+/- 10%
1.6	Frequency	50 Hz +/- 5%
1.7	Phase	3
1.8	Rated voltage	12k V
1.9	Rated current	Bus 2000 A. CB 1250 A Bus raiser in Transformer and Bus coupler panels also shall carry 2000 A
1.10	Short time rating for 3 sec.	25 kA
1.11	Internal arc classification and rating	
1.11.1	Classification	IAC – A - FLR
1.11.2	Rating	25kA for 3seconds.Test conforming to Class C2 as per IEC 62271-100 (Tested for BC2)
1.12	Insulation level (PF rms / Impulse peak)	28 kV / 75 kV
1.13	System ground	Effectively earthed
1.14	Enclosure degree of protection	IP 4 X for HV compartment IP 5 X for LV compartment
	Note: As per Schedule -G of specification IP 4X type test report for degree of protection is accepted.	
1.15	Bus bar – Main	3 nos. rated voltage resin cast insulated solid round/rectangular copper bus bar with a current density of 1.6 amps per sq.mm. suitable for highest system voltage shall be provided. Solid Core (touch proof) insulated / HS sleeve type is also acceptable.
1.15.1	Material	Tinned Electrolytic 99.9% copper
1.15.2	Bus bar joints	The busbar joints shall be insulated by preformed insulation and shall be detachable type. The insulating material used shall be capable of withstanding the heating effects of the rated short time current without permanent deformation or deterioration.

1.16	Spacing between the Bus bars between live part to live part and live part to earth in mm	As per type tested design. Capable of withstanding the appropriate power frequency test voltage and internal arc. Size and spacing shall be as per typed tested drawing. Epoxy moulded bus bars are preferred. Right angle boot of reputed make shall be provided inside cable chamber.
1.16.1	Preferred spacing	Phase to phase 125 mm Phase to earth 90 mm
1.17	Insulating Material	Should be capable of withstanding the heating effect of the rated short time current without permanent deformation or deterioration.
1.18	Isolating plugs	3 Nos. for the Buses and 3 Nos. for the line with necessary sockets along with automatic safety shutters, bus bar jumpers, etc. are to be provided in each panel.
1.19	Bus identification	Colour coded
1.20	Temperature rise	As per IEC/IS. With 50°C Ambient temperature.
1.21	Auxiliary bus bar	Round/rectangular copper bus bar. Bus bars in cable chamber shall be provided with 11 kV class HS sleeves.
1.22	Auxiliary DC Supply	30 V/110 V DC
1.23	Auxiliary A C supply	240V single phase, 50Hz, A C with neutral grounded
1.24	Hardware	Stainless steel.
1.25	Earth bus	Copper
1.26	Power cable entry	From bottom and rear
1.27	Control cable entry	From bottom and rear
1.28	Cable charging current for C2 duty	25 A
1.29	Capacitor duty (C2 duty tested)	400 A
1.30	Mechanical Endurance -	Test conforming to Class M2 as per IEC 62271-100
1.31	Noise level at base and up to 50 metres	140 dB (max.)
1.32	Seismic acceleration	0.3 g
1.33	Isolation Transformers (440/230 V) more than 2 KVA	The VA rating shall be so as to cater the load of 6 panels. The isolation transformer shall be wall mounted type and to be mounted in control room wall To be provided with every transformer panel.



<b>2.0</b>	<b>CIRCUIT BREAKER</b>	
2.1	Voltage class, insulation level, short time rating	As specified for switchgear
2.2	Rated current	As specified for switchgear
2.3	Duty cycle	O-0.3s-CO-3Min-Co.Duty Cycle with
2.4	<b>Short circuit rating</b>	
2.4.1	A.C sym. breaking current	25 kA
2.4.2	Short circuit making Current	62.5 kA
2.5	<b>Operation time</b>	
2.5.1	Break time	≤40 ms
2.5.2	Make time	≤60 ms
2.6	Contacts	Flower/jaw types are to be provided on the truck side and free from atmospheric effects, other type of mating contacts shall not be accepted. They shall be mounted on the truck side only. Contact materials should be silver plated. The contacts shall be tested for 1250A and test certificate from NABL lab shall be furnished.
2.7	Breaker to control equipments on the LV chamber	24 pin plug and socket arrangements
2.8	Close /Trip coil consumption	250 ± 25 Watts.
2.9	<b>Range of Auxiliary Voltage</b>	
2.9.1	Closing	85% - 110%
2.9.2	Tripping	70% - 110%
2.9.3	Spring Charging	85% - 110%
2.10	No. of spare aux. Contacts of Breaker for Owner's use.(should break the closing and tripping coil current without any deformation and having the rating of 500W at 110V while breaking)	7No +7NC (2NO+2NC to be wired upto, control cubicle terminals for SCADA. Additional spare NO+NC contacts wired up to control cubicle shall be provided.

2.11	No. of spare contacts of Service and Test position limit switch	4 NC + 2NO
2.12	Insulation level of auxiliary contacts	1100 volts, 2.5 kV for 1 min.
2.13	Transient recovery voltage	20.6 kV
<b>3.0</b>	<b>CURRENT TRANSFORMERS</b>	
3.1	Voltage class, insulation level and short time rating	As specified for switchgear
3.2	Type	window/ring type, indoor resin cast, three core
3.3	Class of insulation	Class E or better
3.4	Ratio	
	Transformer	1200/1-1-1A
	Bus coupler	1200/1-1-1A
	Feeder	400/1-1Amps
3.5	Accuracy class	
3. 5.1	Protection core	PS
3. 5.2	Protection(Diff)	PS
3. 5.3	Metering	0.2S, ISF less than 5
3.6	Burden(VA)	5VA for metering core
3.7	Excitation current of PS Class CTs	30mA@Vk
3.8	Excitation current RCT & VK of PS Class CTs	400/1A , $V_K \geq 400V$ , $R_{ct} \leq 6-2\Omega$ . 1200/1-1A , $V_K \geq 900V$ , $R_{ct} \leq 10\Omega$
<b>4.0</b>	<b>VOLTAGE TRANSFORMERS</b>	
4.1	Type	Cast resin, draw out type, single phase units
4.2	Rated Voltage	
4.2.1	Primary	11 kV/ $\sqrt{3}$

4.2.2	Secondary	110 V/ $\sqrt{3}$
4.3	No. of phases	3
4.4	No. of secondary	1
4.5	Method of connection	Star/Star
4.6	Rated voltage factor	1.2 continuous and 1.5 for 30 seconds
4.7	Class of insulation	Class E or better
4.8	Accuracy class for Metering /Burden VA	0.2 100
4.9	Primary and secondary Fuses	HRC current limiting type, Primary fuse replacement shall be possible with PT in withdrawn position.
<b>5.0</b>	<b>HV FUSES</b>	
5.1	Voltage class	12 kV
5.2	Rupturing capacity	50kA
5.3	Rated current	As per application
<b>6.0</b>	<b>SURGE ARRESTORS</b>	
6.1	Rated Voltage	9 kV
6.2	Maximum continuous operating voltage	7.65 kV
6.3	Discharge current	10 kA
6.4	Discharge class	3
	All panels shall have suitable surge protection for DC controls at the DC source point. Provision shall be given to isolate the DC load of the SCADA system at a single point. The complete details of such protection shall be clearly indicated in the drawing.	
<b>7.0</b>	<b>Static Trivector Meter ( DLMS COMPLIANT METERS) with ABT</b>	
7.1	Type	3 Phase 4 wire 110V 1A 0.2S Class of Accuracy Type A

7.2	To read	with automatic and manual scrolling facility to read KWHr, KVA Hr, RKVA Hr, Voltage, Current, Power factor and instantaneous KW with optical port for downloading the load survey for 35 days and with MD reset push button and test terminal block.
7.3	Software	Necessary software compatible with SANDS CMRI
7.4	Port	RS 485 port confirming to MODBUS ( RJ 45 compatible with IEC protocol for future) shall be provided. Opto coupler or one set potential free contact to translate the energy transmitted through the feeder to SCADA shall be provided.
7.5	Communication Capability	The meter shall be provided with two ports for communication of the measured/collected data as per guideline document enclosed in the annexure, i.e. a hardware port with RS 485 confirming to IEC protocol shall be provided. specification with multi-drop connections, which shall be used for remote access through suitable Modem (GPRS/GSM/EDGE/ CDMA / PSTN/LPR) and for exporting data to substation data logger/ DCU/ Computer and server and an Optical port complying with hardware specifications detailed in IEC-62056-21. This shall be used for local data downloading through a DLMS compliant HHU. Both ports shall support the default and minimum baud rate of 9600 bps.
7.6	Applicable Standards	IS: 14697 /1999 (Reaffirmed 2004) IS-15707
7.7	General Technical Requirements	
7.7.1	Type	AMR Compatible Static, 3 Ph, 4 Wire Tri-Vector Energy Meter (In substation for Incoming/ Outgoing HT Feeders)
	Frequency	50 Hz $\pm$ 5%
7.7.3	Accuracy class	0.2 S
7.7.4	Secondary voltage	Suitable for operation from 110V Ph-Ph or 63.5V Ph-N
7.7.5	Basic current- $I_b$	-/1 Amp
7.7.6	Maximum continuous current	2.0 $I_b$ ; Starting and maximum current shall be as per IS-14697

7.7.7	Power consumption	<p>i) The active and apparent power consumption, in each voltage circuit, at reference voltage, reference temperature and reference frequency shall not exceed 1.5 W and 8 VA .</p> <p>ii) The apparent power taken by each current circuit, at basic current, reference frequency and reference temperature shall not exceed 1.0 VA</p>
7.7.8	Power factor	0.0 Lag -Unity- 0.0 Lead
7.7.9	Design	Meter shall be designed with application specific integrated circuit (A SIC) or micro controller; shall have no moving part; electronic components shall be assembled on printed circuit board using surface mounting technology; factory calibration using high accuracy (0.02 class) software based test bench.
7.7.10	Quantities to be measured & displayed	<p>a) Instantaneous Parameters such as phase and line voltages, currents, power factors, overall kVA, kW, kVA<sub>r</sub>, power factor, frequency.</p> <p>b) Block Load Profile Parameters such as kVAh/kWh/kVA<sub>r</sub>h (lag/lead)/Maximum Demand (MD) in kW/kVA /power factor/phase and line voltages/currents etc (minimum 5 parameters).</p> <p>c) Daily Load Profile Parameters such as cumulative energy kWh (import/export)/ cumulative kVAh (while kW- import/export)/ cumulative energy kVA<sub>r</sub>h (quadrant-1/2/3/4)/ reactive energy high (V&gt;103%)/low (V&lt;97%).</p>
	<p>Tamper details shall be stored in internal memory for retrieval by authorized personnel through either of the following:</p> <p>i) HHU.</p> <p>ii) Remote access through suitable communication network.</p> <p>Minimum 200 numbers of events (occurrences &amp; restoration with date &amp; time) should be available in the meter memory.</p>	

## 8.0 Relay characteristics:

8.1	Type	Draw out Numerical with true RMS measurement
8.2	CT secondary	1 A
8.3	Burden	less than 1 VA
8.4	Auxiliary supply voltage	Suitable for DC voltage range from 28 – 185 Volts
8.5	IDMTL characteristic	1.3 and 3secs at 10 times set value of the current with time set at unity.
8.6	Characteristics that should be set at the site.	IDMTL – 5% to 200% for OC in steps of 0.2 2% to 80% for E/F in steps of 0.1 High Set – 50 % to 2000 % for OC in steps of 5 20 % to 800 % for E/F in steps of 1
8.7	Selection of curve	1.3 and 3secs. Instantaneous setting for O/L shall be 20. For E/L it shall be 8
8.8	Time Multiplier setting	0 to unity continuously in steps of 0.01
8.9	Provisions to be given	<ol style="list-style-type: none"> <li>1. To store minimum of last ten fault data with date, time and current.</li> <li>2. Alpha – Numeric LED display of minimum 12 mm backlit.</li> <li>3. HMI for programming the relay.</li> <li>4. Shall have self diagnostic features.</li> <li>5. Shall have two set of NO and 1 set of NC potential free contacts.</li> <li>6. The relay should operate satisfactorily at ambient air temperature ranging from 10°C to 50°C.</li> </ol> <p>The relay should have inbuilt characteristics of blocking unscrupulous tripping of upstream breakers. The relay shall have suitable provision to take care of surges and inadvertent high voltage due to fault.</p>

8.10	Trip circuit supervision Scheme (Inbuilt feature in numerical relay is not acceptable. Separate TCS Relay shall be provided)	Testing of trip circuit healthiness is possible irrespective of whether the Circuit Breaker is in the closed or open position. The Trip Circuit Healthy LED should glow continuously in CB „ON“ Position and on demand in Circuit Breaker „OFF“ position. The rating of dropping resistance in series with Trip Circuit Healthy LED shall be such that the Trip Coil should not get damaged because of continuous current flowing through it.
	Upon TSR (trip circuit supervision relay) activation, there should be an alarm. The permissive command to close the breaker should be disabled (i.e.) the breaker should not be closed when the trip circuit is unhealthy. If there is loss of DC simultaneously in all the breakers, there shall be an alarm with indication.	

## 9.0 Mandatory type tests

9.1	Mandatory type tests	As per Schedule-G
9.2	Other type tests	<p>The bidder should furnish the following type test reports with offer or the same shall be submitted with drawing approval.</p> <p><b>A. Switchgear Panel</b></p> <ul style="list-style-type: none"> <li>(i) Out of phase making &amp; breaking test</li> <li>(ii) Single phase breaking capacity test.</li> </ul> <p><b>B. For bought out items as per the recommended make</b></p> <p><b>I. Current Transformer</b></p> <ul style="list-style-type: none"> <li>a. Short Time Current Test</li> <li>b. Impulse Voltage Withstand Test</li> <li>c. Temperature Rise Test</li> <li>d. Determination of errors and ISF test</li> </ul> <p><b>II. Potential Transformer</b></p> <ul style="list-style-type: none"> <li>a. Impulse Voltage Withstand Test</li> <li>b. Temperature Rise Test</li> <li>c. Determination of errors.</li> </ul>

## 10.0 Quality assurance plan

- i. Statement giving information about names of sub-suppliers, list of testing standards, list of tests normally carried out for bought out item.

- ii. Copies of test certificates in respect of following bought out items.
  - a. Vacuum Interrupter.
  - b. Insulators
  - c. Bus Bar Material
  - d. Instrument transformers.
  - e. Terminal connectors
- iii. List of areas in manufacturing process, where stage inspection are normally carried out by the tenderer for quality control and details of such tests and inspections.
- iv. List of testing equipment available with the tenderer for final testing of breakers visa-vis the type, special, acceptance and routine tests specified herein . The limitations in testing facilities shall be very clearly brought out in Schedule.

### **11.0 Drawings as per type tested design to be given along with bid**

- i) Instruction manuals.
- ii) Catalogues of spares recommended with drawing to indicate each item.
- iii) List of spares and special tools recommended by the supplier.
- iv) Type Test Certificates as per ISS
 

Bidder shall also have to furnish the following drawings along with the offer

  - (i) Principal dimensions of the 11 KV switchgear
  - (ii) GA for tendered panels including main bus as well as link bar arrangements, its foundation details etc.,
  - (iii) Typical single line diagram for 11KV panel Switchgear
  - (iv) Sectional view of incomer, bus coupler & feeder panels.
  - (v) GA of Circuit Breaker truck, Current Transformer & Potential Transformer.
  - (vi) Bill of material for complete switchgear.

### **11.2 Drawings as per type tested design to be given for approval before commencement of supply.**

- i. Foundation details for Switchgear
- ii. Equipment door layout for incomer, bus coupler & feeder panels.
- iii. Schematic Diagram for incomer bus coupler & feeder section of Switchgear
- iv. Protection Circuit for incomer bus coupler & feeder section of Switchgear
- v. DC control circuit for incomer, bus coupler & feeder section.
- vi. Metering circuit for incomers, bus coupler & feeder section.
- vii. Annunciator and Alarm scheme.
- viii. P.T. supply change over scheme.
- ix. Terminal block details for incomer, bus coupler & feeder section.
- x. Cross section view for CTs.



- xi. Name Plate & Connection diagram for CTs.
- xii. Cross section view for PTs.
- xiii. Name Plate & Connection diagram for PTs.
- xiv. Drawing showing height and arrangement of 11 KV bus bars including design calculations & loading data for its support insulators,
- xv. Vacuum interrupter drawing.

**-/Sd/-**  
**Chief Engineer/**  
**Materials Management**

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## **SECTION -VII**

### **SCHEDULES**

<b>Sl.No.</b>	<b>Contents</b>
A	Price Schedule
B	Schedule of materials and delivery period
C1	Deviation from Technical Specification
C2	Deviation from Commercial Specification
D	Declaration Form
E	Statement of Supply orders Executed/ Under Execution during the past Ten Years as on the date of Tender
F	Guaranteed Technical Particulars
G	Statement of Type Test particulars
H	Questionnaire

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**SCHEDULE-A**  
**PRICE SCHEDULE**

SPECIFICATION NO.**M.224/2025-26**

ALL PRICES IN RUPEES

Sl. No.	Description	Qty Tendered	Qty offered in sets *	All inclusive FOR(D) price per set. In Rs.p	
				In Figures	In Words
1	Cost of One Set comprising of : <b>2 Nos.</b> 11 KV, Single Bus, 1250 A, 25 KA Indoor Vacuum Circuit Breaker suitable for transformer control(LV). + <b>8 Nos.</b> 11KV, Single Bus, 1250 A, 25 KA Indoor Vacuum Circuit Breaker suitable for feeder control + <b>1 No.</b> 11KV, Single Bus , 1250 A, 25 KA Indoor Vacuum Circuit Breaker suitable for Bus coupler control with bus raiser	<b>18 sets</b>		Will be calculated from schedule A1	

\* **The bidders are requested to quote the quantity offered ON LINE as per BOQ .**

COMPANY SEAL

SIGNATURE :

DESIGNATION :

COMPANY :

DATE :

## **PRICE SCHEDULE**

### **SCHEDULE-A1 Supply**

Name of Material	Tendered Qty	HSN Code (***)	Ex-works price per unit. Rs.Pa	Freight & Insurance charges per unit. ** Rs.Pa	Packing & Forwarding charges per unit. Rs.Pa	GST amount and percentage Rs.Pa	All inclusive FOR(D) price * per unit. Rs.Pa
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
11KV, Single Bus, 1250 A, 25 KA Indoor Vacuum Circuit Breaker suitable for transformer control.(LV)	36 nos.						
11 KV, Single Bus,1250 A, 25 KA Indoor Vacuum Circuit Breaker suitable for feeder control.	144 nos.						
11KV, Single Bus,1250 A, 25 KA Indoor Vacuum Circuit Breaker suitable for Bus coupler control with bus raiser.	18 nos.						

**SPECIAL NOTE: The bidders are requested to quote the rates ON LINE as per BOQ .**

COMPANY SEAL

SIGNATURE  
DESIGNATION  
COMPANY  
DATE

#### **NOTE :**

(\*) For supply at the Destination TNEB Stores/Site anywhere in Tamil Nadu.

(\*\*) Freight and Insurance Charges including unloading at Stores.

(\*\*\*) While quoting the rates, the bidder shall indicate the HSN code for all the tendered items as per GST Act.

## SCHEDULE – B

### SCHEDULE OF MATERIALS AND DELIVERY PERIOD

Sl.NO	Description of material	Quantity tendered in sets.	Quantity offered in sets
1	11KV, Single Bus, 1250Amps 25KA Indoor VCB Panels suitable for Transformer, Feeder, Buscoupler control	<b>18 sets</b> (Each set comprising <b>2 No.</b> Transformer breaker+ <b>8 Nos.</b> Feeder breaker + <b>1 No.</b> Bus coupler breaker with adaptor)	

COMPANY SEAL :

SIGNATURE :

DESIGNATION :

COMPANY :

DATE :

**SCHEDULE - C1**  
**DEVIATION FROM TECHNICAL SPECIFICATION**

All technical deviations from the specification shall be filled in by the Tenderer, clause by clause, in the Schedule.

SECTION NO.	CLAUSE NO.	DEVIATION

The Tenderer hereby certifies that the above mentioned are the only deviations from the Technical Specification and the tender conforms to the specification in all other respects.

COMPANY SEAL:

SIGNATURE :

DESIGNATION :

COMPANY :

DATE :



**SCHEDULE - C2**  
**DEVIATIONS FROM COMMERCIAL TERMS**

All deviations from the Commercial terms shall be filled in by the Tenderer, clause by clause, in this schedule.

SECTION NO.	CLAUSE NO.	DEVIATION

The Tenderer hereby certifies that the above mentioned are the only deviations from the Commercial terms of the Specification and the tender conforms to the specification in all other respects.

COMPANY SEAL:

SIGNATURE :

DESIGNATION:

COMPANY :

DATE :

## **SCHEDULE - D**

### **DECLARATION FORM**

To  
The Chief Engineer/Materials Management,  
TNPDCCL,  
4<sup>th</sup> floor, Western Wing,  
NPKRR Maaligai, Electricity Avenue,  
144, Anna Salai,  
Chennai – 600 002.

Dear Sir,

Having examined the above specification together with the accompanying schedules etc., we hereby offer to manufacture and supply the equipment/materials covered in this specification at the rates entered in the attached schedule of prices.

2. We hereby guarantee the particulars entered in the schedules attached to the specification.

3. In accordance with security deposit cum performance guarantee clause, Section-V, of the specification we agree to furnish security to the extent of 5% of the total value of the contract.

4. Our company is not a potentially Sick Industrial Company or a Sick Industrial Company in terms of Section-23 of Section-15 of the Sick Industrial Companies (Special Provisions) Act, 1985.

Yours faithfully,

PLACE :

SIGNATURE :

DATE :

DESIGNATION :

COMPANY SEAL :

COMPANY :

### **SCHEDULE - E**

#### **STATEMENT OF SUPPLY ORDERS EXECUTED/UNDER EXECUTION DURING THE PAST TEN YEARS AS ON THE DATE OF TENDER**

Sl. No.	Name and address of the organization	Description of material	P.O.NO. & Date	Qty.	Value of order in Rs. in Lakh	Scheduled date of completion of order	Actual date of completion of order	Whether PO copy furnished	Whether end user certificate furnished
1	2	3	4	5	6	7	8	9	10

COMPANY SEAL:

SIGNATURE :

DESIGNATION :

COMPANY :

DATE :

**SCHEDULE - F**  
**GUARANTEED TECHNICAL PARTICULARS.**

**(I) Schedule of Guaranteed Technical Particulars for 11KV ID VCBs**

<b>Sl.No</b>	<b>Description</b>	<b>Offered by tenderer</b>
1	Manufacturer's Name and Country of origin	
2	Manufacturer's Design / type Ref	
3	Frequency	
4	Rated Voltage	
5	Highest system voltage	
6	Rated current	
7	Short Circuit current rating with duration	
8	Certificate or report of short circuit type test	
9	Rated operating duty cycle	
10	Short Circuit Breaking Current :	
	(a) Symmetrical	
	(b) Symmetrical at rated voltage	
	(c) Asymmetrical at rated voltage	
	(i) Per Phase	
	(ii) Average	
	(iii) D.C. Component	
11	Arcing time (at rated breaking current) in ms.	
12	Opening time	
13	Total break time in milli sec.	
	(a) At 10% rated interrupting capacity	
	(b) At rated interrupting capacity	
14	Breaking Current	
	(a) Rated out of phase current	
	(b) Rated cable charging current	
	(c) Rated kilometric fault level	
	(d) Rated capacitor breaking current	
15	Make time in ms.	
16	Maximum temp. rise over ambient	
	(a) Main contacts	
	(b) Terminals	
17	Rated re striking voltage at 100% and 50% rated capacity	
	(a) Amplitude factor	
	(b) Phase factor	
	(c) Natural frequency	
	(d) R.R.R.V. (Volts/Micro Sec.)	

18	Dry 1 minute power frequency withstand test voltage	
	(a) Between line terminal and Earth KV rms	
	(b) Between terminals with breaker contacts open	
19	1.2/50 full wave impulse withstand test voltage	
	(a) Between line terminal and Earth KV p	
	(b) Between terminals with breaker contacts open	
20	Spacing between Busbars (Live part to live part)	
21	Spacing between Live part to Earth	
22	Vacuum Interrupter Make	
23	Contact separation Distance	
24	Type of main contacts	
25	Contact pressure	
26	Contact Resistance	
27	Life of the Interrupter (In no of operations)	
	(i) Tripping at Rated current	
	(ii) Tripping at maximum fault current (Allowable maximum erosion 3mm)	
	(iii) Mechanical operations	
28	Details of main contacts making contact with the Breaker truck with the panel	
29	Control Circuit Voltage AC / DC	
30	Power required for Closing Coil at 30 V /110 V	
31	Power required for Tripping Coil at 30V / 110V	
32	Whether Trip free or not	
33	Whether all the interlocks provided	
34	Overall dimensions	
35	Gauge of the MS sheet used for the fabrication of the cubicle	
36	Total weight of one complete Breaker	
37	Whether truck lifting/lowering mechanism provided if the breaker positioned in the panel at a height	

PLACE :  
DATE :  
COMPANY SEAL :

SIGNATURE :  
DESIGNATION :  
COMPANY :

**(II) Schedule of Guaranteed Technical Particulars for 11 KV Current Transformers**

<b>Sl.No</b>	<b>Description</b>	<b>Offered by tenderer</b>
1	Manufacturer's Name and country of origin	
2	Manufacturer's design Ref / Model	
3	Applicable Standards	
4	Type	
5	Rated Primary current	
6	Rated secondary current	
7	Rated frequency	
8	Transformation ratios	
9	Number of cores	
10	Rated output	
	(a) For Core I	
	(b) For Core II	
	(c) For core III	
11	Class of insulation	
12	Class of accuracy	
	(a) For metering	
	(b) For Protection	
13	Short circuit current rating and its duration	
14	Secondary resistance at 70 Deg.C	
15	Continuous over load (percentage)	
16	One minute power frequency dry withstand voltage	
17	1.2/50 micro sec. impulse withstand test voltage	
18	One minute power frequency withstand test voltage on secondary	
19	Instrument safety factor	
20	Type of primary winding	
21	Literature/leaflets pamphlets about the current transformer offered	

PLACE :  
DATE :  
COMPANY SEAL :

SIGNATURE :  
DESIGNATION :  
COMPANY :

### III) Schedule of Guaranteed Technical Particulars for 11 KV Potential Transformers

Sl.No	Description	Offered by tenderer
1	Manufacturer's Name and country of origin	
2	Manufacturer's design reference	
3	Applicable Standards	
4	Type	
5	Ratio	
6	Rated Primary voltage	
7	Rated secondary voltage	
8	Rated frequency	
9	Class of accuracy	
10	No. of phase and method of connection	
11	Burden	
12	One min. power frequency dry flash over voltage	
13	1.2/50 micro sec. impulse withstand test voltage	
14	Class of insulation	
15	Insulation level	
16	Min. Creepage distance	
17	Rated voltage factor and time	
18	Temperature rise at 1.2 time rated voltage and burden	
19	Variation in ratio and phase angle error	
20	Max. ratio error with rated burden and 5% normal primary voltage.	
21	Technical literature pamphlets about the PTs offered	

PLACE :  
DATE :  
COMPANY SEAL :

SIGNATURE :  
DESIGNATION :  
COMPANY :

#### (IV) Schedule of Guaranteed Technical Particulars for Numerical Relays

Sl.No	Description	Offered by tenderer
1	Manufacturer's Name and Country of origin	
2	Manufacturer's design Ref / Type	
3	Applicable Standards	
4	Current setting range for	
	(a)Over current	
	IDMTL	
	Instantaneous	
	(b) Earth fault relay	
	IDMTL	
	Instantaneous	
5	Details on IDMTL characteristics	
6	Whether High Set is Transient free	
7	Whether separate Time setting for IDMTL /Instantaneous Elements available	
8	Whether Relay senses True RMS Current	
9	Accuracy for different settings and limits of errors	
10	Whether settings site selectable and HMI provided	
11	Whether Alpha Numeric / LCD Display	
12	Whether Compatible for auxiliary supply voltage from 28 - 185V DC	
13	Whether Compatible for 1 A CT Secondary	
14	Whether Self diagnostic features available	
15	Whether Communication Port RS 485 Compatible for MODBUS / IEC /61850 Protocol	
16	Whether Blocking characteristics available for blocking the unscrupulous tripping of Upstream Breakers	
17	Whether draw out type unit or not	
18	Types of case	
19	Reset time	
20	Burden of relay	
21	Maximum and Minimum operating ambient air temperature	
22	Whether technical literature pamphlets offered. for the Relay	

PLACE :  
DATE :  
COMPANY SEAL :

SIGNATURE :  
DESIGNATION :  
COMPANY :



**V) Schedule of Guaranteed Technical Particulars for Static Trivector Meter ( DLMS COMPLIANT METERS) with ABT**

Sl.No.	Description	Offered by tenderer
1	Maker's Name & Country	
2	Type	
3	Application	
4	Rated Voltage	
5	Rated Current	
6	Frequency	
7	Overload capacity	
8	Minimum starting current in % of basic current	
9	Power loss in potential circuit	
10	Power loss in current circuit	
11	Change in error due to	
	a) Variation in frequency	
	b) Variation in temperature	
	c) Variation in Voltage	
12	Accuracy Class	
13	Total weight of meter	
14	Details of case	
15	H.V. Withstand	
16	Insulation resistance	
17	Standard to which the meter confirm	
18	Type of energy Registration Mechanism	
19	MD Reset Mechanism	
20	Insulation Test	
21	Temperature Co-efficient from 10% of rated load to 100% of rated load (5°C to 45°C	
22	Working Range	
	d) Voltage	
	e) Current	
23	Type of load (linear, non linear, balance, unbalanced at any P.F.)	
24	Display details	
	a. Display cycle	
	b. Period of display in each parameter	
	c. Display scroll lock facility	
	d. Backlit LCD	
25	Memory	
26	Non Volatile Memory	
27	Power on in absence of mains	
28	Tamper data preservation capacity	
29	Load survey	
	a. Parameter logged	

	b. Logging interval	
	c. No. of days of load survey	
30	Time of the day Zone	
31	Capability for fraud Prevention & detection	
32	Sealing Arrangement	
	a. Meter Cover	
	b. Terminal Block Cover	
	c. MD Reset Push Button	
	d. Optical port	
	e. Additional Communication Port	
33	Type of communication	
	a. Local Optical Port	
	b. Additional Communication Port	
34	Real time clock	
35	Whether the meter carries any certification mark	
36	Self diagnostic feature if any (provide details) Principle of operation ( provide details)	

PLACE :  
DATE :  
COMPANY SEAL :

SIGNATURE :  
DESIGNATION :  
COMPANY :

**SCHEDULE – G**  
**STATEMENT OF TYPE TEST PARTICULARS**  
**11 KV ID VCB**

Sl.No.	Name of Test	Name of Lab	Date of Test
01.	Short time current withstand test and peak current withstand test. (25 KA for 3 sec & 62.5 KA peak)		
02.	Lightning Impulse voltage with-stand test (75 KV)		
03.	Basic Short Circuit Test duties(E2)/Short Circuit current making and breaking tests (E2)( Panels tested for test duty E1 at present are accepted for evaluation purposes subject to providing proof for having submitted sample for testing E2 duty at CPRI/any NABL accredited lab (like fees paid) shall be furnished along with the offer and the test certificates shall be submitted before first inspection call letter.)		
04.	Power frequency voltage withstand test (dry) (28 KV rms for 1 minute)		
05.	Temperature rise test for 2000A for Bus bar(Type test conducted on 1250 & 1600A ratings are accepted for evaluation purposes subject to providing proof for having submitted sample for testing Temperature rise test for 2000A at CPRI/any NABL accredited lab (like fees paid) shall be furnished along with the offer and the test certificates shall be submitted before first inspection call letter).		
06.	Mechanical Endurance Test conforming to class M2 of IEC / 62271 – 100		
07.	Capacitive current switching test conforming to class C2 of IEC 62271-100 (Panels tested for capacitive current switching test (C1 duty) are accepted for evaluation purposes subject to providing proof for having submitted sample for testing class C2 at CPRI/any NABL accredited lab (like fees paid) shall be furnished along with the offer and the test certificates shall be submitted before first inspection call letter).		

08.	Measurement of the resistance of the main circuit.		
09	Internal Arc Fault withstand test on cable, main bus and breaker chambers. (Main bus & Breaker chamber – 25 KA for 1 sec Cable Chamber – 25 KA for 0.5 sec)		
10.	IP 4X for HV & LV Compartment		

PLACE :  
DATE :  
COMPANY SEAL :

SIGNATURE :  
DESIGNATION :  
COMPANY :

**SCHEDULE - H**  
**QUESTIONNAIRE-A**  
**(TO BE KEPT IN THE "COMMERCIAL AND TECHNICAL BID")**

**INSTRUCTIONS:**

- (a) Strike off, whichever is not applicable  
(b) Separate sheets should be used, wherever necessary:

S.No.	PARTICULARS	BIDDERS'S RESPONSE
1.	Name and Address of the Firm/Company	
	a. Registered Office	
	b. Factory/Works Address	
	c. Fax. No:	
	d. e-mail Id:	
	e. Contact No.	
2.	Name, Designation and Address of the person signing the tender.	
3.	a. Whether the Company is Small /Medium /Large Scale Unit.	
	b. If SSI Unit, whether registered with Udyam	YES/NO
	c. Whether the company is located inside Tamil Nadu	YES/NO
	d. Legal Status of the Firm/Company	
	e. Permanent Account Number- PAN	
	f. GSTIN	
4a.	Confirm whether tenderer is a manufacturer of 11 KV Indoor VCB panels	YES/NO
b.	Details of documents furnished towards proof for manufacturer	Mention the details of documents furnished
5a.	Whether the bidder has supplied a minimum of <b>20 Nos.</b> of 11 KV and or /higher rating Indoor VCB panels of offered make to State Electricity Boards/Public Power Utilities/Central/State Public Sector undertaking in India during preceding ten years as on date of tender opening.	YES/NO
b.	Whether copies of purchase orders along with end user's certificate for satisfactory completion of supply have been furnished in proof of above.	YES/NO
c.	Whether at least <b>10 Nos</b> of 11 KV Indoor Vacuum Circuit Breaker panels of offered make supplied by the manufacturer or through Channel Partner during the preceding 10 years as on date of tender opening to State Electricity Boards/ Public Power Utilities/Central/State Public Sector undertaking in India should have been in satisfactory Continuous operation for a minimum period of 2 years.	YES/NO

S.No.	PARTICULARS	BIDDERS'S RESPONSE
d	Whether copies of purchase order along with end users certificate for satisfactory performance duly mentioning the make of ID VCB have been furnished in proof of above.	YES/NO
6a.	Annual Turnover of the bidder during last three years (2022-23, 2023-24 & 2024-25).	2022-23: 2023-24: 2024-25:
b.	Whether Audited financial statements (or) Annual turnover certified by the practicing Chartered Accountant statements furnished.	YES/NO
7.	<b>TYPE TEST CERTIFICATES:</b>	
	<p>Whether the copy of the Type Test Certificates for the tests prescribed in Schedule – G is enclosed along with the tender.</p> <p>NOTE: If the type tests conducted on the tendered item is more than 5 years as on the date of opening of tender (or) if the type tests has been conducted on higher voltage rating, then the tenderer has to conduct the Type tests on the 1<sup>st</sup> unit at free of cost, if purchase order is placed on them and offers of such bidders may be considered subject to furnishing of an undertaking in a Non-judicial stamp paper of value not less than <b>Rs.500/-</b> stating that Type Test Report for the <b>tendered material /equipment</b> as per requirement /specification of TNPDCCL will be furnished before offering the 1<sup>st</sup> lot of materials for inspection, in case an order is placed on them.</p>	YES/NO
8.	<b>EARNEST MONEY DEPOSIT - Rs.9,00,000/- (Rupees Nine lakh only) :</b>	
	Mode of Payment :	"online"
	a. Whether EMD Payment has been made "online"	YES/NO

S.No.	PARTICULARS	BIDDERS'S RESPONSE
	b. Whether EMD furnished in the form of Bank Guarantee i. If Yes, BG Details  ii. Whether scanned copy of the BG uploaded.	YES/NO BG No , Date, Name of Bank & Validity  YES/NO
	c. If exempted from payment of EMD,  i. Whether the bidder is Micro/SSI unit located in Tamil Nadu  ii. Whether registered under Udyam Portal for the tendered item.  iii. Whether Udyam Registration Certificate uploaded  iv. Whether Undertaking in lieu of EMD uploaded  v. Whether documents in support of investment held in plant and machinery and Annual turnover uploaded.	YES/NO  YES/NO  YES/NO  YES/NO  YES/NO
	d. If PEMD holder of Rs.40 Lakhs and above with TNPDC Head Quarters, held on or after 03.12.2021. i. Whether Scanned copy of proof of PEMD uploaded ii. Whether undertaking in lieu of EMD uploaded	YES/NO  YES/NO
	<b>After confirming the EMD paid / Exemption uploaded, then only the system will allow to submit the technical and financial bids.</b>	
9.	<b>VALIDITY:</b>	
	Whether your offer is valid for <b>180 days</b> from the date of tender opening of Commercial / Technical Bids (Offers with validity period of less than <b>180</b> days are liable to be rejected)	YES/NO
10.	<b>PRICE:</b>	
	a. Whether the price quoted is firm.	YES/NO
	b. Whether the following break ups for the quoted Unit Price (All-inclusive price) have been mentioned Unit Ex-Works Price Freight & Insurance Charges Packing & Forwarding	YES/NO

S.No.	PARTICULARS	BIDDERS'S RESPONSE
	c. Whether SGST/CGST/IGST (in Percentage and Amount) applicable has been mentioned	YES/NO
	d. Whether you are agreeable, in case of delayed delivery, the GST prevailed on the date of actual delivery or the GST applicable on the date of contractual date of delivery whichever is less shall only be payable.	YES/NO
	e. Confirm that Freight & Insurance charges quoted are applicable for delivery to any of the TNPDCCL stores/sites in Tamil Nadu.	YES/NO
12.	Whether you are agreeable for the following clauses specified under SECTION- V of the specification:	
	a. Price (Cl.-7.0)	YES/NO
	b. Payment terms (Cl.--14.0)	YES/NO
	c. Security Deposit cum Performance Guarantee (Cl.--15.0)	YES/NO
	d. Delivery (Cl.--11.0)	YES/NO
	e. Liquidated Damages.( Cl.--17.0)	YES/NO
	f. Guarantee. (Cl.--19.0)	YES/NO
	g. Recovery of dues to TNPDCCL (Cl.--23.0)	
	h. Jurisdiction for Legal Proceedings.( Cl.--45.0)	
13.	QUANTITY OFFERED	..... sets.

DATE :  
PLACE :

SIGNATURE OF THE TENDERER  
NAME :  
DESIGNATION:  
(SEAL OF THE COMPANY)

### **UNDERTAKING**

I \_\_\_\_\_, Sole Proprietor  
/ Partner of  
M/s. \_\_\_\_\_ give undertaking  
that details given in the above QUESTIONNAIRE are correct to the best of my  
knowledge and I agree to abide by all your Tender / Order terms and conditions.

DATE :  
PLACE :

SIGNATURE OF THE TENDERER  
NAME :  
DESIGNATION:  
(Seal of the company)

\*\*\*\*\*



## SCHEDULE – H

### QUESTIONNAIRE-B

#### INSTRUCTIONS:

- (a) Strike off, whichever is not applicable
- (b) Separate sheets should be used, wherever necessary.

Sl. No	PARTICULARS	BIDDERS RESPONSE
1a.	Whether materials offered is exactly as per Technical Specification (Section-VI ) (Offers with Deviation in Technical Terms are liable to be rejected)	YES / NO
b.	If not, Whether the details of technical deviation are furnished in Schedule-C1 .	YES / NO
2.	Whether the tendered equipment is type tested as per the specification of TNPDC.	YES / NO

Date :

SIGNATURE OF THE  
TENDERER

Place :

NAME

STATUS IN THE COMPANY  
(Affix Seal of the company)

#### UNDERTAKING

I \_\_\_\_\_, Sole Proprietor / Partner of  
M/s. \_\_\_\_\_ / \_\_\_\_\_ give  
undertaking that details given in the above QUESTIONNAIRE - B are correct to the  
best of my knowledge and I agree to abide by all your Tender / Order terms &  
conditions.

Date :

SIGNATURE OF THE  
TENDERER

Place :

NAME

STATUS IN THE COMPANY  
(Affix Seal of the company)

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## **SECTION- IX**

### **ANNEXURES**

<b>Sl.No.</b>	<b>CONTENTS</b>
I	Undertaking In Lieu of E.M.D.
II	Undertaking towards Jurisdiction for Legal Proceedings
III	Proforma of Bank Guarantee for SD cum Performance
IV	Declaration Form for Input Tax Credit Benefit
V	Tender Acceptance Letter
VI	Undertaking towards Recovery of Dues to TNPDC
VII	Format of Bank Guarantee for E.M.D
VIII	Guidelines for releasing GST portion to suppliers / Contractors
IX	Declaration pursuant to Section 206AB
X	Format of Undertaking to be furnished by the OEM for bidding through Channel Partner

**ANNEXURE-I**  
**UNDERTAKING IN LIEU OF E.M.D.**  
**(TO BE FURNISHED IN NON-JUDICIAL STAMP PAPER OF VALUE NOT LESS THAN Rs.500/-)**

THIS DEED OF UNDERTAKING executed  
at.....

..... on this .....day of  
..... hereafter called 'TENDERER' ( which expression  
shall

where the context so admits mean and include their Agents, Representatives,  
Successors – in – office and Assigns).

TO AND IN FAVOUR OF THE TAMIL NADU POWER DISTRIBUTION CORPORATION  
LIMITED, a corporation incorporated under companies act , 1956 and a subsidiary of  
TNEB Ltd., having its office at NPKRR Maaligai , 144, Anna Salai, Chennai – 600  
002, herein called the "TNPDC" (which expression shall where the context so  
admits mean and include its successors in office and Assigns )

WHERE AS the Tenderer is required to pay Earnest Money Deposit of  
Rs...../- (Rupees.....Only) for  
participation in the tender for supply of ..... in  
terms of Specification No.....

AND WHERE AS the Tenderer is exempted by the TNPDC from payment of EMD in  
the form of cash, subject to the tenderer executing an undertaking to the value of  
Rs...../- (Rupees .....Only) representing the  
amount equivalent to the amount of EMD specified to be paid to the TNPDC in the  
event of non-fulfillment of breach of any of the conditions of the tender by Tenderer  
as mentioned hereunder.

AND WHEREAS in consideration of the acceptance by the TNPDC of the above  
proposal, the tenderer has agreed to pay to the TNPDC the said amount of  
Rs...../-(Rupees .....Only) in event of –

1. Withdrawing his tender before the expiry of the validity period OR
2. Withdrawing his tender after acceptance , OR
3. Violating any of the conditions of the tender issued by the competent authority.

NOW THIS UNDERTAKING WITNESETH that in pursuance of the said agreement

the Tenderer hereby doth covenant with the TNPDCCL that in consideration of the "TNPDCCL" waiving the condition of payment of EMD in cash in terms of the said specification, the Tenderer has agreed to pay to the TNPDCCL Rs. .... (only) in the event of:

- i) Withdrawing his tender before the expiry of the validity period.
- ii) Withdrawing his tender after acceptance.
- iii) Violating any of the conditions of the tender issued by the competent authority.

NOW THE CONDITIONS OF THE above written undertaking is such that if the tenderer shall duly and faithfully observe and perform the conditions specified as above, then the above written undertaking shall be void, otherwise it shall remain in full force.

The tenderer undertakes not to revoke this guarantee till the contract is completed under the terms of contract.

The expression, 'TENDERER' and the 'TNPDCCL' hereinafter before used shall include their respective successors and assigns in office.

IN WITNESS WHERE OF THIRU.....  
acting

for and on 'behalf' of the Tenderer has signed this deed on the day, month and year  
herein before first mentioned.

SIGNATURE :  
NAME IN BLOCK LETTERS :  
SEAL OF THE COMPANY :

In the presence of Witnesses :

- 1. Signature  
(Name and Address)
- 2. Signature  
(Name and Address)

\*\*\*\*\*

## **ANNEXURE - II**

### **UNDERTAKING TOWARDS JURISDICTION FOR LEGAL PROCEEDINGS (TO BE FILLED BY THE TENDERER IN A NON-JUDICIAL STAMP PAPER OF VALUE NOT LESS THAN Rs.500/-)**

THIS DEED OF UNDERTAKING executed at.....on this ..... day of ..... by M/s..... a company registered under Companies Act, 1956 having its Registered Office at .....hereinafter called the "TENDERER" (which expression shall where the context so admits mean and include its successors in office and assigns) with the TAMIL NADU POWER DISTRIBUTION CORPORATION LIMITED, a corporation incorporated under companies act , 1956 and a subsidiary of TNEB Ltd., having its office at 144, Anna Salai, NPKRR Maaligai, Chennai – 600 002, hereinafter called the purchaser (which expression shall where the context so admits mean and include its successors in office and assigns).

WHERE AS the contract is for the supply of .....in terms of the Purchase Order No.....Dated.....AND WHEREAS in accordance with clause ..... (Payment Clause) and Clause ..... (Jurisdiction for Legal Proceedings) of the above said P.O. certain terms were stipulated for the above supply.

AND WHEREAS in accordance with Clause ..... of the above mentioned Purchase Order, the supplier has to furnish an undertaking that no suit or any proceedings in regard to any matter arising in any respect under this contract shall be instituted in any court other than in the High Court, Chennai, City Civil Court of Chennai or other court of small causes at Chennai.

In consideration of the TNPDCCL having agreed to accept the undertaking, the undertakes that no suit or any proceedings in regard to any matter arising in any respect under this contract shall be instituted in any court, other than the High Court, Chennai, City Civil court at Chennai or the Court of Small Causes at Chennai. It is also agreed that no other court shall have the jurisdiction to entertain any suit or proceedings, even though part of the cause of action might arise within their jurisdiction. In case any part of cause of action arises within the jurisdiction of any of the Courts in Tamil Nadu and rest within the jurisdiction of Courts outside Tamil Nadu, then it is agreed to between the parties that such suits or proceedings shall be instituted in Court within the State of Tamil Nadu and no other Court outside Tamil Nadu shall have jurisdiction, even though any part of the cause of action might arise within the jurisdiction of such Courts.

IN WITNESS WHERE OF THIRU..... of the Tenderer hereby put his hand and seal for the Undertaking in the presence of the following witnesses.

SIGNATURE OF THE TENDERER WITH SEAL

In the presence of Witnesses :

1.Signature  
(Name and Address)

2. Signature

**ANNEXURE- III**  
**(To be submitted after award of contract)**  
**PROFORMA OF BANK GUARANTEE FOR**  
**SECURITY DEPOSIT CUM PERFORMANCE**

(To be stamped in accordance with stamp Act)

To

The Chief Engineer, Materials Management  
TNPDC

GUARANTEE NO.:

VALUE OF GUARANTEE:

GUARANTEE COVER FROM:

LAST DATE FOR LODGEMENT OF CLAIM:

THIS DEED OF GUARANTEE made on this .....day of .....Two thousand and ..... by the bank of ..... (hereinafter called "The Bank") to and in favour of the TAMILNADU POWER DISTRIBUTION CORPORATION LTD, a corporation incorporated under companies act , 1956 and a subsidiary of TNEB Ltd., having its office at NPKRR Maaligai, 144, Anna Salai, Chennai – 600002 represented by the Chief Engineer / Materials Management (hereinafter called "The Purchaser").

WHEREAS M/s. .... (herein after called "the Contractor") have by virtue of Contract entered into with the Purchaser as per the Lr. No. ....dt..... agreed with the purchaser for Supply of \_\_\_\_\_ in accordance with the terms and conditions of the contract.

AND WHEREAS in accordance with the terms of the contract in Lr. No. .... dt..... the Contractor has to pay a sum of Rs...../- (Rupees ..... only) as security deposit cum performance guarantee from a nationalized bank.

AND WHEREAS the Contractor has requested the Purchaser to accept the Bank Guarantee in lieu of Security Deposit cum Performance Guarantee for a sum equivalent to five percent of the value of the contract for the satisfactory performance of the contract.

AND WHEREAS the Bank has at the request of the contractor, agreed to guarantee the payment of the said sum in case the contract is not performed in accordance with the specification indicated in the terms and conditions in the Lr. No. .... dt. ....

NOW THIS DEED WITNESSES AS FOLLOWS:

1. In consideration of the Purchaser having agreed to accept the Bank Guarantee from a Nationalized Bank towards Security Deposit/Performance Guarantee for a sum equivalent to Rs...../- (Rupees .....only) the Bank do hereby guarantee that if the Contractor fails to perform the Contract in accordance with the specifications and conditions of the contract as subsequently amended, the Bank shall pay forthwith merely on demand without any demur to the Purchaser such amount or amounts as the Bank may be called upon to pay by the Purchaser.

PROVIDED that the liability of the bank under this deed shall not at any time exceed the amount of Rs...../- (Rupees .....only)

PROVIDED further, that the Guarantee hereunder furnished shall be released as soon as the Contractor has performed his part of the Contract in accordance with the terms of the Contract and period of performance guarantee is over and a certificate to that effect is issued by the Purchaser.

2. The Bank further undertakes to indemnify the Purchaser to the extent of Rs...../- (Rupees..... only) against any loss or damage that may be caused or suffered by the Purchaser by reason of any breach of the terms and conditions of the said Lr. No. .... dt. ....
3. The Guarantee herein contained shall remain in force till the terms and conditions of the Lr. No. ....dt..... have been fully and properly carried out by the said Contractor and in any case, the Guarantee shall not hold good after ..... (date of expiry of Guarantee).
4. The Bank further agrees with the Purchaser that the Purchaser shall have the fullest liberty (without the consent of the Bank and without affecting in any manner the obligations of the bank hereunder) to vary any of the terms and conditions of the Contract or to extend the time of performance of the contract by the said Contractor for time to time or to postpone from time to time any of the powers exercisable by the Purchaser against the said Contractor and to forbear or to enforce any of the terms and conditions relating to the said Contract and the Bank shall not be relieved of its liability by reason of any such variation, or extension being granted to the said contractor or by reason of any forbearance, act or omission on the part of the Purchaser or any indulgence by the Purchaser to the said Contractor or by any such matter or thing whatsoever which under the Law relating to sureties would but for these provisions have the effect of so relieving the Bank.
5. Any account settled between the Purchaser and the Contractor shall be the conclusive evidence against the Bank for the amount due and shall not be questioned by the Bank.
6. The expressions "Bank", "Contractor" and "The Purchaser" herein before used shall include their respective successors and assigns.



NOTWITHSTANDING anything contained herein above

- (a) Our liability under this Bank Guarantee shall not exceed Rs...../-  
(Rupees.....only)
- (b) This Bank Guarantee shall be valid up to ..... and
- (c) We are liable to pay the Guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before ....., the expiry of this Guarantee.

IN WITNESS WHEREOF THIRU.....for and on behalf of the Bank has signed this Deed on the day, month and year first above written.

Confirmation of issue of this Bank Guarantee should be sought for by the beneficiary from our Regional office at the following address:

SIGNATURE

WITH THE SEAL OF THE BANK

(Name in Block letters)

IN THE PRESENCE OF WITNESS:

1.

(Name in Capital with Address)

2.

(Name in capital to be superscribed with  
Designation office address or residential address)

**ANNEXURE- IV**  
**Declaration Form for Input Tax Credit Benefit**  
**(To be Submitted by the bidders in NJS paper of value not less than**  
**Rs.500/-)**

To  
The Chief Engineer/Materials Management  
TNPDCCL

We hereby declare and confirm that we are registered vendor under GST Act having GSTIN .....in State of ..... . Our applicable GST% for the above reference job is under code ..... .

We hereby declare and confirm that we are unregistered vendor under GST Act being turnover is less than Rs.....Lakhs (being threshold limit) per annum. (For unregistered vendor, the vendor has to submit an affidavit in the enclosed format).

We hereby declare and confirm that we are registered vendor under composite scheme having GSTIN.

We are aware that as per sec 171 of CGST Act, any reduction in rate of tax on any supply of goods or services or the benefit of input tax credit should be passed on to TNPDCCL by way of commensurate reduction in prices and as such we hereby declare that we are extending Rs.-----/- of % as rebate in my quoted price against input tax credit benefit.

We hereby declare that we do not have any input tax credit benefit on account of GST applicable against this job. If it is established that we have availed input tax credit benefit against this job, the differential tax benefit will be returned to TNPDCCL failing which TNPDCCL may take appropriate action

Signature of the bidder with Company Seal

Witness with address:

- 1)
- 2)

**Note: Bidder may strike out the para not applicable**

**ANNEXURE – V**  
**(To be signed with company seal on letter head and uploaded in the**  
**technical Bid)**  
**TENDER ACCEPTANCE LETTER**

(To be given on Company Letter Head)      Date:

To,  
The Chief Engineer, Materials Management  
TNPDCCL

Sub : Acceptance of Terms & Conditions of Tender.

Tender Reference No :

Name of Tender/Work :

Dear Sir,

1. I/We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely: -----  
-----  
----- as per your advertisement, given in the above mentioned website(s).
2. I/We hereby certify that I/We have read the entire terms and conditions of the tender documents from page No.----- to -----(including all documents like annexure(s), schedule(s), etc.,) which form part of the contract agreement and I/We shall abide hereby the terms / conditions / clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/ organization too has also been taken into consideration, while submitting this acceptance letter.
4. I/We hereby unconditionally accept the tender conditions of above mentioned tender document(s) corrigendum(s) in its totality / entirety.
5. In case any provisions of this tender are found violated, then your department/organization shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.

Yours faithfully,  
(Signature of the bidder, with official Seal)

\*\*\*\*\*

## **ANNEXURE-VI**

### **UNDERTAKING TOWARDS RECOVERY OF DUES TO TNPDC (TO BE FURNISHED BY THE TENDERER IN A NON-JUDICIAL STAMP PAPER OF VALUE NOT LESS THAN Rs.500/- AS PER CLAUSE 20.0 OF COMMERCIAL)**

THIS DEED OF UNDERTAKING executed at.....on this.....day of  
.....by

M/s..... hereinafter  
called the "TENDERER" (which expression where the context so admits mean and  
include their agents, their representatives, successors in office and assigns).

TO AND IN FAVOUR OF THE TAMIL NADU POWER DISTRIBUTION CORPORATION  
LIMITED, a corporation incorporated under companies act , 1956 and a subsidiary  
of TNEB Ltd., having its office at NPKRR Maaligai, New No. 144, Anna Salai,  
Electricity Avenue, Chennai – 600 002, hereinafter called the "TNPDC" (which  
expression shall where the context so admits mean and include the successors in  
office and assigns).

WHEREAS the TNPDC has called for an undertaking from the Tenderer  
empowering the TNPDC to recover the dues if any,

NOW THIS UNDERTAKING WITNESSETH that the TNPDC is empowered to  
recover any dues against this contract in any bills /Security Deposit / E.M.D. due  
to the Tenderer either in this contract or any other contracts with the TNPDC.  
Further, the Tenderer hereby authorizes the TNPDC to recover any dues against  
any other contract of the Tenderer with the TNPDC/TANTRANSCO/TNEB Ltd with  
the available amount due to the Tenderer against this contract.

IN WITNESS WHERE OF THIRU.....acting for and on  
behalf of the Tenderer has signed this deed on the day, month and year herein  
before first mentioned.

SIGNATURE OF THE TENDERER.

In the presence of witnesses.

1. Signature

(Name in capital letters with address)

2. Signature

(Name in capital letters with address)

**ANNEXURE-VII**  
**FORMAT OF BANK GUARANTEE FOR E.M.D.**

**(TO BE FURNISHED IN NON-JUDICIAL STAMP PAPER OF VALUE NOT LESS THAN Rs.500/-)**

Beneficiary: The Chief Engineer, Materials Management,  
TAMIL NADU POWER DISTRIBUTION CORPORATION LIMITED,  
4<sup>th</sup> Floor, WESTERN WING, N.P.K.R.R. Maaligai,  
New. No:144, Anna Salai, Chennai - 480 002

Date: .....

Bid Guarantee No: .....

We have been informed that M/s..... (here after called "the bidder") has submitted to you its bid dated ..... (herein after called, "the bid") for TNPDC e-Tender Specification No: **M-224/ 2025-26**.

Furthermore, we understand that, according to the conditions, bids must be supported by a Bid Guarantee.

At the request of the bidder, we the..... BANK, Banking company, a body corporate, constituted under the Banking companies (Acquisition and Transfer of Undertakings) act, 1970, with their head office at ....., and having among others at branch office at ....., India hereby irrevocably undertake to pay you a sum or sums not exceeding in total an amount of **Rs.9,00,000/- (Rupees Nine lakh only)** upon receipt by us of your first demand in writing accompanied by a written statement stating that the bidder is in breach of its obligation(s) under the bid conditions, because the bidder :

- a) has withdrawn its bid during the period of bid validity specified by the Bidder in the form of bid ;or
- b) having been notified of the acceptance of its bid by the TNPDC during the period of validity
  - i. fails or refuses to execute the contract form, if required ,or
  - ii. fails or refuses to furnish the Security deposit cum performance Bank Guarantee, in accordance with the instructions to Bidders.

This Guarantee will expire:

a) if the bidder is the successful Bidder, upon our receipt of copies of the contract signed by the bidder and the security deposit cum Performance Bank Guarantee issued to upon the instruction of the bidder and

b) if the bidder is not successful Bidder, upon the earlier of

i. our receipt of copy of the notification to the Bidder of the name of the successful Bidder or

ii. Six months after the expiration of the Bidder's Bid.

Consequently, any demand for payment under this Guarantee must be received by us at the office on or before that date.

This Guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No.758.

**NOTWITHSTANDING ANYTHING CONTAINED HEREIN:**

1. Our liability under this Bank Guarantee shall not exceed Rs. ..../-  
( Rupees ..... Only/-)

2. The Bank Guarantee shall be valid up to .....

3. We are liable to pay the guarantee amount or any part thereof under this Bank guarantee only and only if you serve upon us a written claim or demand on or before ..... (mention period of the guarantee as found under clause (2) above plus claim period)"

IN WITNESS WHERE OF THIRU ..... and THIRU..... . acting for and on behalf of the Bank has signed this deed on the day, month and year first above written.

In the presence of witnesses:

1.

2.

(Signature with seal of the Bank (Name in Block letters) and

(Name in capitals to be subscribed with designation, address of office or residential)

## **ANNEXURE- VIII**

### **Guidelines for releasing GST portion to suppliers / Contractors:**

As per GST guidelines TNPDCCL / TANTRANSCO has to ensure the remittance of GST to Govt. made without omissions by the supplier / contractors, since GSTR 2A is getting updated regularly.

Hence the following guidelines were issued to the Supplier / Contractor:

1. The Tax invoices shall have the details of rates, quantity and admissible rate of GST.
2. The suppliers shall pay the GST and file the returns under GST promptly to avoid delay in processing / payment of invoices could be avoided/ minimized. If the supplier paid the GST, their invoices would be exhibited in the GSTR-2A and the same will be taken as GST compliance of Supplier/contractor.
3. The running bills will be passed after verification of the GST paid in the previous month. In case of high value bills (say 10 lakh or above) the GSTR-2A will be verified before passing the bills.
4. In case of one and only bill against the PO/W.C, the bill will be passed after verification of GSTR-2A only.
5. The updated GSTR-2A available in the portal will be utilized in lieu of documentary proof for any GST claim.
6. Instead of insisting for the hard copy of any document proof such as returns filed, Challons remitted, CA certificate, GSTR-3B the GSTR-2A will be verified for admitting invoices.

The Tax supplier who has availed the scheme of quarterly filing of returns (i.e when turnover is upto 150 Lakhs) the following mechanism will be adopted for passing the bills.

- i. If it is only one bill, the GST payment of the supplier's bill will be verified during PO closure.
- ii. If there are multiple bills, then
  - (a) Bills related to first 3 months i.e Initial quarter will be admitted inclusive of GST without verifying with GSTR-2A reports.
  - (b) Bills for the subsequent quarter will be passed if GST payment of bills raised on TNPDCCL in the earlier processed quarter has been updated and exhibited in GSTR-2A.

If discrepancies arises between the value shown in the GSTR-2A and the invoices available, the liability towards GST may be restricted to the lower of the above two.

## **ANNEXURE-IX**

### **Declaration pursuant to Section 206AB**

#### **(To be obtained from applicable Suppliers)**

This is to declare that .....(Name of the supplier) have filed the Return of Income (ROI) under the relevant provisions of the Income Tax Act, 1961 for the Assessment Year 2022-23 and 2023-24 (FY 2021-22 and FY 2022-23) and we shall file the ROI for Assessment Year 2023-24 (Financial Year 2022-23) within the due date as per the provisions of the said Act.

Permanent Account No. (PAN) of our Company/Firm/Individual is ..... The details of Return of Income filed are as below:

S. No	Assessment Year	Acknowledgement No	Date of Filing
1	2022-23	_____	_____
2	2023-24	_____	_____

Place :

Date :

(Authorized Signatory)  
Signature & Seal



## **ANNEXURE - X**

(In case of OEM bidding through Channel Partner, Format of Undertaking to be furnished by the OEM in a non-judicial stamp paper of value not less than Rs.500/-)

This undertaking executed at ..... on this .....(date) .....month Two thousand ..... by M/s..... a company registered under Companies Act, 1956 having its Registered Office at ..... hereinafter called the Original Equipment Manufacturer (OEM) (which expression shall where the context so admits mean and include its successors in office and assigns).

TO AND IN FAVOUR OF ..... THE TAMILNADU GENERATION AND DISTRIBUTION CORPORATION LTD, a company registered under Companies Act, having its office at NPKRR Maaligai, Electricity Avenue, 144 Anna Salai, Chennai 600 002, herein after called the "TNPDC" (which expression shall where the context so admits mean and include its successors in office and Assigns).

WHEREAS the contract is for the supply of ..... in terms of the Tender Specification No..... date.....

Whereas the OEM has to perform the obligations entrusted to them within the period specified in the aforesaid scheme.

AND WHEREAS in accordance with Clause ..... of the above said tender specification, the Channel Partner is allowed to participate in the tender on behalf of OEM subject to furnishing of undertaking by the OEM.

IN CONSIDERATION of the TNPDC having agreed to accept an undertaking for bidding through our channel partner, M/s..... a company registered under Companies Act, 1956 having its Registered Office at ..... hereinafter called the Channel Partner (which expression shall where the context so admits mean and include its successors in office and assigns), the OEM undertakes to agree to the following conditions:

- a. The OEM shall manufacture the entire HV components of panels (except LT panel) at their factory & shall supply the same to the licensed partners for LV works only.
- b. OEM shall guarantee the performance of the equipment supplied & provide service support during the guarantee period.

- c. All the Type Test Reports for panels as per specification shall be provided by the OEM.
- d. The IP clause type test report (for HV/LV Compartment) for the panel shall be furnished by OEM and the design and size shall be the same as in the drawing submitted to testing agency including the clearance.
- e. Interlock arrangements shall be confirmed by the OEM.
- f. The OEM shall undertake to comply the obligations under this scheme without any fault.
- g. That this undertaking shall remain in full force until all the obligations are fulfilled towards TNPDCCL till such satisfaction is communicated to the party.

IN WITNESS WHEREOF OF THIRU ..... of the OEM hereby put his hand and seal for due observe of the Undertaking in the presence of the following witnesses.

SIGNATURE WITH SEAL

WITNESSES:

(Signature with Name and Address)

1.

2.

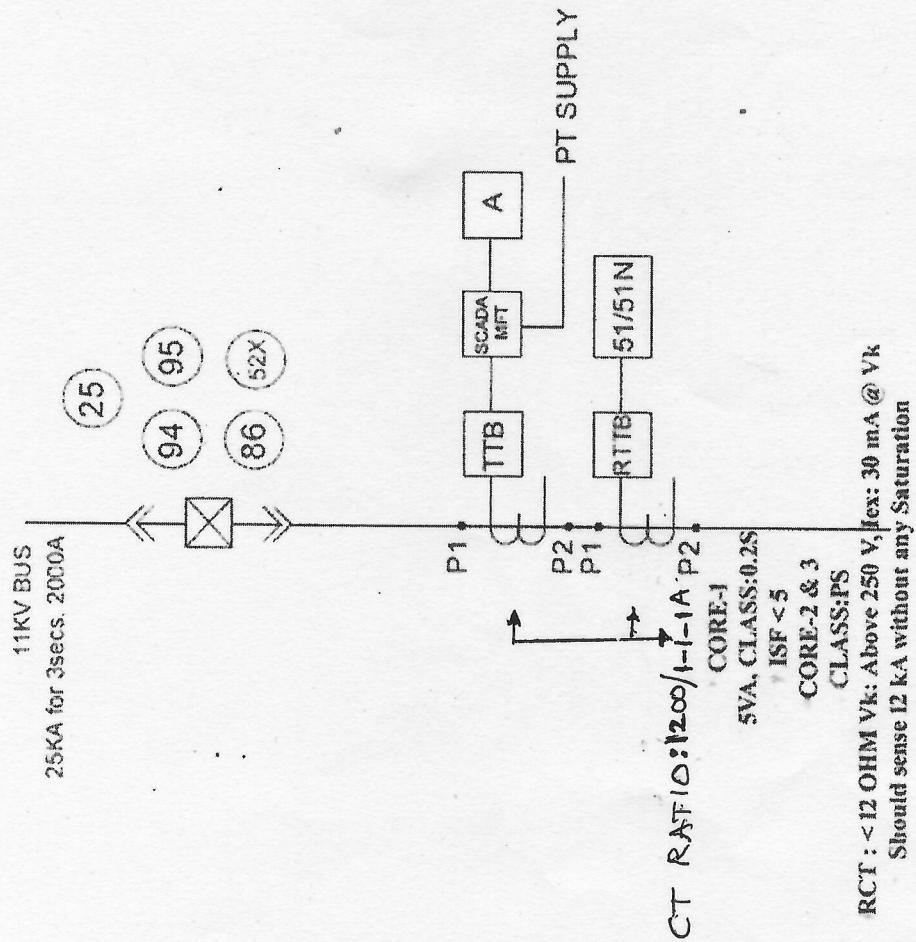


NOTES








DRAWN	TNPDC	FILE NO
		SHEET NO
		SCALE
		NOT TO SCALE
CHECKED	TITLE : STANDARD SLD FOR 11KV OUTGOING FEEDER	DATE

**Executive Engineer / MRT**  
**Chemical E.D.O. / Central**  
**Tamil Nadu Generation and Distribution Corporation Ltd**  
**110KV Valluvar Kottam S.S. Complex,**





# LEGEND:

	11KV 1250A VACUUM CIRCUIT BREAKER (DRAWCUT TYPE)	KWH	ENERGY METER
	CURRENT TRANSFORMER	51/51N	O/C & E/F RELAY
	POTENTIAL TRANSFORMER	RTTB	RELAY TEST TERMINAL BLOCK
	SURGE ARRESTOR	A	6 POSITION AMMETER
	BREAKER AUXILIARY CONTACT MULTIPLIER	V	7 POSITION VOLT/METER
	TRIP CIRCUIT SUPERVISION RELAY	95	HIGH SPEED TRIP RELAY
	ANTI PUMPING RELAY	25	SYNC CHECK RELAY

## NOTE:

DRAWN	TNPDC	FILE NO
		SHEET NO
CHECKED	TITLE : STANDARD SLD FOR 11KV BUS COUPLER	SCALE
		NOT TO SCALE
		DATE

Executive Engineer / MRT  
Chennai E.D.C / Central  
Tamil Nadu Generation and Distribution Corporation Ltd.,  
110KV Valluvarakkottam S.S. Complex,  
Nungambakkam, Chennai - 600 034.