

Standard Bidding Document

INDIA GOVERNMENT MINT

(A UNIT OF SECURITY PRINTING & MINTING CORPORATION OF INDIA LTD.),
MINIRATNA CATEGORY – 1, CPSE, (WHOLLY OWNED BY GOVERNMENT OF INDIA)
P.B. NO. 10, H.C.L. POST, I.D.A. PHASE II, CHERLAPALLY, HYDERABAD – 500 051. (TELANGANA)
Tel. No: +91-40-27268300 (Extn -122); Fax No.: 040-27262951
E-mail: igm.hyderabad@spmCIL.com, Web: <http://igmhyderabad.spmCIL.com>
CIN: U22213DL2006GOI144763; GSTIN: 27AAJCS6111J2Z7

Security Classification: *Non Security*

TENDER DOCUMENT FOR PURCHASE OF:

**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 33KV INDOOR VACUUM CIRCUIT
BREAKER (VCB) SWITCHGEAR PANELS WITH ASSOCIATED CONTROL, RELAYS, CABLES,
ACCESSORIES, CIVIL WORKS, RELAY TESTING ON TURNKEY BASIS**

Tender Number: 6000019450/Re-float, dated: 07.05.2026

This Tender Document Contains 56 Pages.

Details of Contact person in SPMCIL regarding this tender:

Name: V KIRAN KUMAR
Designation: Jt. General Manager (M)
Address: IGMH (India Government Mint, Hyderabad) India
E-Mail: V.KIRANKUMAR@SPMCIL.COM

Disclaimer

The information contained in this Bid Document or subsequently provided to Bidder(s), whether verbally or in documentary or any other form by or on behalf of the Security Printing and Minting Corporation Limited (hereafter referred as the "Purchaser") or any of its employees or associated agencies, is provided to Bidder(s) on the terms and conditions set out in this Bid Document and such other terms and conditions subject to which such information is provided.

This Bid Document is not an agreement and is neither an offer nor invitation by the Purchaser to the prospective Bidder(s) or any other party hereunder. The purpose of this Bid Document is to provide the Bidder(s) with information to assist them in the formulation of their proposal submission. This Bid document does not purport to contain all the information Bidder(s) may require. This Bid document may not be appropriate for all bidders, and it is not possible for the Purchaser to consider particular needs of each Bidder. Each Bidder should conduct its own investigation and analysis, and should check the accuracy, reliability, and completeness of the information in this document and obtain independent advice from appropriate sources.

Information provided in this Bid Document to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Purchaser, its employees and other associated agencies accept no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

This Bid document and ensuing bids; communications and Contracts would alone determine the legal and commercial relationship between the bidders/ contractors and the Purchaser. No other Government or Purchaser's document/ guidelines/Manuals including its Procurement Manual (which are for internal and official use of its officers), have any locus standii in such a relationship. These documents/guidelines/ Manuals therefore should not be cited or referred in any legal or dispute resolution or grievance redressal proceedings.

The Purchaser, its employees and other associated agencies make no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this Bid Document or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the Bid Document and any assessment, assumption, statement or information contained therein or deemed to form part of this Bid Document or arising in any way for participation in this Bid Stage.

The Purchaser, its employees and other associated agencies also accept no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder(s) upon the statements contained in this Bid Document.

The Purchaser may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this Bid Document.

The issue of this Bid Document does not imply that the Purchaser is bound to select Bidder(s) and the Purchaser reserves the right to reject all or any of the Bidders or Bids or to decide to drop the procurement process at any stage without assigning any reason.

The Bidder(s) shall bear all its costs associated with or relating to the preparation and submission of their Bids including but not limited to preparation, copying, postage, delivery fees, expenses associated with any submission of samples, demonstrations or presentations which may be required by the Purchaser or any other costs incurred in connection with or relating to their Bids. All such costs and expenses will remain with the Bidder(s) and the Purchaser shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder(s) in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

This disclaimer forms an integral part of the Bid document and shall supplement but not supplant the provision of the Bid Document.

SECTION I: NOTICE INVITING TENDER (NIT)

INDIA GOVERNMENT MINT

(A Unit of Security Printing & Minting Corporation of India Ltd.),

Miniratna Category – 1, CPSE, (Wholly Owned By Government of India)

P.B. NO. 10, H.C.L. POST, I.D.A. PHASE II, CHERLAPALLY, HYDERABAD – 500 051. (TELANGANA)

Tel. No: +91-40-27268300 (Extn -122); Fax No.: 040-27262951

E-mail: igm.hyderabad@spmcil.com, Web: <http://igmhyderabad.spmcil.com>

1. Sealed tenders are invited from eligible and qualified tenderers for supply of the following:

Schedule No.	Brief Description of Goods/ Services	Quantity (with unit)	Earnest Money (in Rs.)	Remarks
01.	SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 33KV INDOOR VACUUM CIRCUIT BREAKER (VCB) SWITCHGEAR PANELS WITH ASSOCIATED CONTROL, RELAYS, CABLES, ACCESSORIES, CIVIL WORKS, RELAY TESTING ON TURNKEY BASIS	1.000 AU	Rs. 2,50,000.00 (Two Lakh Fifty Thousand only)	

Type of Tender (Two Bid/ PQB/ EOI/ RC/ Development/ Indigenization/ Disposal of Scrap/ Security Item etc.)	Two Bid (Single Stage) i.e., (Techno-commercial Bid & Price Bid) National Competitive Bid (NCB)
Security Classification	Non- Security
Authority in whose favour all tender related financial instruments (FD, DD, Banker's cheque etc) are to be made	India Government Mint, Hyderabad, A Unit of SPMCIL
All Financial Instruments to be payable at	Hyderabad.
Dates and place of issue of tender documents:	ONLINE I.E., CPPP (E-TENDERING) HTTPS://ETENDERS.GOV.IN/EPROCURE/APP
Place, Time and date before which written queries for Pre-Bid Conference must be received	As per CPP Portal
Closing date and time for receipt of tenders	As per CPP Portal
Place of receipt of tenders	ONLINE I.E., CPPP (E-TENDERING) HTTPS://ETENDERS.GOV.IN/EPROCURE/APP
Time and date of opening of tenders for Technical Bid. {Place, Time, and date of Opening of Price (Financial) bid would be intimated later on}	As per CPP Portal
Pre-bid Conference	23.05.2026 @11:00AM
Place of opening of tenders	India Government Mint, Hyderabad-500051, Telangana, India.
Nominated Person/ Designation to Receive Bulky Tenders (Clause 21.1 of GIT)	V KIRANKUMAR, Joint General Manager (M), India Government Mint, Hyderabad-500051, Telangana, India.
Officer to be contacted for clarifications/ help:	V KIRANKUMAR
Name and Contact Details of Independent Monitor(s) for Integrity Pact (Please refer to Clause 44.3 of GIT) for this Tender:	V KIRANKUMAR V.KIRANKUMAR@SPMCIL.COM

2. Eligibility to participate as per Government of India's Public Procurement (Preference to Make in India) Order 2017 (as amended/ revised) and Ministry of Finance, Department of Expenditure, Public Procurement Division's Orders (Public Procurement 1, 2 and 3) F.No.6/18/2019-PPD dated 23rd/ 24th July 2020 (or any further amendments thereof) regarding eligibility of bidders from neighbouring countries shall apply to this tender.
3. Please note that SPMCIL reserves its right to grant Purchase preferences in accordance with Government of India's Public Procurement (Preference to Make in India) Order 2017 (as amended/ revised) and Public Procurement Policy for Micro and Small Enterprises (MSEs) Amendment Order, 2018 (as amended/ revised).
4. Interested tenderers may obtain further information about this requirement from the above office selling the documents. They may also visit our website mentioned above for further details.
5. Tenderer may also the tender documents from the web site mentioned above and submit its tender by utilizing the downloaded document (Through e-tendering portal i.e. CPPP (E-tendering) <https://etenders.gov.in/eprocure/app>), the bidder must not make any changes to the contents of the documents, except for filling the required information. A certificate to this effect must be submitted by the bidder in the Tender Form (Section X).
6. Bidders to upload their bids to through e-tendering portal i.e. CPPP (E-tendering) <https://etenders.gov.in/eprocure/app>, bidders must upload their bids along with scanned copies as required enclosures (including proof of cost of EMD as applicable) as per instructions given in this regard. Original copy of such scanned uploaded EMD, must reach in physical form within the date and place as provided in such instructions, otherwise their uploaded bid, would be declared as unresponsive..
7. In the event of any of the above-mentioned dates being declared as a holiday/ closed day for the purchase organisation, the tenders will be sold/ received/ opened on the next working day at the appointed time
8. The Tender Document is not transferable.
9. The bidder, their affiliates, or subsidiaries – including subcontractors or suppliers for any part of the contract – should not stand declared ineligible/ blacklisted/ banned/ debarred by any Government Agency anywhere in the world, for participating in its tenders, under that country's laws or official regulations. A declaration to this effect shall be submitted by the bidder in the Tender Form (Section X).
10. EMD amount mentioned at point 1 above and in Section VI – List of Requirements shall be furnished in one of the following forms:
 - a. Account Payee Demand Draft or Banker's cheque in acceptable form, otherwise the tender will not be accepted in any case. The demand draft or banker's cheque shall be drawn on any scheduled commercial bank in India, in favour of India Government Mint (A Unit of SPMCIL) payable at Hyderabad.
 - b. Through NEFT or RTGS with the details given below:
 - i. Account No. 201003484303
 - ii. IFSC Code. INDB0000004
 - iii. Bank Name. INDUSIND Bank
 - iv. Branch Address - 0004-HYDERABAD
11. As per the amendments to Companies Act 2013, companies are required to make certain disclosure pertaining to vendors registered under Micro, Small and Medium Enterprises Development Act 2006 (MSMED Act 2006). If your firm/ company is registered under MSMED Act 2006, please attach a copy of the registration certificate.

12. As per provisions contained in M/o Finance, Dept. of Expenditure O.M. No.1(2)(1)/2016-MA dt.10th March 2016, relaxation shall be given of prior turnover and prior experience with respect of Micro & Small Enterprises (MSEs) subject to meeting of quality and technical specifications. Traders/resellers/distributor/authorized agents will not be considered for availing benefits under PP Policy 2012 for MSEs as per MSE guidelines by MOMSME.

13. The guidelines issued vide office Memorandum No. DPE/7(4)/2007-Fin. Dated 06.12.2012 issued by the Ministry of Heavy Industries & Public Enterprises, D.O.No.21(1)/2011-MA dated 25.04.2012 and letter F.No.21(8)/2018-MA dated 09.11.2018 issued by the Ministry of Micro, Small & Medium Enterprises and letter No. NSIC/HO/BD/66/PPP/1415 dated 23.01.2015 issued by National Small Industries Corporation Ltd as follows: #Micro & Small Enterprises are eligible to get the benefits under Public Procurement Policy for Micro & Small Enterprises (MSEs) Order 2012” as notified by the Government of India, Ministry of Micro, Small & Medium Enterprises, New Delhi vide Gazette Notification dated 26.03.2012 (Traders are exempted from purview of this policy).The major benefits allowed are as under:

- a. Issue of Tender Sets free of cost.
- b. Exemption from payment of Earnest Money Deposit (EMD).
- c. In Tender participating MSEs quoting price within price band of L1 + 15% shall also be allowed to supply at least 25% of requirement by bringing down their price to L1 price where L1 is non-MSEs. Further out of this requirement of at least 25% procurement from MSEs, 4% is earmarked for units owned by Schedule Caste/Schedule Tribes and 3% reservation for Women owned MESs. In case no SC/ST and Women owned MSE is a responsive tenderer then whole procurement shall be made from responsive MSE fulfilling the above mentioned conditions.

Note: Firm must submit a valid UDYAM registration certificate (which clearly indicates the status of firm) in order to be eligible for MSME benefits.

14. The undersigned confirms that the required goods mentioned above are not available on GeM Portal.

15. The tender document includes:-

- | | |
|----------------------|---|
| I) Section I | - Notice Inviting Tender (NIT) |
| II) Section II | - General Instructions to Tenderers (GIT) |
| III) Section III | - Special Instructions to Tenderers (SIT) |
| IV) Section IV | - General Conditions of Contract (GCC) |
| V) Section V | - Special Conditions of Contract (SCC) |
| VI) Section VI | - List of Requirements |
| VII) Section VII | - Technical Specifications |
| VIII) Section VIII | - Quality Control Requirements |
| IX) Section IX | - Qualification/ Eligibility Criteria |
| X) Section X | - Tender Form |
| XI) Section XI | - Price Schedule |
| XII) Section XII | - Vendor Details |
| XIII) Section XIII | - Bank Guarantee Form for EMD (--NOT APPLICABLE--) |
| XIV) Section XIV | - Manufacturer's Authorization Form |
| XV) Section XV | - Bank Guarantee Form for Performance Security |
| XVI) Section XVI | - Contract Form |
| XVII) Section XVII | - Letter of Authority for attending a Bid Opening |
| XVIII) Section XVIII | - Proforma of Bills for Payments |
| XIX) Section XIX | - NEFT Mandate |
| XX) Section XX | - Integrity Pact (--NOT APPLICABLE--) |

Note: For “SPMCIL” be read as ‘India Government Mint, Hyderabad’

(V KIRAN KUMAR)
Jt. General Manager (M)
India Government Mint, Hyderabad.
Telephone No. 040-27268300 (Extension: 122)
E-mail: v.kirankumar@spmCIL.com
purchase.igmh@spmCIL.com

For and on behalf of

*The Chief General Manager
India Government Mint, Hyderabad.*

Section II: GENERAL INSTRUCTIONS TO TENDERER (GIT)

Please refer the link <https://spmcl.com/uploaddocument/GIT3.0.pdf> for the following:

- 1) Part I: General Instructions Applicable to All Types of Tenders
- 2) Part II: Additional General Instructions applicable to Specific Types of Tenders

Section III: SPECIAL INSTRUCTIONS TO TENDERER (GIT)

The following Special Instructions to Tenderers will apply for this purchase. These special instructions will modify/ substitute/ supplement the corresponding General Instructions to Tenderers (GIT) incorporated in Section II. The corresponding GIT clause numbers have also been indicated in the text below:

In case of any conflict between the provision in the GIT and that in the SIT, the provision contained in the SIT shall prevail.

(Clauses of GIT listed below include a possibility for variation in their provisions through SIT. There could be other clauses in SIT as deemed fit.)

Sl. No.	GIT Clause No.	Topic	Modify/Substitute/ Supplement	SIT Provision
1	3	ELIGIBLE TENDERERS		No change
2	3.4	ELIGIBLE GOODS AND SERVICES (ORIGIN OF GOODS)		No change
3	6.1	THE TENDER DOCUMENTS INCLUDES:		No change
4	8	PREBID CONFERENCE		Pre-bid shall be conducted on 23.05.2026 at 11:00 AM. All the interested Bidders are required to submit their queries through email: purchase.igmh@spmcil.com & putti.devendranath@spmcil.com on or before 21.05.2025. For site visit, bidders need to provide details of visitors along with their Photo ID Proof at least 2 days in advance.
5	9	TIME LIMIT FOR RECEIVING REQUEST FOR CLARIFICATION OF TENDER DOCUMENTS		No change
6	10.1	THE TECHNICAL BID TO BE SUBMITTED BY TENDERER SHALL CONTAIN THE FOLLOW		No change
7	11.2	TENDER CURRENCY		Supplier is requested to quote price within 2 Decimal places. Quotation with price quote beyond 2 decimal place is ignored.
8	12.1	TENDER PRICES		INR
9	12.2, 33, 36.1	SCHEDULE WISE EVALUATION		Not Applicable
10	12.6	GST DETAILS		No change
11	14	PVC CLAUSE & FORMULA		Not Applicable
12	14.4 TO 14.7	EXCHANGE RATE VARIATION (ERV)		Not Applicable

13	16.2 A) To C)	DOCUMENTS ESTABLISHING TENDERER'S ELIGIBILITY AND QUALIFICATIONS		No change
14	18.4, 18.5	EARNEST MONEY DEPOSIT (EMD)		No change
15	19	TENDER VALIDITY		No change
16	20.4	NUMBER OF COPIES OF TENDERS TO BE SUBMITTED		Tenderer shall submit their tender in Original only.
17	20.8	TWO BID SYSTEM		No change
18	20.9	E-PROCUREMENT		No change
19	34 AND 35.1	COMPARISON ON CIF DESTINATION BASIS		Not Applicable
20	35.2 TO 35.6	ADDITIONAL FACTORS FOR EVALUATION OF OFFERS AND PREFERENTIAL SCHEMES		Not Applicable
21	43	PARALLEL CONTRACTS		Not Applicable
22	44.1	SERIOUS MISDEMEANOURS		No change
23	44.3	INTEGRITY PACT		Not Applicable
24	45.1	NOTIFICATION OF AWARD OF CONTRACT		No change
25	50.	APPLICABILITY OF ADDITIONAL GIT FOR RATE CONTRACTS		Not Applicable
26	51.	APPLICABILITY OF ADDITIONAL GIT FOR PQB TENDERS		Not Applicable
27	52.	APPLICABILITY OF ADDITIONAL GIT FOR TENDERS INVOLVING SAMPLES		Not Applicable
28	53.	APPLICABILITY OF ADDITIONAL GIT FOR EOI TENDERS		Not Applicable
29	54.	APPLICABILITY OF ADDITIONAL GIT FOR TENDERS FOR DISPOSAL OF SCRAP		Not Applicable
30	55.	APPLICABILITY OF ADDITIONAL GIT FOR DEVELOPMENT/ INDIGENIZATION TENDER		Not Applicable

Section IV: GENERAL CONDITIONS OF THE CONTRACT (GCC)

Please refer the link <https://spmCIL.com/uploaddocument/GCC3.0.pdf> for the following:

- 1) Part I: General Conditions of Contract Applicable to All Types of Tenders
- 2) Part II: Additional General Conditions of Contract applicable to Specific Types of Tenders

Section V: SPECIAL CONDITIONS OF THE CONTRACT (SCC)

The following Special Conditions of Contract (SCC) will apply for this purchase. The corresponding clauses of General Conditions of Contract (GCC) relating to the SCC stipulations have also been incorporated below. These Special Conditions will modify/substitute/ supplement the corresponding (GCC) clauses.

Whenever there is any conflict between the provision in the GCC and that in the SCC, the provision contained in the SCC shall prevail.

(Clauses of GCC listed below include a possibility of variation in their provisions through SCC. There could be other clauses in SCC as deemed fit)

Sl.No	GCC Clause No.	Topic	Modify/Substitute/ Supplement	SCC Provision
1	1.2	ABBREVIATIONS:		No change
2	6.1, 6.2, 6.3 & 6.5	PERFORMANCE BOND/ SECURITY		Applicable; 5% of Contract Value valid for a period up to 60 days beyond the date of completion of all the contractual obligations.
3	8.2	PACKING AND MARKING		No change
4	9	INSPECTION AND QUALITY CONTROL		No change
5	11.2	TRANSPORTATION OF DOMESTIC GOODS		No change
6	12	INSURANCE		No change
7	14.1	INCIDENTAL SERVICES		No change
8	15	DISTRIBUTION OF DESPATCH DOCUMENTS FOR CLEARANCE/ RECEIPT OF GOODS		No change
9	16.2,16.4	WARRANTEE CLAUSE		Guarantee applicable for 36 months from the date of issue of Final Acceptance Certificate by IGMH.
10	19.3	OPTION CLAUSE		Not Applicable
11	20.1	PRICE ADJUSTMENT CLAUSE		Not Applicable
12	21.	TAXES AND DUTIES		No change
13	22.	TERMS AND MODE OF PAYMENTS		100% payment will be made within 30 days from the date of final acceptance Certificate.
14	24.1	QUANTUM OF LD		No change
15	25.1	BANK GUARANTEE AND INSURANCE FOR MATERIAL LOANED TO CONTRACTOR		Not Applicable
16	33.1	RESOLUTION OF DISPUTES		No change
17	36.3.2, 36.3.9	DISPOSAL/ SALE OF SCRAP BY TENDER		Not Applicable

Section VI: LIST OF REQUIREMENTS

Sch. No	Brief description of goods and services (Related specifications etc. are in Section-VII)	Accounting unit	Quantity	Amount of Earnest Money (INR)	Place of Delivery for GST purpose
01.	Supply, Installation, Testing And Commissioning of 33KV Indoor Vacuum Circuit Breaker (VCB) Switchgear Panels With Associated Control, Relays, Cables, Accessories, Civil Works, Relay Testing On Turnkey Basis	AU	1.00	Rs. 2,50,000 (Rupees Two Lakh Fifty Thousand only)	India Government Mint, Hyderabad -500051, Telangana, India.

1. **Required Delivery Schedule:** 6 Months from the date of issue of Notification of Award of Contract (NAC)/ Purchase order (P.O) whichever is earlier.
2. **Required Terms of Delivery:** Free on Road (F.O.R) India Government Mint, Hyderabad.
3. **Destination:** India Government Mint, P.B. NO. 10, H.C.L. POST, I.D.A. PHASE II, CHERLAPALLY, HYDERABAD – 500 051. (TELANGANA)
4. **Earnest Money Deposit:** (Refer Point No. 10 of NIT for Modes of Payment)
The required Earnest Money Deposit for the above tendered items is Rs.2,50,000/- (Two Lakh Fifty Thousand only) shall be submitted scanned copy along with e-tender in Techno-Commercial Bid.

The EMD shall remain valid for a period of 45 days beyond Bid Validity i.e., 90+45 = 135 days after the date of opening of the tender. Any short validity, the tender shall be treated as unresponsive and rejected. The EMD should be in Indian Rupees only. Successful tenderer's EMD will be returned without any interest, after the receipt of Performance Security from the tenderer. Unsuccessful Tenderers EMD will be returned to them without any interest, after expiry of the tender validity period.

The firm who are registered under UDYAM as Micro & Small Enterprises (MSEs) for Manufacturing/Selling, National Small Industries Corporation (NSIC), District Industrial Centres (DIC), Small Scale Industries (SSI) for Manufacturing/Selling of Tendered Goods may be exempted from submitting the EMD subject to the submission of valid certificate(s) during the tender validity period.

EMD must be furnished along with the tender in the form of Demand Draft/ Fixed Deposit Receipt denominated in Indian Rupees drawn on any Scheduled Commercial Bank, in favour of India Government Mint, Hyderabad payable at Hyderabad.

Note: Earnest Money Deposit (EMD) in original shall be sent to the designated officer Mr. V. Kiran Kumar, Joint General Manager (Materials), India Government Mint, Hyderabad through post or by hand so as to reach within 5 days' time of tender opening.

5. Two bid systems:

- i. E-Tender will consist of Two Bid system i.e. Part I – Techno-commercial Bid and Part II -Financial/ Price Bid.
- ii. The tenderer is requested to submit their quotations in two parts –
 - a. First part, called the Techno-commercial Bid, containing the relevant technical details and documents required as per relevant sections of the tender document such as Section VII, Section VIII, Section IX & EMD Details. *This part shall not contain any price aspects i.e., price bid should not be submitted here.*
 - b. The Second part, Called Financial Bid, contains Price quotation/Offer for the tendered item.
- iii. Part I- Techno-commercial Bid and Part II- Financial/ Price Bid are to be submitted through e-tendering portal i.e. CPPP (E-tendering) <https://etenders.gov.in/eprocure/app> on or before the due date of submission of tenders.
- iv. Revealing of Price in Techno-commercial Bid would only lead for rejection of Bid.
- v. Price bid will be considered of those firms who will qualify in the Techno-commercial bid. The opening date of the financial bid will be intimated accordingly to those firms who have qualified in Techno-Commercial Bid.
- vi. All the Documents/Copies submitted by the tenderer shall be complete in every aspect with all their enclosures/ attachments duly numbered and signed on each and every page of the bid.
- vii. The bidder has to sort and arrange the documents as per the tender document and only then numbering of the document(s) maybe done accordingly.
- viii. Bidder has to furnish stipulated documents in support of fulfilment of qualifying criteria. Non-submission or incomplete submission of documents may lead to rejection of offer.

6. Bidder has to furnish stipulated documents in support of fulfilment of qualifying criteria. Non-submission or incomplete submission of documents may lead to rejection of offer.

Section VII: TECHNICAL SPECIFICATIONS

Item/Machine/Equipment/Goods:

1.0 DESCRIPTION OF THE COMPLETE SYSTEM:

I. OBJECTIVE OF PROPOSED SYSTEM:

The proposed work involves the supply, installation, testing, and commissioning of an indoor type 33 KV, 26.3 kA Vacuum Circuit Breakers switchboard cubical panel on a turnkey basis. This includes:

- i. Replacing the existing 33kV VCB switchgear panel with a new indoor, 7-panel configuration.
- ii. Provision of 02 incomers, 01 bus coupler, 01 bus riser, and 03 outgoing feeder panels.
- iii. Ensuring SCADA-ready compatibility for remote monitoring and operation.
- iv. Inclusive of associated civil works, earthing systems, trenching and interconnections to ensure seamless transition.
- v. Execution of the project on a turnkey basis with all material, testing, commissioning, and warranty coverage.

The scope also covers the replacement of Old VCB Panels at IG Mint Hyderabad. The new panels will be adjacent to the existing ones, requiring a trench of 1 meter wide and 1.2 meters deep as per site requirements. The power cable from Incomer-1 terminated to the existing VCB Panel will be removed and connected to Incomer-1 of the new panel. Similarly, the outgoing power cable to the 5 MVA transformer will be disconnected from outgoing-1 VCB and connected to outgoing-1 of the new VCB panel.

II. PROCESS FLOW:

- i. Civil trenching work for new cable routing.
- ii. Dismantling of old panels in phased manner.
- iii. Installation of new VCB panels in proposed orientation.
- iv. Electrical interconnection of incomers and outgoing feeders.
- v. Relay testing and trial run followed by full commissioning.

2.0 TENTATIVE BILL OF QUANTITY:-

Sr. No.	Description of Material	Quantity
1	Supply and Installation , testing & commissioning of indoor type VCB cubical panel of 33 KV HT VCB in MRS having 02 INCOMER + 01 BUSCOUPLER (BR) + 01 Bus Riser + 03 OG FEEDER]	1 AU (1SET)
	Supply and Installation of 33 KV HT Cable:-	
2	3 Core X 240 sq. mm Al. Ar. Cable 33 KV	As per site requirements
3	3 Core X 300 sq. mm Al. Ar. Cable 33 KV	As per site requirements
4	3 Core X 400 sq. mm Al. Ar. Cable 33 KV	As per site requirements
5	Supply and Installation of 33 KV heat Shrinkable term. kit HT Cable as required	As per site requirements
6	Supply and Installation of 33 KV HT Straight through jointing kit as required	As per site requirements
7	Copper Lugs & Brass cable Glands for termination of cables as required	As per site requirements
8	Supply and fixing of cable trays as required	As per site requirements

9	Disconnection & Removal of 33 KV HT cables	As per site requirements
10	HT/LT Electrical inspector charges statutory	As per site requirements
11	HT/LT revised SLD (single line diagram)	As per site requirements
12	Metallic Caution Boards as per IS standard	As per site requirements
13	Supply and Installation of Rubber mats of 33 KV Voltage Grade	As per site requirements
14	Supply and Installation of shock treatment chart	As per site requirements
15	First aid kit	1 set
16	portable Co2 fire extinguisher (22.5 kgs)	03 nos
17	sand buckets (9 liters) with suitable stand	02 nos
18	Third party testing for entire work	1 AU
19	Panel testing and commissioning	1 AU
20	Civil works & construction of Masonry underground cable trench	As per site requirements
21	Supply and fixing of MS chequered plate	As per site requirements

Note:- Firm shall visit/inspect and confirmation of the site required quantities in the above BoQ to be assessed. Accordingly, Quotation needs to be submitted.

MAKE- SIEMENS / Schneider/ GEC / ALSTHOM /JYOTI/Kirloskar/EQUIVALENT

3.0 TECHNICAL BRIEF ABOUT THE PROJECT:

I. SCOPE:

This Specification covers the basic requirements in respect of 33 KV, 26.3 KA Vacuum Circuit Breaker having SCADA Compatible facilities switchgear panel integrated with associated indoor control and relay panels for installation at MSDS in IGM, Hyderabad. The Specification covers the requirements of indoor switchgear with relays & controls. The control and relay panel should form integral part of the switchgear (i.e. should be physically integrated into one unit). The specification is intended to cover the Design, Engineering, supply, installation, testing and commissioning of indoor type vacuum circuit breakers cubical panel with adequate capacity of electrolytic copper bus bar in horizontal arrangements and consisting the set of vacuum circuit breakers, manufactured and tested as per IS: 13118 for VCB & IEC :62271-100,200 for Switchgear and control panel. The necessary Electro- Mechanical interlocking arrangement between incomer and bus couplers shall be provided in such a way that the Bus coupler / Bus couplers can only be switched on if any One Incomer / is put OFF as per the site conditions requirements. Each compartment shall be separated from adjacent one by sheet steel barrier.

The equipment offered shall be complete with all parts necessary for their effective and trouble-free operation. Such parts will be deemed to be within the scope of the supply irrespective of whether they are specifically indicated in the specifications / order or not and specification attached hereto form an integral part of this specification for all purposes. Design shall allow further extension at either end in future.

The equipment offered shall conform to the relevant standards and be of high quality, sturdy, robust and of good design and workmanship complete in all respects and capable to perform continuous and satisfactory operations in the actual service conditions at site and shall have sufficiently long life in service as per statutory requirements. In actual practice notwithstanding any anomalies, discrepancies, omissions and incompleteness etc. in these specifications, the design and constructional aspects, including materials and dimensions, will be subject to good engineering practice in conformity with the required quality of the product, and to such

tolerances, allowances and requirements for clearances etc. as are necessary by virtue of various stipulations in that respect in the relevant Indian Standards, IEC standards, I.E. Rules, I.E. Act and other statutory provisions.

II. INTENT OF SPECIFICATION:-

The specification is intended to cover the Supply, installation, testing and commissioning of indoor type 33 KV, 26.3 kA Vacuum Circuit Breakers having SCADA Compatible facilities switchboard cubical panels with the replacement of old VCB Panels at IG Mint Hyderabad. The Vacuum Circuit Breakers will be integrated with associated indoor controls and protection relays panels. The Vacuum Circuit Breakers isolation will be horizontal along with Horizontal draw out type with distinct SERVICE/TEST/ISOLATE Positions. The Switchboard Panels should **have adequate capacity of electrolytic copper bus bar in horizontal arrangements and consisting the set of vacuum circuit breakers, manufactured and tested as per IS: 13118 for VCB & IEC :62271- 100,200 for Switchgear and control panel for MSDS at India Govern mint Hyderabad** on Turnkey basis.

III. **TECHNICAL SPECIFICATIONS OF 33KV, 26.3 kA INDOOR VACUUM CIRCUIT BREAKER SWITCHGEAR PANEL INTEGRATED WITH ASSOCIATED CONTROL AND RELAYS**

i. **MAIN RECEIVING STATION (MRS) VCB CUBICAL PANEL TECHNICAL DETAILS:-**

The VCB panel shall have capacity and facilities to install 07 Nos of draw out VCB's, which includes 02 Nos as Incomer, 01Nos as Bus coupler, 01Nos Bus Riser Panel and 03 Nos shall be of Outgoing Transformer Feeders. VCB It shall be with manual as well as electrically operated ON, OFF and TRIP operations through spring charge mechanism having arrangements for charging the spring through manual cranking handle and through electrical motor gear along with suitable electromechanical indications of the VCB's operational status. The complete work i.e. Design, engineering, supply, installation, testing and commissioning of indoor type 33kV, 26.3 kA Vacuum Circuit Breakers switchboard cubical panel at site is on turnkey basis.

Qty- 01 set [**CONFIGURATION:** - 02 INCOMER + 01 BUSCOUPLER (BR) + 01 Bus Riser + 03 OG FEEDER]

VCB MAKE- SIEMENS / Schneider/ GEC / ALSTHOM/JYOTI/Kirloskar/Equivalent

ii. **TOLERANCES:**

Tolerances on all the dimensions shall be in accordance with provisions made in the relevant Indian/IEC standards and in these specifications. Otherwise the same will be governed by good engineering practice in conformity with required quality of the product.

iii. **SERVICE CONDITIONS:**

System particulars: -

S.NO	System particulars	Details
1	Nominal system voltage	33 KV
2	Frequency	50 Hz ± 3%
3	Number of phases	3
4	Neutral earthing	Solidly grounded
5	Short time Current Rating	26.3 kA

Equipment supplied against the specification shall be suitable for satisfactory operation under the following tropical conditions:-

- Max. ambient temperature-50 Deg. C
- Max. relative humidity up to 90 %
- Max. annual rainfall- 650- 700mm

- d. Max. altitude above mean sea level: 584 mtrs.
e. Reference Ambient Temperature for temp. rise- 50 Deg. C

The equipment shall be of suitable design to work satisfactorily under these conditions.

iv. **Auxiliary D.C. supply**

Auxiliary D.C. supply required for the operation of VCB and VCB panel (Closing, tripping, indications, protection etc.) should be taken from the existing Battery Bank. The existing Battery bank and charger available at MRS will be utilized for required function of VCB and VCB panel. The firm shall confirm the compatibility of Battery charger and if it is not useful then firm has to supply the same as per requirement.

v. **CODES AND STANDARDS:-**

- A. The design, manufacture and performance of the equipment shall comply with all currently applicable statutes, regulations and safety codes. NOTHING IN THIS SPECIFICATION SHALL BE CONSTRUED TO RELIEVE THE TENDERER OF THIS RESPONSIBILITY.
- B. Unless otherwise specified, the equipment offered shall confirm to the latest applicable Indian, IEC Standards which are as follows:-
1. IS: 13118 for VCB & IEC: 62271-100,200 for Switchgear and control panel.
 2. All other accessories used in switchgear panel shall confirm to the latest applicable Indian, IEC standards.

vi. **GENERAL TECHNICAL REQUIREMENTS:-**

A. **33KV INDOOR SWITCHGEAR:**

1. Switchgear for Indoor installation shall be Indoor metal clad, draw out type and fully Compartmentalized having 26.3 kA short time current rating. All panels shall be of unitized construction providing facility for extensions on both sides. Switchgear panels are required, viz. the incomer panel, the bus section panel, bus riser (if required) panel and the outgoing feeder panel.

Circuit breaker Type and rating:-

d.1	REFERENCE STANDARD	IEC-62271-100; 2002
d.2	NO. OF PHASES & POLES	3
d.3	INTERRUPTING MEDIUM	Vacuum
d.4	RATED FREQUENCY	50 HZ +/- 3%
d.5	VOLTAGE CLASS	
d.5.1	Nominal System Voltage	33kV
d.5.2	Rated Voltage	36kV
d.5.3	Rated 1 min Power Frequency Withstand Voltage	
d.5.3.1	Between Live Terminal to Earth	70kV
d.5.3.2	Between Open Breaker Contacts	70kV
d.5.4	Rated 1.2/50 micro-sec Impulse Withstand Voltage	170kVp
d.6	CURRENT	
d.6.1	Rated continuous Current at 40 deg C Ambient	800A
d.6.2	Deration for 45 deg C Ambient	0.96
d.6.3	Deration for 50 deg C Ambient	0.92
d.6.4	Rated Short Time Current for 3 sec..	26.3 kA
d.6.5	Rated Peak Withstand Current	66 kAp

d.6.6	Rated Making Current	66 kAp
d.6.7	Rated Breaking Capacity	
d.6.7.1	Symmetrical at System Voltage	1500 MVA
d.6.7.2	Symmetrical at Rated Voltage	1500 MVA
d.6.7.3	% DC Component	36%
d.6.7.4	Asymmetrical	Based on 36% DC component
d.7	DUTY CYCLE	
d.7.1	Normal	0-3 min -CO-3 min -CO
d.7.2	Auto reclosing	0-300ms - CO-3min-CO
d.7.3	Minimum Dead Time	300 ms
d.7.4	Whether Dead Time Adjustable	No
d.14	SPECIFIC SWITCHING REQUIREMENT	
d.14.1	Rated Short Line/Kilometric breaking Current	Not applicable below 52kV as per IEC 56 (1987) CL. No. 4.105
d.14.2	Rated Line Charging Breaking Current	Not applicable below 72.5kV as per IEC 56 (1987) CL. No. 4.107
d.14.3	Rated out of Phase Breaking Current	Not assigned
d.14.3.1	For Earthed Neutral System	Not applicable below 100 kV. As per IEC 56 (1987) CL. No. 4.106
d.14.3.2	For Other than Earthed Neutral System	Refer table No VIA, CL.No. 4.106 IEC 62271-100
d.14.4	Rated Cable Charging Breaking Current	50Amps for "CC2" category as per IEC62271-100
d.14.5	Rated Small Inductive Breaking Current	Test parameters under consideration of IEC as per Cl. No. 4.112
d.14.6	Rated Capacitor Bank Switch Current	
d.14.6.1	Single Phase	
d.14.6.2	Three Phase	400Amps 3-phase for "C2" category as per IEC62271-100
d.14.6.3	Whether Breaker Restrike Free	Yes
d.16	OPERATING MECHANISM	
d.16.1	Fixed trip/Trip Free	
	Motor Operated	Trip Free
	Solenoid Operated	NA
d.16.2	Type of Antidumping Device	Contactora (Standard), Relay on request
d.16.3	Type of Mechanism	Standard: Motor Operated, Spring Charged Stored Energy
d.16.4	Closing Coil	
d.16.4.1	Rated Voltage	Standard: 110DC. Other Voltage on request.
d.16.4.2	Voltage Operating Range	85%-110%
d.16.4.3	Power for closing	
	At rated Voltage	<=250VA
	At 80% rated Voltage	
	At 100% rated Voltage	
d.16.5	Trip Coil	
d.16.5.1	Rated Voltage	Standard: 110DC. Other Voltage on request.
d.16.5.2	Voltage operating range	70% - 110%
d.16.5.3	Power for Tripping	
	At rated Voltage	<=250VA
	At 80% rated Voltage	

	At 100% rated Voltage	
d.16.6	Spring Charging Motor	
d.16.6.1	Type of Motor	Universal Motor
d.16.6.2	Rated Voltage	110V/220 Volts: Other voltages on request
d.16.6.3	Permissible Voltage Variation	85 to 110%
d.16.6.4	Power Rating	100VA
d.16.6.6	Full Load Current	Less than 1Amps
d.16.6.8	Insulation Class	F
d.16.7	Operation sequence stored in spring	O - C - O
d.16.8	Is spring Immediately Charged after closure	Yes
d.16.9	Slow Closing/Opening for Maintenance	NA
d.16.10	Provision for Manual Spring Charging	Provided
d.16.11	Type of Operation Counter	5 Digit, Stroke Counter
d.16.12	Mechanical Life	30000 Operations

2. Circuit Breakers used shall be VCBs of specified rating for the various types. The design of the breaker truck shall be such that there will be flexibility of interchanging between incomer to incomer, bus section to bus section and feeder to feeder trucks, where similar rated breakers are offered.

3. **Materials:** Materials for the incomer, bus section and feeder panels (each breaker panel) shall be as follows:

3.1) **Incomer panel:**

- a. Draw out type Vacuum circuit breaker having 800A Amps. Continuous Current Rating and 26.3 kA for 3 sec. short time current rating, complete with operating mechanism and accessories.
- b. 3 nos. of current Transformers of ratio of suitable ratings.
- c. 3 nos. of single phase PTs of suitable ratio as per site condition suitable to our requirement. PT should be connected to the incomer with proper protection arrangement.
- d. One mechanical ON/OFF indicator.
- e. One mechanical 'spring charged' indicator.
- f. One T-N-C control switch for circuit breaker.
- g. Remote-Local switch for circuit Breaker.
- h. All Relay and instruments etc.
- i. Set of MCBs, stud type terminals and control wiring.
- j. Fuse/MCB and link for Motor Starter, indication lamps, push buttons, meters.
- k. Space heaters with thermostat control, one each for the breaker chamber, bus bar chamber and the CT/cable chamber along with a common MCB mounted inside LT control wiring.

3.2) **Bus Coupler:**

- a. Draw-out type vacuum circuit breaker having 800A Amps continuous current rating and 26.3 kA for 3 sec. short time current rating, complete with operating mechanism and accessories.
- b. 3 nos. of CTs of suitable ratio.
- c. One T-N-C control switch for circuit breaker.
- d. Remote-local switch for circuit Breaker.
- e. One mechanical ON/OFF indicator.
- f. One mechanical 'spring charged' indicator
- g. Three nos. of space heaters with thermostat control, one each for the breaker

chamber, bus bar chambers and the CT/cable chamber along with a common MCB mounted inside the L.T. Control Cubicle.

- h. Set of MCBs, stud type terminals, and control wiring.
- i. Fuse and link for Motor Starter.
- j. All Relay and instruments etc.

3.3) Feeder (outgoing) panel:-

- a. Draw-out type vacuum circuit breaker having 800AMP continuous current rating and 26.3 kA for 3 sec. short time current rating, complete with operating mechanism and accessories.
- b. 3 nos. of CTs of suitable ratio.
- c. One T-N-C control switch for circuit breaker.
- d. Remote-local switch for circuit Breaker.
- e. One mechanical ON/OFF indicator.
- f. One mechanical 'spring charged' indicator.
- g. Space heaters with thermostat control, one each for the breaker chamber, bus bar chamber and the CT/cable chamber along with
- h. A common MCB mounted inside the L.T. control cubicle.
- i. Set of MCBs, stud type terminals, and control wiring.
- j. Fuse/MCB and link for Motor Starter.
- k. All Relay and instruments etc.

B. BUSBAR:

1. 33 KV bus bars shall be of electrolytic copper and shall be rated for 800AMP Continuous current. The electrolytic copper bus bar of adequate Cross sectional area shall be considered and it should be uniform through the length for the bus bars. The bus bar edges/ends shall be rounded off/ chamfered so that there will not be any sharp edges/projections. All bus connections, joints and taps shall be tinned or silver plated, Connections shall be as short & straight as possible
2. 33kV bus support insulators and other equipment insulators shall have a minimum creepage distance as per IS standards. These insulators shall be of solid core porcelain or epoxy resin cast, with suitable design. Insulators shall have cantilever strength.
3. All fasteners (Nuts Bolts) used for bus bar connections shall be of non- magnetic stainless steel. Only Belleville type washers shall be provided for each nut bolt. If the fasteners used are not of stainless steel, the tenderer shall state in their offer the material which is used and confirm that the same is non-magnetic and is superior to stainless steel.
4. The bus bars along with their supporting insulators etc. shall have a short time current rating of 26.3 KA for 3 sec. This shall be confirmed by the tenderers in their technical offer.
5. Clearances between phases and between phase and earth shall be kept so as to obtain high reliability. However, minimum clearances as shown below shall be kept.
 - 5.1) Phase to Phase As per IS Standard
 - 5.2) Phase to earth As per IS Standard
6. If any special insulating material is proposed to achieve the effect of above clearances, details of the same shall be furnished in the technical offer.

C. CIRCUIT BREAKERS:

1. The circuit breakers offered shall be Vacuum Circuit Breakers and of Horizontal draw out Horizontal Isolation type with distinct SERVICE/TEST/ISOLATE Positions and provided with set of safety shutter of polycarbonate material. Breakers shall be of 3 pole design for use in 33KV indoor switchgear. It shall be removable trolley type with manual as well as electrically operated ON,OFF and TRIP operations through spring charge mechanism having arrangements for charging the spring through manual cranking handle and

- through electrical motor gear along with suitable electromechanical indications of the VCB's operational status. The removable trolley (Two nos. for MRS) shall be supplied with each set to facilitate the breaker movement.
2. The circuit breaker shall have 26.3 kA for 3 sec. short time current rating. The circuit breaker for incomer and bus section shall have 800AMP. Continuous current rating for feeders shall have 800AMP continuous rating. Circuit breaker shall be suitable for rapid reclosing cycle i.e. 0-0.3 sec.- CO-3 min.-CO.
 3. The circuit breaker shall be provided with Manual and motor operated spring charged closing. Spring charging motor shall be suitable for 240V, 50 Hz, single phase AC. Suitable rating starter shall be provided for Motor protection. Spring release coil for closing shall be suitable for 110 V DC. Provision shall be available for charging the springs manually as well, and to close CB mechanically.
 4. Tripping of the circuit breakers shall be through "Shunt trip" coils rated for 110 V DC auxiliary supply. It shall be possible to trip the breaker manually in case of necessity.
 5. All circuit breakers shall have mechanical ON/OFF indicator and spring charge indicator. These shall be visible from the front without opening the panel door. Also there shall be provision for mechanical (manual) tripping and also for manual charging of the springs.
 6. Each operating mechanism of the circuit breaker shall be provided with adequate number of Cam/Snap type auxiliary switches of normally open and normally closed contacts for the control and operation of the equipment.
 7. Adequate numbers of "NO/NC" contacts of the C.B. shall be wired up to the terminal block. Following contacts shall be wired up to the terminals and clearly marked up in the relevant drawings.
 - 7.1) Terminal for remote indication of breaker ON/OFF.
 - 7.2) Terminal for remote indication of spring charge.
 - 7.3) Terminal for remote indication of trip circuit healthy.
 - 7.4) Terminal for remote closing / Opening
 - 7.5) Terminal for remote trip.
 - 7.6) Operation counter
 - 7.7) Terminals for Test & Service Position of VCB
 8. Safety shutters (polycarbonate material) which close automatically to prevent accidental contact with the live bus after withdrawal of the C.B. shall be provided.
 - 8.1) Electrical anti pumping device shall be provided for breaker.
 - 8.2) Each breaker should be equipped with RACKING - IN- OUT LEVER
 - 8.3) Mechanical under voltage release override shall be provided.
 9. **Supply, installation & fixing of GI perforated type cable trays of various sizes:-** Supply, installation, fixing of GI perforated type cable trays of various sizes as per the site condition requirement wherever necessary with MS angle support, GI slotted C channel at an interval of 1 meter or MS angle iron fabricated support for cable laying. If any material required, it shall be the part of the work and shall be arranged and will be the responsibility of the successful bidder.
 10. **Oil painting:** Oil painting of all MS fabrication work with anti-rust treatment coats and main colour paint shall also be executed by the successful bidder.
 11. **CIRCUIT BREAKERS CONTROL SWITCH:**
 - 11.1) Trip-neutral-close, (T-N-C SWITCH) handle must be pushed in to spring return type to either trip or close position from Neutral position.
 - 11.2) **Interlocks:**
 - a. Breaker truck cannot be withdrawn or inserted when breaker is closed.
 - b. Breaker can be operated only in Service/ Test position.
 - c. Breaker cannot be moved from service to test position in ON state.

- d. Closing of the breaker should be possible only when the breaker truck is in service or test position and not in a position in between.

12. PROTECTIVE RELAYS: Suitable for automation through the SCADA (Make:- Schneider/Alstom/C&S/Siemens/Ashida or equivalent)

- 12.1) The protective relays shall be suitable for the station auxiliary supply (110 V DC for MRS) and have facility of a test push button to test the relay functioning or else as per the design.
- 12.2) It should be preferably draw out type O/C, E/F and High speed Trip Relay or as per the design.
- 12.3) For each incomer, bus section and outgoing feeder, over current relay, earth fault relay, trip circuit supervision relay and Master trip relay shall be provided for protection.
- 12.4) For each incomer, Bus coupler and outgoing feeder, high speed tripping relay/Master tripping relay shall be provided. All action of tripping shall be through high speed tripping relay/Master tripping relay in event of fault. Master tripping relay shall be of hand reset type.
- 12.5) **MAIN RECEIVING STATION VCB switchgears panel:** -Only Outgoing feeders for i.e., MAIN RECEIVING STATION shall be provided with auxiliary relay type VAA for BUCHHOLZ, OT, WT Alarm and Trip. Interlocking/command provision for such faults /Alarms shall be made at L. MAIN RECEIVING STATION VCB switchgear panel by laying armoured copper cable/cables of required size from substation no-4 for each transformer to MRS panel if required.(If existing cables are available then same can also be utilised for interlocking).
- 12.6) All the relays shall be suitable for flush mounting, with only the flanges projecting on the front and connections at the back. Relays shall have dust-proof covers removable from the front. Protective relays shall have built-in test terminals as per the standard design of the relay manufacturer/supplier. All the above relays shall be suitable for 110V DC as per the requirement of set.
- 12.7) Trip circuit supervision scheme shall be such that testing of Trip Circuit Healthy is possible irrespective of whether the C. B. is in the closed or open position. The Trip Circuit Healthy LED should glow continuously in CB 'ON' Position and on demand in C.B. '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.

D. CURRENT TRANSFORMERS:

1. As the C.Ts. are being prone to failure due to various reasons, the quality and reliability of the CTs are of vital importance. C.T. shall be rated for 26.3 kA for 1 sec. short time current. Insulation used shall be of very high quality, details of which shall be furnished in the technical offer.
2. The instrument security factor for metering core shall be low.
3. Primaries shall be wound or bar type, rigid, high conductivity grade copper conductor. Unavoidable joints on the primary conductor shall be welded type, preferably lap type.
4. Suitable insulated copper wire of electrolytic grade shall be used for CT secondary winding. Multi ratio in CT shall be achieved by reconnection of secondary winding tapping.
5. Secondary terminal should have the short circuiting facility and to be brought on terminal with marking.
6. The CTs shall be resin/epoxy cast. Contact tips on primary terminals shall be silver plated. Correct polarity shall be invariably marked on each primary and secondary terminal.

7. Details of CTs:-

- 7.1) IS: 2705 or IEC 185 or as per latest applicable standard.
- 7.2) Class of Insulation: E or as per latest applicable standard.
- 7.3) CT Details for Incomer /Bus coupler /Feeders
(As per the current rating of feeder)

a. **Incomer:-**

- a.1) CT ratio: - As applicable
- a.2) Class of accuracy
 - a.2.1. Core I- 0.5 /1
 - a.2.2. Core II- 5P10 or better
- a.3) Purpose of each core
 - a.3.1. Core I - Metering
 - a.3.2. Core II - Protection
- a.4) BURDEN
 - a.4.1. Core I -10VA or better
 - a.4.2. Core II - 10VA or better

b. **Bus coupler:-**

- b.1) CT ratio- As applicable
- b.2) Class of accuracy
 - b.2.1. Core I - 0.5 /1
 - b.2.2. Core II- 5P10 or better
- b.3) Purpose of each core
 - b.3.1. Core I - Metering
 - b.3.2. Core II - Protection
- b.4) BURDEN
 - b.4.1. Core I -10VA or better
 - b.4.2. Core II - 10VA or better

c. **Outgoing Feeders:-**

- c.1) CT ratio- As applicable
- c.2) Class of accuracy
 - c.2.1. Core I - 0.5 /1
 - c.2.2. Core II- 5P10 or better
- c.3) Purpose of each core
 - c.3.1. Core I - Metering
 - c.3.2. Core II - Protection
- c.4) BURDEN
 - c.4.1. Core I - 10VA or better
 - c.4.2. Core II - 10VA or better

Make-Vidyut/Jyoti/ECS/AE/Pragati/Shah or Equivalent

E. POTENTIAL TRANSFORMER:

1. Potential transformers shall be single phase units connected to the line side in the respective incomer. H.V. side shall be connected in star formation and L.V. side in star formation. Three numbers of HRC fuses of suitable rating shall be provided for HV side/LV side.
2. P.T. shall be draw out type and provided in a separate compartment. The primary and secondary contacts (moving & fixed type) shall have firm grip while in service. Service position locking mechanism shall be provided and indicated by bidder in relevant drawing. Rigidity of primary stud point with earth bus in service position shall be

confirmed. The PT design should be such that the HT fuse is encapsulated in EPOXY material to avoid direct exposure of high voltage terminals. The PT compartment shall be suitable for easy accessibility and as per the design of the VCB.

3. P.T. shall be epoxy/resin cast. Contact tips of primary/secondary contacts shall be as per the latest standard. Correct polarity shall be distinctly marked on primary and secondary terminal with adequate space.
4. Details of PTs
 - 4.1) IS: 3156 or IEC 186 or as per latest applicable standard.
 - 4.2) Class of Insulation: Class E or as per latest applicable standard.
 - 4.3) a) Rated primary voltage- as per latest applicable standard.
 - 4.4) b) Rated secondary voltage- as per latest applicable standard.
 - 4.5) Ratio: - as per latest applicable standard.
5. Burden: - 50 VA or better
6. Class of accuracy: Core I - Class 0.5 or better & 3P (dual purpose)

Make-Vidyut/Jyoti/ECS/AE/Pragati/Shah or Equivalent

vii. **CUBICLE DETAILS FOR MAIN RECEIVING STATION VCB PANELS:-**

- A. The switchgear cubicle (panel) shall be made of sheet steel of thickness not less than 2 mm CRCA or better and shall be free standing floor mounting indoor type, Door and load bearing members shall be of 2.5 mm thick sheet or as per latest applicable standard. There shall be sufficient reinforcement to have level surfaces resistance to vibration and rigidity during transportation & installation. Cubicle shall be dust, moisture & vermin proof, and shall provide degree of protection not less than IP4X in accordance with IS. Each cubicle is to be provided with base frame of 75 x 40 x 5 mm. The cubicle shall be designed such that in both the test and isolated position of the C.B truck, the front cover of the cubicle shall remain closed.
(Make: - JSPL/ Rittal or any equivalent)
- B. Design & construction of the switchgear panel shall be of the highest order. All sheet steel work shall be treated as per the seven tank metal pre-treatment process before applying primary coating. For the final coat (stowed) epoxy paint color shade of Siemens Grey RAL – 7032 should be used. The panels after final painting shall present an aesthetically pleasing appearance, free of any dent or uneven surface.
- C. Two separate earthing terminals shall be provided in each panel and shall be connected to the earth bus within the panel. The earth bus shall be of copper and shall have adequate cross sectional area not less than 40 mm width and adequate thickness should be of 06 mm (06 X 40 mm).
- D. Each of the Switchgear panel shall be of unitised construction with all necessary accessories like end covers etc. However the design shall allow for the extension on both sides without limit. Bus bar design shall be such that panel to panel interconnection can be carried out without difficulty as and when required.
- E. Explosion vents of suitable design shall be provided on the roof sheet of the bus bar/cable/CT's chambers so as to enable discharge of explosive gases from inside during a flashover. However the provision of explosion vent shall not affect the degree of protection/vermin proofing of the panel.
- F. Cable compartment shall be provided at the rear of the switchgear panels and shall be suitable for cable entry from the bottom cable trenches & Rear access with bolted covers only. Rear bottom plates of the cable compartment shall be fitted with removable gland plates of adequate size for fixing the cable glands as per the site conditions.
- G. Cable compartments for the incomer and feeder shall be suitable for terminating 300 sq.mm XLPE cables. Copper terminator strip of suitable size shall be provided for termination of cables and shall have adequate height inside to accommodate the heat shrinkable type indoor cable termination. Cable compartment shall be robust enough & self-supporting. The design shall be such that the weight of the power cable within the compartment shall not cause direct

pressure on the C.T. studs. Suitable clamping arrangement shall be provided at the bottom of the cable compartment. Each power cable shall be terminated independently.

- H. a) The existing cables shall be used for Incomer and for outgoing feeders. If, length of existing cables are not sufficient to connect in New VCB panel at respective Incomer/ outgoing feeder, the appropriate length of cable piece of same size and rating, HT cable jointing kit, cable end termination kit, cable glands, lugs and all other materials required to extend the length of cable for termination in VCB panel shall be arranged and will be the responsibility of the successful bidder.
- b) Providing chequered plates for trench covering.
- c) Dismantling of existing 33KV old OCB switchgear panel in phase manner.
- d) Dismantling of existing old cables connections and all allied things.
- e) Disconnection, removal & Re-termination of all the Existing cables of (all sizes) with Heavy duty lugs, cable glands (double compression type glands) with clips for termination on cable glands earthing.

I. The accessories required:-

Supply, installation, Termination, Testing and Commissioning of following accessories:-

1. HT Cables, Termination kit, Cable joint, Cable Glands, Straight joint:-

1.1) HT Cables

- a. a) XLPE, Armoured, Aluminium conductor, 33 KV HT cable 3 C X 300 sq.mm.
Qty- As per site requirement.
- b. b) XLPE, Armoured, Aluminium conductor, 33 KV HT cable 3 C X 240 sq.mm
Qty- As per site requirement.

Note: - Firm shall supply HT Cables mentioned above only after inspection and confirmation of the site requirement.

1.2) Termination KIT:- Heat shrinkable type (Indoor) as per the site requirement

1.3) Straight Joint termination kit:- Heat shrinkable Type (Indoor) as per the site requirement

1.4) HT cable glands of various sizes and Lugs as per the site requirement

1.5) Termination KIT (Outdoor):- Heat shrinkable type as per the site requirement
Heat shrinkable termination kit with lugs etc. for Ht cables as per the site requirement

1.6) LT cables: - Supply, installation, laying, termination, testing and commissioning of following LT cables

- a. 1.5 sq.mm , multi core , copper conductor ,multi stranded , armoured cable, 1.1KV grade XLPE insulated conforming to latest applicable standard as per the site requirement.
- b. 2.5 sq.mm , multi core , copper conductor ,multi stranded , armoured cable, 1.1KV grade XLPE insulated conforming to latest applicable standard as per the site requirement

Note:- Firm should use and supply the reputed brands like Polycab/Finolex/CCI/Havells /RR/Gloster or any equivalent for XLPE cables. Firm should use and supply the reputed brands like Raychem /Cabseal /Vikchem / Superseal /Mahindra /3M brands for cable jointing kit and cable end termination kit.

J. CONTROL WIRING:

1. All control wiring shall be carried out with 1100 volts grade single core, multistrand flexible copper wires with PVC insulation. The conductor size shall be 1.5 sq.mm (minimum) for circuits. Wiring channel may be used for routing the cables. Wire numberings and colour code for wiring shall be as per IS standard. Yellow/Green wires of Size 2.5 sq.mm shall be used for earthing. The wiring diagram for various schematics shall be made on thick and durable white paper in permanent black ink and same should be encased in plastic cover, thermally sealed. It should be kept visibly in a pocket of suitable

size of MS sheet of 1 mm thickness, on the interior surface of the door of C & R Panel.

2. All front mounted as well as internally mounted items including MCBs shall be provided with individual identification labels. Labels shall be mounted directly below the respective equipment and shall clearly indicate the equipment designation.
3. Further it shall be ensured that any control wiring if at all routed through the H.T chamber is properly insulated and provided with metallic barriers to prevent damages due to heat.

viii. **WIRING AND CONTROL WIRING TERMINALS:-**

- A. Terminal blocks shall be of clip-on design made out of non-trackable insulating material of 1100 V grade. All terminals shall be stud type, with all current carrying and live parts made of tinned plated brass.
- B. The terminal connector/blocks shall be disconnecting type terminal connectors with shorting of C.T. secondary terminals shall be provided in CT secondary circuit. 2.5 sq mm wires shall be used for CT secondary. All other terminal connectors shall be Non- disconnecting type. Terminal should be shock protected in single moulded piece. Terminal block should have screw locking design to prevent loosening of conductor.
- C. Spare terminals shall be provided in panel. All terminals shall be provided with ferrules indelibly marked or numbered and identification shall correspond to the designations on the relevant wiring diagrams. The terminals shall be rated for adequate capacity which shall not be less than 10 Amps for control circuit. For power circuit it shall not be less than 15 Amps.
- D. All front mounted as well as internally mounted items shall be provided with individual identification labels. Circuit identifications name plate at the front and back side for identifications should be present. Labels shall be mounted directly below the respective equipment and shall clearly indicate the equipment designation. Labelling shall be on aluminium anodized plates of 1 mm thickness, letters are to be properly engraved.
- E. All fuses used shall be of HRC type and all MCBs as per latest IS standard (amended up to date) of adequate rating shall be used.
- F. **Danger Board Plate:-** The danger board shall be riveted /pasted on the front and back side of each VCB panel as per the standard in force. Each panel shall be riveted on front and back side of each VCB panel with nomenclature of respective Incomer/ feeder for easy identifications.
- G. **Name plate marking:** - The switchgear panels shall have the name plate carrying the following data indelibly marked:-
 1. Name of manufacturer
 2. Purchase Order Number with date
 3. Designation & serial number,
 4. Year of manufacture
 5. Rated voltage,
 6. Rated normal current,
 7. Rated frequency,
 8. Rated Short Circuit Making capacity,
 9. Rated Short Circuit Braking capacity,
 10. Short time Current for 1 sec.(kA) 3 sec
 11. Rated Insulation Level
 12. Rated Operating sequence Aux. Voltage (DC/AC)

ix. **CONTROL AND RELAY PORTION OF 33 KV INDOOR SWITCHGEARS:**

- A. The relays, meter and equipment as described below should be provided on the switchgear for each incomer, bus-section, and feeder as follows:-

Description:-

1. Vacuum Circuit Breaker for Each Incomer:
2. Vacuum Circuit Breaker for Each Bus coupler:
3. Vacuum Circuit Breaker for Each outgoing feeder:

4. Motor for spring charge.
5. Starter with fuse and link for Motor.
6. Ammeter, with selector switch, DIGITAL TYPE.
7. Power factor meter. (Only for Incomers)
8. Voltmeter, with selector switch (Only for Incomers), DIGITAL TYPE
9. Trivector energy meter (Only for Incomers)
10. 10 .Frequency Meter (Only for Incomers), DIGITAL TYPE
11. Control switch for circuit breaker.
12. Local/Remote selector switch.
13. Auto/Manual selector Switch.
14. Indicating LED (Amber colour) for 'Trip Circuit Healthy' (for all breakers)
15. Push button for 'Trip circuit Healthy Test'
16. Indicating LED (White colour) for 'spring charged'
17. Indicating LED (Red colour) for C.B. 'ON'
18. Indicating LED (Green colour) for C.B. 'OFF'
19. Indicating LED for Auto Trip
20. Surge Arrestor for all incomers in MRS
21. All Incomers, Bus couplers, and outgoing feeders should have Numerical over current and earth fault relay with communication protocol for SCADA compatibility. The relay shall be 50/50N, 51/51N, 95 (Trip circuit supervision relay).
22. High Speed Master Trip Relay
23. Alarm scheme consisting of alarm relay(s), indicating LED and Accept/Reset push button(s)
24. Space heater along with MCB
25. Thermostat
26. Toggle switch for Heater
27. Cubicle illumination lamp along with door operated control switch.
28. TNC switch

B. Alarm equipment's:-

1. All the VCB panel (Incomer, Bus coupler, Outgoing feeders) shall be provided with:-
 - 1.1) Eight point (8) annunciators
 - 1.2) One alarm hooter and alarm indicating auxiliary relays.
 - 1.3) It shall indicate the tripping of the circuit breaker under fault condition.
 - 1.4) It shall be complete with the indicating lamp with acknowledge and reset push button.
 - 1.5) **Make:- Alan/Seco or equivalent**

C. Trip circuit supervision scheme shall be provided for each circuit breaker with trip circuit supervision relay facility.

x. TESTS:

A. TYPE TESTS:

The equipment offered in the tender should have been successfully type tested at ERDA/CPRI/PEHLA laboratories by the successful bidder/or the Principle Manufacturer/ or OEM/ or Panel Integrator for following tests in line with the relevant standard and technical Specification, and to submit complete set of the type test reports along with the technical bid and also submit these reports before commencement of supply.

1. Short time withstand current test
2. Temperature rise test
3. Lightning impulse voltage test
4. Power frequency voltage test

B. ROUTINE TEST:-

All routine test as per IS or IEC standard shall be carried out and submit the reports with Materials.

1. Functional test
2. Power frequency voltage withstand test
3. Primary current injection test
4. Insulation resistance test
5. Interchangeability of similar rating circuit breaker
6. Dimension check
7. Mechanical operation of circuit breakers.

xi. EARTHING: - for MRS 33KV Indoor Cubical Panel

A. The maintenance free earthing of adequate quantity should be done.

B. Supply of earthing system: Detailed Technical Specification:

This specification covers adequate quantity of earth electrodes, ground enhancing materials used for a maintenance free earthing system in line with the guidelines given in the latest applicable Indian standards to ensure that the resistance of the earth pits will be as per applicable standard limit i.e. around 2 Ohms or lower.

C. Earth Electrode: High tensile low carbon steel rod of 3 Mts length & 32 mm dia. with bonded copper on the outer surface. The Carbon Steel Rod shall be tested & certified for short current time rating as per latest IS standard.

D. Activated Carbon Based/ or equivalent Back-fill Grounding Compound:

The Back-fill compound will be strictly Activated Carbon based/or equivalent conductive type, having a very low resistivity as per standard. The Back-fill shall be tested as per applicable IEC. The composition of Back-fill compound will be such that it will not require the continuous presence of water / moisture / salt to maintain its conductivity. The Back-fill compound will contain corrosion inhibitor to prevent oxidation of Earth electrode. The Back-fill compound will not contain hazardous chemicals to human & soil.

Earthing Compound Make - Indelec / Jef Techno System/Erico/equivalent

E. INSTALLATION OF EARTHING SYSTEM:- The firm shall carry out the digging work required for the earth pit of size 3 Mtr depth at specified location and it will be filled with carbon based or equivalent material earthing powder in proper proportion in mixture as per standard guideline. The firm shall connect the earthing electrode with suitable size of copper connector to the earthing strip. The firm shall install the test link box at the earth pit chamber with the all required accessories to complete the earthing system. After completion of the earthing system work, the firm shall carry out the earthing resistivity test and value of the resistance will be maintained less than 2 ohm as per applicable Indian standard. The earth pit will be properly covered with heavy duty PVC/metallic removable cover.

F. Supply of GI Earthing Conductor:- Earthing Material of conductor: Soft Mild steel with Galvanized Size of conductor: 50mm x 5 mm Supplied GI Conductor should have Zinc coating of 100-150 Microns to avoid corrosion or deterioration due to environmental factors.

G. Installation & Commissioning of GI Earthing Conductor :- The firm shall route and lay the GI earthing Conductor (size: 50mm x 5 mm) from New earth pits to the New HT switchgear panel as per standard guideline.

xii. OTHER IMPORTANT WORKS:-

A. STATUTORY PERMISSION FOR ENERGIZING THE SWITCHGEAR PANEL:-

The bidder firm should be responsible for Statutory permission for energizing the switchgear panel from Central Electricity authority / state electricity authority as per CEA regulation, and shall be arranged by the bidder firm. The permission will include the submission of application, site inspection visit, test reports and all related documents required for getting the

installation approved certificate from authority.

B. Third party (government approved Electrical contractor) testing:-

The entire New HT electrical installations should be tested through third party agency/firm.

Third party testing shall be arranged by the successful bidder.

Testing for Followings:-

1. Electrical HT panels
2. Relays
3. Earthing
4. HT Cables

C. General Requirements for Protective, Measuring & Control Equipment

Sl. No.	Equipment	Technical Parameters		Make
		Specifications	Requirements	
I	Numerical Protection Relay (O/C & E/F)	O/C Setting:	50% to 200% of Base	Schneider / Alsthom / C&S / Siemens / Ashida or equivalent
		Current E/F Setting:	10% to 40% of Base Current	
		Communication:	RS 485 MODBUS protocol	
		CT Secondary Current	5 Amp	
		Contacts:	2 set of Self Reset N/O contacts or as per design	
		Mounting:	Flush	
		Type:	Numerical protection relay over current and earth Fault	
		Aux. Voltage:	110V DC (MRS)	
		Operational Indicator:	Flags	
		IS Reference:	Latest version	
II	High Speed Master Trip Relay	Type	High Speed of Operation	Schneider / Alsthom / C&S / Siemens / Ashida or equivalent
		General Design	Electromechanical	
		Coil Rating	110V DC (MRS) or as per the site condition	
		Time Setting	Instantaneous	
		Aux Contacts	As per design	
		Operational Indicator	Mechanical flag in window, Hand reset Type	
		Mounting	Flush	
		Application	High speed tripping duties to serve as master Trip relay in C. B. Control Panel.	
		IS Reference	Latest version	
III	Auxiliary Relay (Buchholz/Oil/Windin	General Design	Electromechanical	Schneider / Alsthom / C&S
		Coil Rating	24 V---30 V DC /110	

	g)		V DC or as per the site Condition /requirement	/ Siemens / Ashida or equivalent
		Time Setting	Instantaneous	
		Aux Contacts	As per the site condition/ requirement with spare provision	
		Operational Indicator	Mechanical Flag in window: Hand Reset Type	
		Mounting	Flush	
		Application	For Alarm and Trip (through a master trip relay)	
a	Ammeter (Digital):	In each Circuit, one digital ammeter and associated selector switch shall be provided.		Any standard brand
		Mounting	Flush	
		Response Time	1 sec	
		Operating Temperature	Up to 55°C	
		Frequency:	50 Hz	
		Operating Current	5 A from CT Secondary	
		Type	Digital Display	
b	Voltmeter (Digital)	Mounting	Flush	Any standard brand
		Response Time	1 Second	
		Operating Temperature	Up to 55° C	
		Auxiliary Supply	As per the site	
		Frequency	50 Hz	
		Operating Voltage	110V from PT Secondary	
		Type	Digital Display	
c	Digital Frequency Meter	Mounting	Flush (96 sq.mm)	Rishab / Secure / Schneider / ABB or equivalent
		Size	96 sq.mm	
		Range	45-55 Hz	
		Dielectric Strength	2 kV RMS, 1 min	
		Type	Digital Frequency Meter	
V	Space Heater with Thermostat	Capacity	200 W	Any standard brand
		Voltage	240 V AC	
		Type	Strip Type	
VI	Thermostat	Voltage	240 V AC	Any standard brand
		Range	30-90°C	
VII	Contactors for Antipumping Duty	Contacts:	2 N/O + 1 N/C or as per site condition/ requirement	ABB / Schneider / Siemens or equivalent
		Coil:	30V / 110V DC or as per site	

			condition/ requirement	
VIII	L/R Switch	I. 02 (TWO) Position stay-put handle II. 02 (TWO) Contacts to close in each position as per the site condition/requirement		Rishab/ Secure/ Kaycee/ Switron/ Teknic or equivalent
IX	Auto/Manual Selector Switch	Stay-put type, firm grip handle , 02 (TWO) Contacts to close in each position Auxiliary Voltage: 30V / 110V DC as per the site condition/requirement		Rishab / Secure / Kaycee / Switron / Teknic or equivalent
X	LED Indication Lamp, Push Button, TNC Switch	Voltage	24-30V DC & 110V DC	Rishab / Secure /Kaycee / Switron / Teknic or equivalent
		TNC Switch	Spring return type	

D. ELECTRICAL HIGH VOLTAGE INSULATING MATS:-

Firm should provide the electrical High Voltage insulating mats as an insulating media for floor covering in front of VCB panel as a safeguard against any leakage or short-circuit current. Electrical high voltage insulating rubber mats as per latest standard and suitable for working up to 33 KV voltage applications.

Thickness- 3 mm
Size- As standard

Total length - The electrical high voltage insulating mats shall be provided in such a length to cover the total length of VCB panel /panels for the sets as mentioned above.

E. The successful bidder should submit the updated single line Diagram of the installation.

F. The successful bidder should supply & install the followings:-

1. Shock treatment chart
2. First aid kit with wall mounting stand
3. Portable fire extinguisher
4. Sand bucket with stand

G. The successful bidder should disconnect and remove the existing HT/LT cables of various sizes from the cable trench, cable tray, duct etc. wherever required including civil works if any.

1. **Civil works:-** For the successful installation of HT 33 KV VCBs switchgear panel all ancillary civil works are the part and parcel of scope of work which includes the followings:-
 - 1.1) Construction of base foundation,
 - 1.2) New trench.
 - 1.3) Reconstruction of existing cable trench/ new cable trench.
 - 1.4) Providing M.S. chequered plates.
 - 1.5) All other ancillary civil works as per the foundation details, general floor plan & GA drawing which are not mentioned /specified here but necessary for installation, commissioning of the VCB panel shall be executed in the same cost and price without any additional cost to purchaser. The floor level shall be Plain

(zero level) without any slope for smooth insertion of CB trolley, for smooth closing and opening of doors, aesthetic look of panel positioning. The successful bidder should check and confirm the floor level before placing of VCB panels. The work which is not specifically indicated but necessary for equipment's/panels successful installation and commissioning shall be the part of the order without any additional cost to Purchaser.

4.0 TOOLS AND TACKLES:-

- I. Special Tools and tackles which are necessary for installation, erection, commissioning, maintenance and overhauling of the equipment shall be arranged and supplied with Each panel for MRS separately.
- II. Firm should supply the Metal tool box containing all standard tools as per the best engineering practice for MRS separately.
- III. Firm should supply the standard Ratchet tool box as per the best engineering practice for MRS separately. Make:-Stanley

5.0 INSPECTION:

- I. The inspection shall be carried out by the purchaser at any stage of manufacture. Also before the dispatch, pre dispatch inspection shall be carried out at seller's site. The successful Tenderer shall grant free access to the purchaser's representative/s at a reasonable notice when the work is in progress. Inspection and acceptance of any equipment under this specification by the purchaser 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.
- II. The supplier shall keep the purchaser informed in advance, about the manufacturing program so that arrangement can be made for stage inspection.
- III. The purchaser reserves the right to insist for witnessing the acceptance/routine testing of the bought out items. The supplier shall keep the purchaser informed, in advance, about such testing program.

6.0 DOCUMENTATION:

- I. After placement of Purchase order, the successful bidder shall submit 1 set of complete Drawings for approval. If any modifications are required on these, the same will be conveyed to the supplier who shall modify the drawings accordingly and furnish final drawings for approval.
- II. LIST OF DRAWINGS TO BE SUBMITTED:-

All the Drawings shall be submitted in 03 (Three) sets.

1. GA of indoor panels Switchgear.
2. Typical single line diagrams for panel Switchgear.
3. Sectional view of incomer, bus coupler & feeder panels.
4. Electrical circuit diagram showing all details with nomenclature/parts designation.
5. GA of Current Transformer
6. GA of Potential Transformer.
7. Technical particulars of Switchgears./maintenance procedure.
8. Foundation details for Panel Switchgear.
9. Schematic Diagram for incomer bus coupler & feeder section of Switchgear.
10. Protection Circuit for incomer bus coupler & feeder section of Switchgear.
11. DC control circuit for incomer, bus coupler & feeder section.
12. Metering circuit for incomers, bus coupler & feeder section.

7.0 GENERAL TERMS AND CONDITIONS:-

- A. The entire works being on turnkey basis, the firm may inspect the site with prior intimation to IGM HYDERABAD to see the actual quantum of works which may include breaking of floor, construction of new cable trench, supply of chequered plates, any type of civil works in

addition to the main scope of work. However, it is strongly recommended to inspect the site before submission of bid by the participating firm.

- B. Any additional item/items i.e. Civil, Electrical, Mechanical or any category which are not mentioned in this tender but necessary for equipment's/panels successful installation and commissioning shall be the part of the order without any additional cost to Purchaser. Hence, bidder firm must keep in mind these unforeseen works may be the part and necessity of project for successful installation and commissioning of the item/Items and quote accordingly.
- C. Statutory permission for energizing the switchgear panel from Central Electricity Authority as per CEA regulation shall be arranged by the supplier. Purchaser will only pay the statutory license fee as per the Government Norms.
- D. The participant bidder should have 05 years practical experience of HT Installations.
- E. The firm should attach the valid electrical contractor's license along with the quotation otherwise quotation will not be considered.
- F. Before execution of works, the temporary supply arrangement shall be made by the firm to feed the power supply to the existing feeders connected on these Bus to avoid the production loss.
- G. The entire work is on turnkey basis; hence all tools, tackles and all other related ancillary should be arranged by the firm.
- H. For the successful installation, commissioning of HT VCB panels all civil works related to this job including foundation, trench making, GA arrangement for foundation, floor leveling, chequered plate provision etc. shall be carried out by the firm being a turnkey project.
- I. Firm shall arrange and execute all necessary requirements for partial Temporary arrangement to facilitate the VCB switchgear panels installation at both locations to keep the power supply available to run the plant without hampering production.
- J. The works which is not specifically indicated/mentioned in the works but necessary for equipment's/VCB switchgears panels successful installation, testing and commissioning shall be the part of works & shall be executed by the firm without any additional cost.
- K. If shutdown is essential for erection of works, one by one shutdown will be arranged by IGM HYDERABAD on pre intimation basis.
- L. The firm should take necessary precautionary measures and follow safety norms as per the safety codes.
- M. Firm should give 03 Years guarantee of the entire panels, which includes vacuum bottles also.
- N. During Execution of work, in case of any major or minor accident at site, it will be the sole responsibility of the firm and no compensation or penalty to any employee of the firm and their contractors will be borne by IGM HYDERABAD.
- O. Firm shall remove all the existing old OCB panels of respective MRS to facilitate for new VCB panels installation as per the site condition.
- P. It's firm responsibility to remove scrap/old unused materials like old OCB panels, old OCBs, pieces of cables etc. of this work & to be shifted to IGM HYDERABAD scrap yard as per the directives of IGM HYDERABAD official.

8.0 RELAY TESTING:-

Before energizing of 33 KV HT VCB Panel at MRS, the relay testing should be done by the firm & submit certificate.

9.0 FINAL ACCEPTANCE TEST (FAT):

After successful installation & commissioning of 33 KV HT VCB Panel at MAIN RECEIVING STATION, its performance will be observed for one month as FAT. If any fault/ failure observed during this period, firm has to repair/replace the same and performance will be observed for further one (1) month after resolution of fault. On successful completion of FAT, Final Acceptance Certificate shall be issued.

10.0 INFRASTRUCTURE REQUIREMENT:

- I.** The existing Main Receiving Station (MRS) room will be utilized.
- II.** Required civil modifications include cable trenching (1.2m deep and 1m wide), foundation pads for the new panels, and support ducting in the scope of Contractor.
- III.** The installation, testing and commissioning of the VCB panels will be carried out by the contractor.

11.0 PROJECT TIMELINE:

- I.** Completion Period: 6 months from the date of issue of Purchase Order/NAC.

12.0 PERFORMANCE GUARANTEE:

Goods offered shall be guaranteed for a period of 36 months from the date of commissioning and acceptance by IGMH. The stores /materials found defective within the above guarantee period shall be replaced/ repaired by the supplier free of cost; within one month of receipt of intimation. The undertaking to this effect should be furnished along with the offer.

13.0 SAFETY AND STATUTORY COMPLIANCE:

- I.** All equipment shall conform to IS 13118 and IEC 62271-100/200 standards.
- II.** The contractor shall ensure strict adherence to safety practices during all site activities.
- III.** Relay testing and compatibility checks shall be certified before energizing.
- IV.** Scrap and dismantled materials will be shifted to the IGM Hyderabad scrap yard by the contractor.

Section VIII: QUALITY CONTROL REQUIREMENTS

The supplier shall supply the goods as per the technical specification mentioned in Section VII. In addition the supplier has to ensure:

- a. Installation, commissioning and proving of performance to be carried out by the supplier at India Government Mint, Hyderabad within stipulated time and to the satisfaction of user.
- b. India Government Mint, Hyderabad will conduct acceptance test of the delivered system as per the quality control requirements given in the FAT norms.

A. Acceptance Criteria/FAT:-

After successful installation & commissioning of 33 KV HT VCB Panel at MAIN RECEIVING STATION, its performance will be observed for one month as FAT. If any fault/ failure observed during this period, firm has to repair/replace the same and performance will be observed for further one (1) month after resolution of fault.

B. FINAL ACCEPTANCE CERTIFICATE:

On successful completion of FAT, Final Acceptance Certificate shall be issued.

Section IX: QUALIFICATION/ ELGIBILITY CRITERIA

1. Experience & Past Performance:

The Bidder shall have supplied, erected, installed, commissioned 33KV indoor Vacuum Circuit Breaker (VCB) Panel with the same or higher specifications of at least one number in last five years ending on 31.03.2025.

2. Capability - Equipment & manufacturing Facilities:

The bidder must have an annual capacity to Supply, erect, install, commission 33KV indoor Vacuum Circuit Breaker (VCB) Panel with the same or higher specifications.

3. Financial Standing:

a) The average annual financial turnover of the bidder firm (manufacturer or principal of authorised dealer) during the last three years, ending on 31.03.2025 should be at Rs. 49.92 Lakhs as per the annual report (audited balance sheet and profit & loss account) of the relevant period duly authenticated by a Chartered Accountant in India.

b) The net worth of the firm should

- I. not have eroded by more than 30% in the last three financial years ending 31.03.2025 and
- II. Net worth of the bidder should not be negative as on 31.03.2025.

Note:

- i. All experience, past performance and capacity /capability related / data should be certified by the authorized signatory of the bidder firm. The credentials regarding experience and past performance to the extent required as per eligibility criteria submitted by bidder should be verified from the parties for whom work has been done.
- ii. All financial standing data should be certified by certified accountant's e.g. Chartered Accountants (CA) in India
- iii. Bidder to furnish stipulated documents in support of fulfilment of eligibility criteria. Non-submission or incomplete submission of documents may lead to rejection of offer.
- iv. For MSEs and Start-ups (registered for the tendered item) Experience and financial criteria shall be relaxed subject to their meeting the technical specifications and quality parameters. However, their capacity and capability may be verified (if necessary) by I G Mint, Hyderabad as per the standard format enclosed as Annexure – I (Capacity and Capability Assessment Form)

4. Undertaking :

- a) Undertaking for acceptance of all the terms and conditions of the tender along with technical specification & scope of work without any deviation to be submitted duly sealed and signed.
- b) Undertaking of declaration that the bidder is not blacklisted/debarred for dealing by Government of India.
- c) Undertaking towards land border sharing submission criteria as per Ministry of Finance, Department of Expenditure, Public Procurement Division, Orders (Public Procurement 1,2 and 3) F. No. 6/18/2019-PPD dated 23rd/ 24th July 2020 (or any further amendments thereof) regarding eligibility of bidders from specified countries shall be applicable to this tender. Bidders are required submit the appropriate undertaking in this regard.
- d) Documentary/undertaking against Make in India Status i.e. being a Class I/ Class II supplier with details of percentage.

Section X: TENDER FORM

Date.....

To

.....
.....
.....

(Complete address of I.G Mint, Hyderabad)

Ref: Your Tender document No. dated

We, the undersigned have examined the above-mentioned tender enquiry document, including amendment No. -----, dated ----- (*if any*), the receipt of which is hereby confirmed. We now offer to supply and deliver..... (*description of goods and services*) in conformity with your above referred document for the sum shown in the price schedule(s), attached herewith and made part of this tender.

If our tender is accepted, we undertake to supply the goods and perform the services as mentioned above, in accordance with the delivery schedule specified in the List of Requirements.

We further confirm that, if our tender is accepted, we shall provide you with a performance security of required amount in an acceptable form in terms of GCC clause 6, read with modification, if any, in Section V – “Special Conditions of Contract”, for due performance of the contract.

We agree to keep our tender valid for acceptance for a period up to -----, as required in the GIT clause 19, read with modification, if any in Section-III – “Special Instructions to Tenderers” or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this tender upto the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.

We confirm that in case of downloaded Tender Document, we have not changed/ edited its contents. We realise that in case any such change is noticed at any stage including after the award of contract, we would be liable to action under clause 44 of the GIT.

We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry.

We also solemnly declare as under:

1. MSMEs Status:

Having read and understood the Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 (as amended and revised till date), and solemnly declare the following:

- Company /Partnership Firm /Proprietary Concern / Society/Trust / NGO/Others (Please Specify):
- Micro/ Small / Medium Enterprise/ SSI/ Govt. Deptt. / PSU/ Others:
- Name of MSME Registering Body (NSIC/ DIC/ KVIC/KVIB etc.):
- MSME Registration no. (with copy of registration):

Udyog Aadhaar Memorandum no:

Whether Proprietor/ Partner belongs to SC/ ST or Women category. (Please specify names and percentage of shares held by SC/ST Partners):

2. Make in India Status:

Having read and understood the Public Procurement (Preference to Make in India PPP_MII) Order, 2017 (as amended and revised till date) and related notifications from the relevant Nodal Ministry/ Department, and solemnly declare the following:

a) Self-Certification for category of supplier:

- Class-I Local Supplier/
- Class-II Local Supplier/
- Non-Local Supplier.

b) We also declare that

- There is no country whose bidders have been notified as ineligible on reciprocal basis under this order for offered product, or
- We do not belong to any Country whose bidders are notified as ineligible on reciprocal basis under this order.

3. Restrictions on procurement from bidders from a country or countries, or a class of countries under Rule 144 (xi) of the General Financial Rules 2017

Having read and understood the Order (Public Procurement No. 1) issued vide F.No.6/18/2019-PPD dated 23rd July 2020 (and its amendments if any) by Department of Expenditure, Ministry of Finance under the above provision and solemnly declare the following:

We do not belong to any Country whose bidders are notified as ineligible under this order

4. Debarment Status: Please state whether business dealings with you currently stand suspended/ banned by any Ministry/ Deptts. of Government of India or by any State Govt:

- Yes (with period of Ban)
- No, We, solemnly declare that neither we nor any of our affiliates or subsidiaries – including subcontractors or suppliers for any part of the contract – do not stand declared ineligible/ blacklisted/ banned/ debarred by any Government Agency anywhere in the world, for participating in its tenders, under that country’s laws or official regulations.

5. Penalties for false or misleading declarations: I/we hereby confirm that the particulars given above are correct and complete and also undertake to advise any future changes to the above details. We understood that any wrong or misleading self-declaration by us would be violation of code of Ethics and would attract penalties as mentioned in this tender document, including debarment.

.....
(Signature with date)

.....
(Name and designation)

Duly authorized to sign tender for and on behalf of

.....
.....

Section XI: PRICE SCHDEDULE

To,
Chief General Manager
India Government Mint, Hyderabad

OFFER FORM for Tender No..... Date of Opening.....Time..... Hours.....
We.....hereby certify that we are established firm of manufacturers/authorized agents of M/s.with factories atwhich are fitted with modern equipment and where the production methods, quality control and testing of all materials and parts manufactured or used by us are open to inspection by the representative of(Name of Purchaser). We hereby offer to supply the following items at the prices indicated below:-

Sche dule No.	Description	Qty	Unit	Unit Rate (Excl. GST) (₹.)	GST (₹.)			Total value of offer including GST
					CGST @__	SGST @__	IGST @__	
1	2	3	4	5	6	7	8	9 = (5+6+7)/(5+8)
01	<i>SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 33KV INDOOR VACUUM CIRCUIT BREAKER (VCB) SWITCHGEAR PANELS WITH ASSOCIATED CONTROL, RELAYS, CABLES, ACCESSORIES, CIVIL WORKS, RELAY TESTING ON TURNKEY BASIS (As per Section VII)</i>	1.00	AU					

1. Scope of Supply: (Cost break-up of the quoted cost, showing inter-alia costs of all the concomitant Installation/ Commissioning/ Training/ Technical Support/ incidental services/ software/ accessories, considered necessary to make the proposal self-contained and complete must be indicated here.)

2. Taxation Details:

- a) PAN number
- b) Type of GST Registration (Registered, Unregistered, Composition, SEZ, RCM etc.)
- c) GSTIN number
- d) Registered Address as per GST registration and Place of Delivery for GST Purpose
- e) Contact Names, Nos. & email IDs for GST matters (Please mention primary and secondary contacts)

.....

3. It is hereby certified that we have understood the General and Special Instructions to Tenderers (GIT and SIT), and also the General and Special Conditions of Contract (GCC and SCC) attached to the tender and have thoroughly examined specifications/ Quality Control Requirements and other stipulations in Section VII & VIII – Technical Specifications and Quality Control Requirements; and are thoroughly aware of the nature of stores required and our offer is to supply stores strictly in accordance with the requirements and according to the terms of the tender. We agree to abide solely by the General and Special Conditions of Contract and other conditions of the tender in accordance with the tender documents if the contract is awarded to us.

4. We hereby offer to supply the stores detailed above or such portion thereof, as you may specify in the acceptance of tender at the price quoted and agree to hold this offer open for acceptance for a period of ---- days from the date of opening of tender (i.e., upto -----), We shall be bound by the communication of acceptance despatched within the prescribe time.

5. Earnests Money/Bid Guarantee for an amount equal to is enclosed in form of -----(form and reference number, date) as per the Tender Documents.

Dated.....

Signature and seal of Manufacturer/Bidder

Note:

- i. The Bidder may prepare their own offer forms as per this proforma.
- ii. No change in the proforma is permissible.
- iii. No erasures or alterations in the text of the offer are permitted. Any correction made in the offer shall be initialled by the bidder.
- iv. This Section should not bring in any new Technical Parameter that has not been mentioned in the Technical Bid.

Section XII: VENDOR DETAILS

The tenderer should furnish specific details mentioned below. In case a question/ issue does not apply to a tenderer, the same should be answered with the remark "not applicable".

Wherever necessary and applicable, the tenderer shall enclose certified copy as documentary proof/ evidence to substantiate the corresponding statement.

In case a tenderer furnishes a wrong or misleading answer against any of the under mentioned question/ issues, its tender will be liable to be ignored.

1. Vendor/ Contractor particulars:

- a.** Name of the Company:
- b.** Corporate Identity No. (CIN):
- c.** Registration if any with SPMCIL:
- d.** Complete Postal Address:
- e.** Pin code/ ZIP code:
- f.** Telephone nos. (with country/area codes):
- g.** Fax No.: (with country/area codes):
- h.** Cell phone Nos.: (with country/area codes):
- i.** Contact persons /Designation:
- j.** Email IDs:

2. Taxation Details:

- a.** PAN number:
- b.** Type of GST Registration (Registered, Unregistered, Composition, SEZ, RCM etc.):
- c.** GSTIN number:
- d.** Registered Address as per GST registration and Place of Delivery for GST Purpose:
- e.** Contact Names, Nos. & email IDs for GST matters (Please mention primary and secondary contacts):

- We solemnly declare that our GST rating on the GST portal / Govt. official website is NOT negative / blacklisted during the last three financial years.

.....
(Signature with date)

.....

.....
(Full name, designation & address of the person duly authorized sign on behalf of the tenderer)

For and on behalf of

.....

.....
(Name, address, and stamp of the tendering firm)

Section XIII: BANK GUARANTEE FORM FOR EMD

BANK GUARANTEE FOR BID GUARANTEE

(ON BANK'S LETTER HEAD WITH ADHESIVE STAMP)

-----Not Applicable-----

Section XIV: MANUFACTURER'S AUTHORIZATION FORM

To

.....

..... (Name and address of SPMCIL)

Dear Sirs,

Ref. Your Tender Document No....., dated

We,, who are proven and reputable manufacturers of (name and description of the goods offered in the tender) having factories at....., hereby authorise Messrs..... (name and address of the agent) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred tender enquiry documents for the above goods manufactured by us.

We further confirm that no supplier or firm or individual other than Messrs. (name and address of the above agent) is authorized to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred tender enquiry documents for the above goods manufactured by us.

We also hereby extend our full warranty, as applicable as per clause 16 of the General Conditions of Contract read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this tender document.

Yours faithfully,

.....

.....

[Signature with date, name, and designation]

for and on behalf of Messrs.....

[Name & address of the manufacturers]

Note: This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.

Section XV: BANK GUARANTEE FORM FOR PERFORMANCE SECURITY

**PERFORMA OF BANK GUARANTEE FOR CONTRACT PERFORMANCE
GUARANTEE BOND.
(ON BANK'S LETTERHEAD WITH ADHESIVE STAMP)**

Ref

Date

Bank Guarantee No

To,
**The Chief General Manager,
India Government Mint, Hyderabad**

Dear Sir,

1. Against contract vide Notification for Award of the Tender No dated covering supply of (hereinafter called the 'contract') entered into between the (**insert name of Purchaser**) (herein after called as the Purchaser) and M/s. (here in after called the 'Contractor'), this is to certify that, at the request of the Contractor, we (**name of the bank**), are holding in trust in favour of the Purchaser, the amount of (**write the sum here in words**), to indemnify and keep indemnified the Purchaser, against any loss or damage that may be caused to, or suffered by the Purchaser, by reason of any breach by the Contractor of any of the terms and conditions of the said contract and/or in the performance thereof. We agree that the decision of the Purchaser, whether any breach of any of the terms and conditions of the said contract and/or in the performance thereof has been committed by the Contractor; and the amount of loss or damage that has been caused or suffered by the Purchaser, shall be final| and binding on us, and the amount of the said loss or damage shall be paid by us, forthwith on demand and without demur to the Purchaser.
2. We (**name of the bank**), further agree that, the guarantee herein contained, shall remain in full force and effect, for sixty days after the complete conclusion of the contractual obligations to the complete satisfaction of both the BIDDER and the BUYER, including warranty period whichever is later, i.e. till, (hereinafter called the 'said date') and that if any claim accrues or arises against us (**name of the bank**), by virtue of this guarantee before the said date, the same shall be enforceable against us (**name of the bank**), notwithstanding the fact that the same is enforced within six months after the said date, provided that notice of any such claim has been given to us, (**name of the bank**), by the Purchaser, before the said date. Payment under this bond of guarantee shall be made promptly, upon our receipt of notice to that effect, from the Purchaser.
3. It is fully understood that this guarantee is effective from the date of the said contract and that we (**name of the bank**), undertake not to revoke this guarantee during its currency, without the consent in writing of the Purchaser.

4. We undertake to pay to the Purchaser, any money so demanded, notwithstanding any dispute or disputes raised by the Contractor, in any suit or proceeding pending before any Court or Tribunal, relating thereto, our liability under this present, being absolute and unequivocal. The payments so made by us under this bond, shall be a valid discharge of our liability for payment thereunder, and the Contractor shall have no claim against us, for making such payments.
5. We..... **(name of the bank)**, further agree that the Purchaser shall have the fullest liberty, without affecting in any manner our obligations hereunder, to vary any of the terms and conditions of the said contract, or to extend time of performance by the Contractor, from time to time, or to postpone for any time or form, time to time, any of the powers exercisable by the Purchaser, against the said Contractor and to for bear or enforce any of the terms and conditions relating to the said contracts and we..... **(name of the bank)**, shall not be released from our liability under this guarantee, by reason of any such variation or extension being granted to the said Contractor, or for any forbearance and/or omission on the part of the Purchaser, or any indulgence by the Purchaser towards the said Contractor, or by any other matter or thing whatsoever, which under the law relating to sureties, would, but for this provision, have the effect of so releasing us from our liability under this guarantee.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.

Date
Place

Signature
(Printed Name)
(Designation)

Witnesses

(Bank's Common Seal)

Section XVI: CONTRACT FORM

INDIA GOVERNMENT MINT

P.B. NO. 10, H.C.L. POST, I.D.A. PHASE II, CHERLAPALLY, HYDERABAD – 500 051. (TELANGANA)

Contract No..... dated.....

This is in continuation to this office' Notification of Award No..... dated

1. Name & address of the Supplier:
2. IGM's Tender document No..... dated..... and subsequent Amendment No....., dated..... (If any), issued by IGM, HYD.
3. Supplier's Tender No..... dated..... and subsequent communication(s) No..... dated (If any), exchanged between the supplier and IGM in connection with this tender.
4. In addition to this Contract Form, the following documents etc, which are included in the documents mentioned under paragraphs 2 and 3 above, shall also be deemed to form and be read and construed as part of this contract:

- (i) General Conditions of Contract;
- (ii) Special Conditions of Contract;
- (iii) List of Requirements;
- (iv) Technical Specifications;
- (v) Quality Control Requirements;
- (vi) Tender Form furnished by the supplier;
- (vii) Price Schedule(s) furnished by the supplier in its tender;
- (viii) Manufacturers' Authorisation Form (if applicable for this tender);
- (ix) SPMCIL's Notification of Award

Note: The words and expressions used in this contract shall have the same meanings as are respectively assigned to them in the conditions of contract referred to above. Further, the definitions and abbreviations incorporated under Section – V - 'General Conditions of Contract' of SPMCIL's Tender document shall also apply to this contract.

5. Some terms, conditions, stipulations etc. out of the above-referred documents are reproduced below for ready reference:

- (i) Brief particulars of the goods and services which shall be supplied/ provided by the supplier are as under:

Schedule No.	Brief description of goods/ services	Accounting unit	Quantity to be supplied	Unit Price (in Rs.)	Total Price

Any other additional services (if applicable) and cost there of:

- (i) Total value (in figure) _____ (in words) _____
- (ii) Delivery schedule
- (iii) Details of Performance Security
- (iv) Quality Control
 - (a) Mode(s), stage(s), and place(s) of conducting inspections and tests.
 - (b) Designation and address of SPMCIL's inspecting officer
- (v) Destination and despatch instructions
- (vi) Consignee, including port consignee, if any
- (vii) Warranty clause
- (viii) Payment terms
- (ix) Paying authority

.....
(Signature, name, and address of SPMCIL's authorized official)

For and on behalf of.....

Received and accepted this contract.....
(Signature, name, and address of the supplier's executive duly authorized to sign on behalf of the supplier)

For and on behalf of.....
(Name and address of the supplier)

.....
(Seal of the supplier)

Date:
Place:

**Section XVII: LETTER OF AUTHORITY FOR ATTENDING A
PRE-BID CONFERENCE/BID OPENING**

(Refer to clause 24.2 of GIT)

To,
The Chief General Manager,
India Government Mint,
P.B. NO. 10, H.C.L. POST,
I.D.A. PHASE II, CHERLAPALLY,
HYDERABAD – 500 051. (TELANGANA)

Subject: Authorization for attending bid opening on _____ (date) in the Tender of _____.

Following persons are hereby authorized to attend the bid opening for the tender mentioned above on behalf of _____

(Bidder) in order of preference given below.

Order of Preference	Name	Specimen Signature
I.		
II.		
Alternate Representative		
Signature of bidder or Officer authorized to sign the bid Documents on behalf of the bidder.		

Note:

1. Maximum of two representatives will be permitted to attend pre-bid conference/ bid opening. In cases where it is restricted to one, first named representative will be allowed to attend. Alternate representative will be permitted when regular representatives are not able to attend.
2. In case of pre-bid conference, self-attested copy of proof of purchase of Bid documents, in the name of the bidder must be enclosed with this authorization, without which entry would be refused. Bid documents would be available for sale at the site also.
3. Permission for entry to the hall where even is held may be refused in case authorization as prescribed above is not produced.

Section XVIII: PROFORMA OF BILLS FOR PAYMENTS

(Refer to clause 22.6 of GCC)

Name and Address of the Firm.....

Bill No.....

Dated.....

Purchase order.....No.....Dated.....

Name and address of the consignee.....

S.No	Authority for purchase	Description of Stores	Number or quantity	Rate Rs. P	Price per Rs. P	Amount
Total						

1. GST/ CGST/ SGST/ UTGST/ IGST Amount
2. Freight (if applicable)
3. Excise Duty (if applicable)
4. Packing and Forwarding charges (if applicable)
5. Others (Please specify)
6. PVC Amount (with calculation sheet enclosed)
7. (-) deduction/Discount
8. Net amount payable (in words Rs.)

Dispatch detail RR No. other proof of despatch.....

Dated.....(enclosed)

Inspection Certificate No.....Dated.....(enclosed)

Place and Date

Received Rs.....

(Rupees).....

We solemnly certify that:

- a. Goods and Services Tax (GST) charged on this Bill is not more than what is payable under the provision of the relevant Act or the Rules made there under.

- b. Goods on which GST has been charged have not been exempted under the GST Act or the rules made there under and the charges on account of GST on these goods are correct under the provisions of that Act or the Rules made there under.
- c. We are registered with above indicated GSTIN as dealer in the State where in their Billing address is located for the purpose of GST.
- d. This bill form / invoice is not a replacement for the GST invoice. The proper GST invoice as per requirements of GST rules has been sent to the Purchaser as and when deliveries are made to the consignee.
- e. That the payment being claimed is strictly in terms of the contract and all the obligations on the part of the supplier for claiming that payment has been fulfilled as required under the contract.

Revenue stamp
Supplier

Signature and of Stamp

Section XIX: NEFT MANDATE

(Refer to clause 22.2 of GCC)

From: M/s.

Date:

To:

The Chief General Manager,
India Government Mint,
P.B. NO. 10, H.C.L. POST,
I.D.A. PHASE II, CHERLAPALLY,
HYDERABAD – 500 051. (TELANGANA)

Sub: NEFT payments

We refer to RBI's NEFT scheme. Our mandate SPMCIL for making payments to us through the above scheme to our under noted account.

NATIONAL ELECTRONIC FUNDS TRANSFER MANDATE FORM

1.	Name of City	
2.	Bank Code No.	
3.	Branch Code No.	
4.	Bank's Name	
5.	Branch Address	
6.	Branch Telephone /Fax No.	
7.	Supplier's Account No.	
8.	Types of Account	
9.	IFSC code for NEFT	
10.	IFSC code for RTGS	
11.	Supplier's name as per Account	
12.	MICR Code no.	

In Lieu of Bank Certificate to be obtained as under, please attach a bank cancelled cheque or photocopy of a cheque or front page of your bank passbook issued by your bank for verification of the above particulars.

I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold the user institution responsible. I have read the option intimation letter and agree to discharge responsibility expected of me as a participant under the scheme.

Date

Signature of the Customer

Certified that the above particulars are correct as per our record.

Stamp and
Signature of authorized
official of the bank

Section XX: INTEGRITY PACT

(Ref Para 44.3 of GIT)

(To be signed on Plain Paper)

-----Not Applicable-----

Annexure - I
(Capacity and Capability Assessment Form)

D. CAPACITY AND CAPABILITY ASSESSMENT FORM

	Questionnaire	Firm Response	Committee Observation																				
A	Technical Capability																						
1.	Total annual production capacity of the plant (documentary evidence to be provided)																						
2.	Number of item/product making lines available																						
3.	Details of machines for making the item/product																						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">Sr. No.</th> <th style="width: 15%;">Machine Type</th> <th style="width: 15%;">Machine Make</th> <th style="width: 20%;">Machine Speed, if applicable</th> <th style="width: 15%;">Machine Capability</th> </tr> </thead> <tbody> <tr> <td>a)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>b)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>c)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Sr. No.	Machine Type	Machine Make	Machine Speed, if applicable	Machine Capability	a)					b)					c)						
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a)																							
b)																							
c)																							
	a)																						
	b)																						
	c)																						
B	Manufacturing Process																						
1.	Details of available SOP for manufacturing process																						
2.	Brief details of manufacturing process from Raw Material to Finished Product																						
	2a. Technology used																						
	2b. Is there any SPM used (Special Purpose Equipment/Machinery)? If yes, details																						
	2c. Lab testing facilities available along with standards followed																						
	2d. Process parameters and their controls to achieve quality.																						
3.	Is there any hazardous material used in the process/during manufacturing?																						
C	Quality Control																						
1.	Online/offline quality control system deployed																						
2.	Any specific verification system and procedures for finished products?																						
3.	Conditioning facility required for laboratory test, if applicable																						
4.	Details of third-party verification of produced material and stock control, if any																						
5.	Is there any SOP available for online/offline quality control?																						

D	General		
	1.	Details of manpower employed a) Technical/Supervisory b) Skilled Worker (Permanent) c) Skilled Worker (Casual) d) Administration	
	2.	Is the plant certified by ISO or equivalent bodies? If yes, provide details	
	3.	Contingency plan for breakdown?	
	4.	Is any activity outsourced? If so, list activities outsourced.	
	5.	Details of raw material and its quality assurance/control	
	6.	Whether factory premises is in complete possession of the bidder by way of lease which is current or ownership?	
		6a. Factory area (Sq. meters) & adequacy	
		6b. Production	
		6c. Storage of raw material	
	6d. Bonded room facility		
E	Experience		
	1.	Documentary evidence for past experience, if any,	
	2.	Annual quantities supplied in last five years (documentary evidence to be provided).	
Additional Points only for Security Items:			
F	Details of Security Precautions Followed		
	1.	Provision of secured storage of material in the factory and SOP for material transaction	
	2.	Details of security and surveillance system in factory	
G	Material Accounting Procedures		
	1.	Do you have Systematic accounting procedures for raw materials, dies/special tools (if any), coatings, additives, etc.	
	2.	Periodicity of verification for physical stock of the above items.	
	3.	Accountability for destruction of these items	
H	Spoil Management		
	1.	What is the method of disposal of product in case of rejection/spoil management? Furnish details of the method adopted at production site. Is there any SOP in place? Also, provide details of environment compliance, if any.	
	2.	Facilities for destruction of security items (online/offline), details thereof.	
	3.	Facilities for destruction of die / special tools (if any), details thereof; and	
	4.	Effluent Generation and Management, if any.	
I	Dispatch		
	1.	Details of secured transport mechanism	

2.	Details of safe & secure dispatch such as CCTV recordings of dispatch operations.		
3.	Accounting system for finished products inward & dispatch		
4.	Conditioning required for security items before despatch, during transit, during storage and before application (use in the system); and		
J	Manufacturing Process		
1.	Is there any special tool (like mould, die etc.) used for Manufacturing? If yes, do they have any in house making facility or is it outsourced. Details to be shared for accountability of usage of special tools till its destruction record.		
2.	If outsourced, clearance certificates for outsourced companies after scrutinizing manufacturing process, security of the product, accountability to maintain Confidentiality may be provided.		
K	General		
1.	Is entire operation of production from raw material to finishing, testing, die / special tool preparation, complete manufacturing process and destruction of spoils controlled in the premises of the plant?		
2.	Are employees involved in R&D or any other resource personal for this technology are still with your organization? If not, what is their employment status after leaving your organization?		
3.	Source of Raw Materials (Raw Material, other additives, Specifically the security material)"		
4.	Names of the countries to which you have supplied Security item in the last five years indicating annual quantity supplied (documentary evidence to be provided) if applicable		