
	GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED Transmission Circle Office, Jambuva, N.H.No.8, Vadodara-390 014 CIN U40100GJ1999SGC036018 E-mail : setrjambuva.getco@gebmail.com	 आज़ादी का अमृत महोत्सव
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TRANSMISSION CIRCLE JAMBUVA,
VADODARA-14

Tender No:

JTC / 26-27 / 05 (Web Tender)

TECHNICAL BID

PART-I

TENDER FOR

“ Tender for purchase of various types of Fire Extinguishers as per Specifications for various S/S under Dahod and Godhra AM Divisions under Jambuva Circle ”

TENDER NOTICE No – JTC/26-27/ 05 (Web Tender)

Superintending Engineer , Jambuva invites "Offline Tenders" (WEB TENDER) for the "**Tender for purchase of various types of Fire Extinguishers as per Specifications for various S/S under Dahod and Godhra AM Divisions under Jambuva Circle**" From contractors who has executed similar nature of work successfully as mentioned in Qualification requirement criteria given in the tender document. Bidders should fulfill the all the qualification criteria. Otherwise their bids will not be considered & price bid will not be opened.

Tender Papers & Specifications may be down loaded from GUVNL / GETCO web sites www.getcogujarat.com & www.guvnl.com (For view & download only). Tender fee may be paid along with submission of tender in EMD cover, for respective tender. "All the relevant documents of tender to be submitted physically will be received only be Registered Post A.D. or Speed Post addressed to : The Superintending Engineer (TR) Gujarat Energy Transmission Corporation Limited, Circle Office, 220kv Jambuva s/s compound, N.H.no-8, PO: Jambuva, Vadodara - 390014."

"NO COURIERSERVICE OR HAND DELIVERY" will be allowed.

Sr. No.	Name of Work	Estimated Cost with GST in Rs.	Time Limit	Tender Fee Rs.	E.M.D. Rs.
JTC/ 26-27 / 05 (Web tender)	Tender for purchase of various types of Fire Extinguishers as per Specifications for various S/S under Dahod and Godhra AM Divisions under Jambuva Circle		30 Days	590.00 (Non - Refundable) (500.00 + GST applicable 90.00)	4,990.00

1	Tender offer submission (Download) last date up to 16.00 hours only (This is mandatory)	29.06.2026
2	Physical submission of all the relevant documents, last date up to 16.00 hours by RPAD or SPEED POST only.	01.07.2026
3	Date of opening of Tender fee, EMD cover, and technical bid physical opening at 16.10 Hours.	01.07.2026
4	Tentative Date of opening of Price bid,	Shall be intimated separately.

Validity of tender: **120 Days** from the date of opening of Technical Bid.

Bidders are requested to remain in touch with our Web site for extension in date, corrigendum etc. for the above tenders till opening of technical bid.

No tender shall be accepted / opened in case of receipt after due date and time of tender, irrespective of delay due to postal services or any other reasons and the Corporation shall not assume any responsibility for late receipt of tender.

The tenders are to be submitted by the intending bidders with **forwarding letter on their letter head showing list of documents attached with the tender duly signed by Authorized Person of their firm, affixing stamp of their firm**, in single envelop with two separate sealed and super scribed envelopes as listed below:

Envelope No.1: Technical bid and Post Qualification bid data, details specification.
Envelope No.2: Price Bid.

Technical and post qualification bid details specification (envelope No.1) will be opened first and subject to evaluation based on the qualification criteria contained in the individual bid document.

Price bids (Envelope No.2) of bidders who are assessed and declared as substantially technically responsive on evaluation of the technical bid will be opened for further commercial evaluation.

The Earnest Money Deposit and tender fee **plus GST as applicable** will be accepted by Demand Draft on any Nationalized Bank only situated at "VADODARA", drawn in favor of "**GUJARAT ENERGY TRANSMISSION CORPORATION LTD.**"

Tender without EMD and tender fee **plus GST as applicable** shall be rejected. Two separate demand draft for Tender fee and EMD should be submitted with technical bid.

The Corporation reserves the rights to reject any or all tenders or accept any tender without assigning any reason thereof.

The GETCO reserves the right to award the work to one or more bidders, considering their technical and financial capacity **OR** to reject any or all tenders or accept any tender without assigning any reason thereof.

**SUPERINTENDING ENGINEER
GETCO, Transmission Circle,
Jambuva**

**GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED
BARODA**

Date :

I N T E G R I T Y P A C T

OUR ENEAVOUR

To create environment where Business Confidence is built through Best Business Practices and is fostered in an atmosphere of trust and respect between providers of goods and services and their users for the ultimate benefit of society a the nation.

GETCO COMMITMENT

- To maintain the highest ethical standards In business and professional
- Ensure maximum transparency to the Satisfaction of stakeholders.

- To ensure to fulfill the terms of agreement / contract and to consider objectively the viewpoint of parties.
- To ensure regular and timely release of payment on due dates for work done.

- To ensure that no improper demand is made by employees or by anyone on our behalf.
- To give maximum possible assistance to all the Vendors / Suppliers / Service provider and other to enable them to complete the contract in time.
- To provide all information to suppliers/ contractors relating to contract / Job which facilitate him to complete the contract / job successfully in time.
- To ensure minimum hurdles to Vendors/ suppliers / contractors in complete of agreement / contract / work order.

PARTY'S COMMITMENT

- Not to bring pressure / recommendations outside GETCO to influence its decision.
- Not to use intimidation, threat, inducement or Pressure of any kind on GETCO or any of it's employees under any circumstances.
- To be prompt and reasonable in fulfilling the contract, agreement, legal obligations.

- To provide goods and / or services timely as per agreed quality and specifications at minimum cost of GETCO.
- To abide by the general discipline to be maintained in our dealings.

- To be true and honest in furnishing information including payment to agents / sub-agent.

- Not to divulge any information, business details available during the course of business relationship to others without the written consent of GETCO.
- Not to enter into carter / syndicate / understanding whether formal / non-formal so as to influence the price.

Seal & Signature
(GETCO Authorized Signatory)

Seal & Signature
(Party's Authorized Person)

Name :
Designation :

Name :

PART-A

COMMERCIAL TERMS AND CONDITIONS

1 TENDER SPECIFICATIONS:

All technical specification should be ISS/ISI/BIS. Specification framed out by COMPANY shall be separately brought out in the tender documents. No deviation in specification shall be allowed and COMPANY decision shall be final. COMPANY also desires that all the suppliers should possess high quality ISO 9001 / ISO 9002 certificate as on date of publication of tender. The technical scrutiny committee of COMPANY shall evaluate the techno-commercial view of the tender. COMPANY reserves the right to open or not to open the price bid of the bidders on the basis of their past performance of their supplied materials.

Tender should be in two bids.

- a) Techno – Commercial Bid and b) Price Bid.

Incomplete bids and amendments and additions to bids after opening of the bids will be ignored out rightly. The price Bid of Techno-commercially qualified Bidders will be opened. After technical bid is opened, for modification, if any, all shall give equal chance

2 EVALUATION:

Tender Shall be called for in two bids:

2.1 Techno-commercial Bid and

2.2 Price Bid.

2.2.1 The price Bid of Techno-commercially qualified Bidders will be opened.

2.2.2 For modification or relaxation in Techno-commercial Conditions after Technical Bid is opened, all Bidders shall be given equal opportunity.

3 PRICE EVALUATION:

3.1 No price preference shall be given on any account. All Tenders shall be evaluated on firm Price End Cost with GST and Cess as applicable basis unless otherwise mentioned in the Tender documents.

3.2 If the Tender is invited with Total Owning Cost (TOC) Clause, the evaluation shall be done accordingly. For the same, the Bidders have to give the detailed breakup of the End Cost.

4 Negotiation and Price matching:-

4.1 If the Company feels that there is lack of serious competition, or any other valid reasons, the Company may negotiate with the L-1 New and lowest Regular Categories.

4.2 If more than one firm is to be considered for placement of order, then New Supplier has to match price with L-1 Supplier and Regular Supplier has to match with L-1 Regular Supplier, as the case may be, who is technically acceptable.

4.3 The firm, who has submitted their consent for price matching with Regular/ New L-1 bidder, as the case may be, for allotted quantity shall only be considered for placement of order. The consent for price matching with reduction in quantity shall not be considered for placement of order.

4.4 If an order is under execution by a Firm placed by the Company and in the meanwhile Tender is invited for the same item by same Company or by other Company on behalf of them, and the rates received/ negotiated in this subsequent Tender from same Firm are lower than the rates at which the current order is placed, then the lower rates shall apply for the balance quantity of the order under execution, subject to the condition that the technical specifications remain unchanged and the delivery schedule of the order is already completed.

5 TENDER FEE:

Tender fee (Non-refundable) plus GST as applicable as notified in the tender notice should invariably be paid by way of Demand Draft/ Bankers Cheque; otherwise offer will be ignored out rightly. Indian Postal Orders (IPO's) & Cheques are not acceptable. Demand Draft/ Bankers Cheque should be in the "Gujarat Energy Transmission Corporation", **Payable at Vadodara.**

The envelope shall be addressed to **The S.E. of the Circle Office, Jambuva** and the Circle will not be responsible for the transit loss or misplacement. Tender fee Demand Draft must be kept in the cover of EMD; otherwise suppliers offer is liable to be rejected.

6 IMPORTANT:

Both the bids technical and price bid should be submitted simultaneously along with EMD cover in the respective envelopes and super scribed accordingly (duly sealed), so as to reach this office not later than **16.00 Hrs** on due Date as specified in the tender notice through RPAD / Speed post only. Please note, that any bid, technical or price bid and Telegraphic or short offers / bids received after the due date and time will not be accepted and the offer will be ignored out rightly. **NO LATE TENDER/ DELYAED TENDER SHALL BE CONSIDERED.**

Every bidder shall inform their GSTIN No. at the time of payment of applicable fees

7 PRICES:

Prices quoted should be FIRM and on F.O.R. Destination basis (i.e. any of the stores of COMPANY in Gujarat). However, the Tenderer should indicate in the Schedule- "A" (i.e. Price Bid), the break-up of Total Unit F.O.R. Destination Price and Total Unit End Cost with GST and Cess as applicable stating the Unit Ex-works price, freight, packing & forwarding charges, Insurance Charges, GST and Cess as applicable separately in price bid, which is a must. .

If the Supplier/Contractor has opted for the Composition scheme of GST, the same must be clearly specified with valid Declaration & Certificate from Department. In the event of withdrawal/cessation of the Supplier from Composition scheme during the tenure of the contract, the rate (i.e. price) mentioned in the price bid shall be final and any additional GST will have to be borne by the tenderer himself. In no case additional amount towards GST or otherwise will be paid / reimbursed to supplier/contractor. Further Statutory Variation clause will not be applicable in case of Supplier / Contractor has opted for Composition Scheme under GST.

Also, please mention separate applicable HSN / SAC Code and rate of GST and Cess as applicable for each item of Goods/Service. If not specifically mentioned then COMPANY will have the option to take the prices as exclusive of taxes and duties at maximum higher slab rates for the evaluation of the tenders.

The offered prices to be indicated in the format given (i.e. Schedule-A).

The Tenderer should invariably indicate the total unit end cost price considering all their costs / calculations in the Price bid itself for each item and all sub-items if any. This is a must. Cost components hidden / furnished elsewhere will not be considered and will be ignored out rightly.

Every bidder shall inform their GSTIN No. of the registered place(s) wherefrom the bidder intends to supply the goods / services, meaning thereby the bidder has to supply the goods / services from the relevant declared / registered place of supply only.

8 EARNEST MONEY DEPOSIT: (E.M.D.)

'EMD COVER DOCUMENTS' CONTAINS THE FOLLOWING:

The following documents as stated hereunder out of 8 documents mentioned here under of commercial terms and condition of tender are required to be submitted in physical form under Seal cover of "EMD cover Documents".

[1] Tender fee amount by way of demand draft. This is mandatory.

[2] Earnest Money Deposit (E.M.D) amount by way of demand draft and/or valid Bank Guarantee in original OR. This is mandatory.

a) If the EMD amount is more than Rs.1 Lac, it should be paid either by **Demand Draft or Banker's Cheque or Bank Guarantee. Otherwise it should be paid either in Cash (up to Rs. 10,000/- only) at the office address specified in the tender document or by Demand Draft or Banker's Cheque or pay order only.**

Payment of EMD by RTGS/NEFT/on line shall be encouraged.

b) The Micro and Small Scale Industrial (manufacturing) Units registered under Small Scale Industries of Gujarat State and holding subsequent registration with CSPO / NSIC / DGS&D, Registration Certificates for the item under Tender will be

eligible for exemption from payment of EMD on submission of duly notarized copies of their SSI (SSI/ MSME Part-II/ UdyogAadhaar Memorandum) & CSPO / NSIC / DGS&D Registration Certificates in EMD Cover.

- c) The Certificates should indicate the manufacture of items offered. In case of Udyog Aadhaar Memorandum, it should indicate the manufacture of related group of item.
- c) The MSME firms has to submit valid duly notarized copies copies of SSI/ MSME Part-II/ UdyogAadhaar Memorandum) or CSPO / NSIC / DGS&D Registration Certificates in EMD Cover to avail benefit of MSME unit for EMD payment. The documents required for MSME is mediatory to avail benefit of MSME unit.

Also take note that, if the EMD be paid by way of Bank Guarantee, the validity of Bank Guarantee must be for 6 Months from the date of submission of the bid for this tender.

- [3] The Copy of valid vendor registration letter of tender item/s issued by GUVNL or its any subsidiary company OR the copy of receipt of the fees paid towards vendor registration. The complete guideline for registration of vendors & Vendor development policy is attached herewith as APPENDIX-1. This is mandatory wherever applicable as per technical specification / requirement of tender documents.

Note: The bid will be rejected out rightly, if the above mandatory documents i.e. (At Sr. No.: [1] to [3]) are not submitted in physical form in “EMD Cover Documents”.

Moreover, the following documents (for Technical Evaluation) are also required to be submitted in physical form in “EMD Cover Documents”.

- [4] Drawing/s of each item of tender duly signed & stamped of the bidder as per technical specification / requirement of tender documents.
- [5] The Copy of valid Bureau of Indian Standard (BIS) license Or copy of application of renewal (applied before expiry of license) of such license along with photo copy of license (expired) and copy of money receipt / acknowledge of BIS, if license expired at the time of bidding, duly notarized. This is mandatory wherever applicable as per technical specification / requirement of tender documents.
- [6] Valid Type test report of tender item/s, not older than 7 years, from any Govt. approved laboratory or laboratory as per tender requirement / technical specification, duly notarized.
- [7] List of orders of tender item/s, executed / under execution, which are received by bidder in last five years (five years from the date of publishing of the tender), from GUVNL (Formerly GEB) or their subsidiary companies viz. COMPANY/DGVCL/UGVCL/PGVCL/GETCO/GSECL should be submitted in physical form in “EMD Cover Documents”. The details of list of such order/s should cover the details of Order placing company, Date of order, Name of item/s of order, Item wise qty. of order, status of supplies etc. However, the copies of any such orders along with performance reports issued by purchaser should be submitted / uploaded by bidder.
Please note that these details are required for deciding performance / experience / status of bidder.
- [8] The Copy of High Quality ISO certificate duly notarized wherever applicable

The documents mentioned under [4] to [6] are required for technical evaluation of bid hence bidder should submit the same along with the “EMD Cover Documents” in physical form.

- 8.1 All the Bidders shall be required to pay EMD, except those who are exempted as per Industries & Mines Department, GoG New Purchase Policy Resolution No. SPO/102015/691093/CH dated 03/06/2016 for Small and Micro Scale Industries.
- 8.2 In cases, where EMD need not to be paid, valid exemption Certificates duly notarized has to be produced / attached in place of EMD documents as per the Tender Terms and Conditions.
- 8.3 The Micro and Small Scale Industrial (manufacturing) Units registered under Small Scale Industries of Gujarat State and holding subsequent registration with CSPO / NSIC / DGS&D, Registration Certificates for the item under Tender will be eligible for exemption from payment of EMD on submission of attested copies of their SSI (SSI/ MSME Part-II/Udyog Aadhaar Memorandum)& CSPO / NSIC / DGS&D Registration Certificates in EMD Cover. This benefit of exemption will not be admissible if they take part in the tender indirectly either through their dealers, agents, distributors or other intermediators.
- 8.4 The Certificates should indicate the manufacture of items offered.
- 8.5 Government or Semi-Government Organizations, which are being run departmentally & are not Limited Companies, will be eligible for exemption from payment of EMD. Further, Over& above mentioned in clause No.8.3 to 8.5, bidders who are exempted as per Gujarat state purchase policy-2016 will be eligible for exemption from payment of EMD.

8.6 Participants not covered under these categories mentioned at Clause No. 8.3 will have to pay EMD compulsorily, as prescribed below, failing which the "Bid" will be treated as "Disqualified Bid" and automatically stand as "Rejected Bid" at the time of opening of Preliminary / Technical Bid.

Bidder have to submit detailed break up of EMD amount against item/s offered by them in EMD cover in following format:

Sr.	Offered item in tender	EMD Amount for MSME (GB & OGB) Units in Rs.	EMD Amount for Non-MSME units in Rs.

- 8.7 Any basic document with regard to EMD will not be acceptable after closing time of On-line bid of Tender.
- 8.8 If the EMD amount is more than Rs.1 Lac, it should be paid either by Demand Draft or Banker's Cheque or Bank Guarantee. Otherwise it should be paid either in Cash (up to Rs. 10,000/- only) at the office address specified in the tender document or by Demand Draft or Banker's Cheque or pay order only.
- 8.9 EMD of the unsuccessful Tenderers if paid in Cash / Demand Draft / Banker's Cheque will be returned within 15 days from the date of placing of the order to the successful Tenderer through RTGS / NEFT for credit to his Bank Account. The Bidder shall have to give details of his Bank Account with a Cheque duly cancelled. No claim for refund of EMD without original Money Receipt shall be entertained by the Company. The details of refund of EMD by RTGS with transaction No. should be informed to respective bidder by letter/ e-mail etc.
- 8.10 EMD will be returned to the successful Bidders, only on their submission of Performance Guarantee towards execution period (i.e. Security Deposit) against order released on them.
- 8.11 EMD will be encashed & forfeited (i) if the tender, which it covers, is withdrawn during the validity of the offer and (ii) the Tenderer fails to furnish / deposit the Performance Guarantee towards Execution Period (security deposit).

9 SECURITY DEPOSIT (SD) TOWARDS EXECUTION PERIOD:

Security Deposit shall be paid by the successful Bidders irrespective of whether they are SSI Unit or exempted by NSIC.

9.1 The Supplier shall submit the Security Deposit 10% of the order value to cover execution period by DD / Bank Guarantee within 10 days from the date of issue of Letter of Acceptance. Security deposit will be reimbursed only after successful completion of warranty period for minimum 12 Months.

9.2 The successful bidder has to give Bank Guarantee with validity period of additional 01 (One) month i.e. more than actual delivery period to safeguard Company's interest in case any eventuality happening on the last day of the delivery period after office hours of the Bank or Bank holidays.

9.3 Bank Guarantee shall be considered as per Tender terms.

The Micro and Small Scale Industrial (manufacturing) Units registered under Small Scale Industries of Gujarat State and holding subsequent registration with CSPO / NSIC / DGS&D Registration Certificates for the item under Tender shall submit Security Deposit & Performance Bank Guarantee as under on submission of attested copies of their SSI (SSI/ MSME Part-II / UdyogAadhar Memorandum) & CSPO / NSIC / DGS&D Registration Certificates. This benefit of exemption will not be admissible if they take part in the tender indirectly either through their dealers, agents, distributors or other intermediates.

The item wise security deposit(SD) towards execution of contract is given as under.

Sr.No	Items	Amount	
		For MSME /non MSME unit	For Gujarat based MSME unit
1	Distribution Transformers & meter (All types), Conductors, Cables, Insulators, Steel items, Kit-Kat fuses, L/T. Dist.boxes, Transformers oil, Line Hardware and PVC pipes	10%(Ten) of the contract value in the form of DD/BG to cover execution period.	04%(Four) of the contract value in the form of DD/BG to cover execution period.

2	Metal Meter Boxes, G.I.Wires, Stay Wires, Earthing Plates	10% (Ten) of the contract value in the form of B/G to cover the Warranty period.	02%(Two) of the contract value in the form of DD/BG to cover execution period
3	Transmission items ,Generation &other	10% (Ten) of the contract value in the form of B/G to cover the Warranty period.	04% (Four) of the contract value in the form of B/G to cover the Warranty period

9.4 The Supplier / Contractor can submit only one Bank Guarantee considering the Performance Guarantee requirement.

9.5 The Bank Guarantee shall be from the Nationalized Banks or any other Banks, as Notified by the Finance Department, Govt of Gujarat from time to time.

9.6 In case of delivery deferment by Company, option should be given to the supplier to submit new BG towards execution period for balance order value subject to the supplier have submitted Performance Guarantee towards Guarantee / warrantee period.

10 VALIDITY OF THE OFFERS:

The offers will have to be kept valid for a period of **120 days** from the date of opening of technical bids. In case of finalization of the tender is likely to be delayed, the tenderers will be asked to extend the same without change in the prices or any terms and conditions of the offer. If any change is made, original or during the extended validity period, the offers will be liable for outright rejection without entering into further correspondence in this regard and no reference will also be made.

11 RAILWAY RECEIPT (R.R.) / TRUCK RECEIPT (T.R.):

All goods should be dispatched freight paid and the R.R. /T.R should be forwarded directly to the consignee by registered letter and not through any Bank or COMPANY Office of Vadodara.

It should be immediately intimated on dispatch of the stores, as otherwise demurrage charges if any paid by the consignee will be deducted from supplier's bill. It is essential that packing notes and prices invoices should be furnished to the consignees in respect of every consignment with a copy to this office.

A clear R.R. /T.R. should be obtained from the Railway authorities / Transport Authorities without any ambiguity, otherwise the supplier will be held responsible for any damages / shortage claim rejected by the Authorities for want of a clear R.R. /T.R.

Materials may be dispatched by any convenient mode of transport and up to COMPANY stores i.e. F.O.R. Destination.

Materials may be dispatched by any convenient mode of transport and up to Corporation's stores i.e. F.O.R. Destination -220KV Godhra S/S under Godhra AM Division.

12 PACKING AND FORWARDING CHARGES:

The prices shall be inclusive of packing & forwarding charges. The stores should be strongly and adequately packed to ensure safe arrival at destination. The materials dispatched from overseas by Air / Shipping should be packed in such a way that it can withstand rough handling and possible corrosion due to exposure to salt laden atmosphere, salt spray or open storage. All packing must be clearly marked with order Number and consignee's name and address.

13 TRANSIT INSURANCE:

All the materials will be required to be supplied up to Destination against all transit risks, such as damage, loss, theft, fire, etc. The insurance period shall cover 30 days after the date of receipt of materials at site in order to enable COMPANY to check up stores fully. The suppliers will be responsible for free replacement of such stores components as may be reported by the consignee which have been received short, damaged or broken within 30 days.

The cost of damaged, defective stores materials will however be deducted from the bills of the suppliers and will be refunded only after replacement thereof. It will be the responsibility of the supplier to lodge claim against the insurance on receiving necessary advice from the consignee.

14 ACCEPTANCE OF STORES:

All or any stores and materials to be supplied at 220KV Godhra S/S, against this contract will be subject to their acceptance by the consignee or any other Officer deputed by COMPANY for this purpose. COMPANY will be at liberty to reject whole lot without assigning any reasons and the decision of the Officer concerned will be considered as final.

15 Goods and Service Tax (GST) :

The F.O.R. Destination prices are excluding GST and Cess as applicable which will be paid extra on a given taxable goods and/or services within the original contractual delivery period. The amount and% of GST and Cess as applicable should clearly be indicated separately. (GST/Cess means all applicable Tax/Cess under GST Laws. GST Laws means IGST Act, GST(Compensation to the State for Loss of Revenue) Act, CGST Act, UTGST Act and SGST Act, 2017 and all related ancillary legislations).

You shall have to submit a C.A Certificate & duly authorized Signatory of successful bidder, certifying that you have not claimed Refund of any applicable GST and Cess, charged to COMPANY or shall not claim any such Refund, on a future date, from the concerned Authorities and if, any Refund, in respect of such GST and Cess, is claimed by you, it will be immediately passed on to the COMPANY, without COMPANY making any specific Claim, for the same, either from the Department or from you.

The offers having price INCLUSIVE OF GST and Cess is likely to be rejected if the rate of GST and Cess is not mentioned clearly unless the bidder has opted for Composition Scheme under GST Act, which should be clearly indicated in the price bid. COMPANY may at its discretion consider such offer with presumption of highest applicable rate of VAT/GST/Cess prevailing when the price quoted is inclusive of GST and Cess.

If the Supplier/Contractor has opted for the Composition scheme of GST, the same must be clearly specified with valid Declaration & Certificate from Department. In the event of withdrawal/cessation of the Supplier from Composition scheme during the tenure of the contract, the rate mentioned in the price bid shall be final and any additional GST will have to be borne by the tenderer. In no case additional amount towards tax or otherwise will be paid / reimbursed to supplier/contractor. Further Statutory Variation clause will not be applicable in case of Supplier / Contractor has opted for Composition Scheme under GST.

Supplier/Contractor should charge GST in Invoice at the rate as agreed to / mentioned in acceptance of tender only and any deviation in the same shall not be accepted. Further, any additional liability of GST (later on due to wrong mentioning of GST rate, mis-interpretation of HSN/SAC Code, etc.) over and above as charged in the invoice shall be borne by the Supplier/Contractor. However, any refund received by the supplier / contractor on account of GST charged from the company; such refund shall have to be passed on to the company, along with interest if any. Such refund along with interest needs to be passed on suo-moto by the supplier / contractor.

Further, the Company has a right to recover the amount of GST along with penal interest at the rate of 15% per annum if GST charged is not paid / short paid to the government or fail to upload the details or uploads inaccurate particulars on GSTIN portal by the Supplier / Contractor within the stipulated time limit.

In case, Govt. revises the rate of GST rate / Code during the tenure of the contract, the provision of GUVNL's statutory variation clause shall apply.

INPUT TAX CREDIT BENEFIT

In the event of any statutory increase in the rate of Input Tax Credit and / or due to inclusion of any other additional item of their inputs / input services under the ambit of the Input Tax Credit provisions under the GST Act, subsequent to the date of submission of the offer, the same should be passed on to COMPANY and you should inform such changes to COMPANY from time to time.

17 UNLOADING:

Unless and otherwise specified in the detailed purchase order, Unloading of the materials shall be arranged by COMPANY.

18 STATUTORY VARIATION:

Any statutory increase or decrease in the taxes and duties including GST and Cess as applicable or in the event of introduction of new tax/cess or cessation of existing tax/cess subsequent to suppliers offer if it takes place within the original contractual delivery date will be to COMPANY's account subject to the claim being supported by documentary evidence. However, if any decrease takes place after the contractual delivery date, the advantage will have to be passed on to COMPANY.

Statutory Variation clause will not be applicable in case of Supplier / Contractor has opted for Composition Scheme under GST.

19 PAYMENT TERMS:

100% Payment shall be made by respective AM Division offices as per GETCO's standard terms & condition within thirty days on receipt of the material at site. For necessary payment against each consignment of material along with 100% taxes, duties, F & I shall be duly recorded in the form of TRC & SR note by the field office, which shall be now uploaded on Vendor Management System (VMS) Portal, www.vms.guvnl.com including invoice, documents which are digitally signed by Vendors / Suppliers. The supporting documents duly signed, stamped and scanned are required to be uploaded. The VMS portal also provides 'real time' tracking of invoice status, to monitor the process of submissions and to receive timely updates.

20 REPEAT/ADDITIONAL ORDERS:

- 20.1 The Company may place repeat Order / additional Order, provided there is no conspicuous downtrend in the price of such item.
- 20.2 The Company reserve the right to place repeat orders / additional orders on the successful Tenderers up to 25% of the original quantity of the A/T at the same Prices, Terms and Conditions stipulated in the original contract within completion of contractual period. If, repeat order is placed in the last month of Contractual delivery schedule of main order, commencement period of one month should be given for repeat order. The delivery schedule for repeat order should be given considering proportionate delivery schedule of main order and it will be started on completion of contractual delivery schedule of main order. However, in special circumstances the Company may place repeat order for 25% of the original quantity of the A/T with early delivery schedule of material, as mutually agreed upon.
- 20.3 In special circumstances GUVNL and its subsidiary Companies reserve the right to place repeat order / additional order up to 100% of the original quantity of the A/T at the same prices terms and conditions stipulated in the original Contract as mutually agreed upon.
- 20.4 The material supplied will be considered on FIFO basis i.e. first applied towards original order & after completion of original order quantity, material supplied will be considered towards repeat / additional order.

21 DELIVERY SCHEDULE OF COMPANY:

Delivery of materials is desired as under:

a) Submission of sample/Drawing.	Within commencing period.
b) Approval of Sample/Drawing.	No separate commencement period will be given.
c) Commencement of supply after -----→ d) Qty. to be supplied. Month wise / Quarter wise supply after Commencement period -----→	As per the details Shown in Schedule – “A” of the relevant Tender.

Supplier is liable to get the drawings / Sample /proto approved within the Commencement period.

Supplier should indicate deviation in delivery period, if any. The delivery period will be reckoned after four days for Gujarat based firms and seven days for out state firms from the date of dispatch of the order. All necessary formalities are to be completed within the commencement period instead of vague period. If specific period is not quoted, the delivery period, best suitable to COMPANY will be considered and in such case, no subsequent complaint will be entertained.

The delivery Schedule proposed by COMPANY is considering the full quantity of the tender. If the finalized quantity is less, then in that case the delivery period best suited as per COMPANY requirement will be given on pro-rata basis and also based on the quantity allocations done by COMPANY.

22 DELIVERY PERIOD:

The Time limit (delivery period) for aforesaid supply is **30 days** from the date of issue of purchase order.

The Tenderers will have to quote a firm delivery schedule on month / quarter wise basis as specified subject to the force Majeure conditions as accepted by DGS & D. Tenderer should mention their delivery period in Annexure - 5. Time being the essence of this tender, delivery period shall be strictly adhered to. Delay in execution of order on account of any other reasons will be subject to levy of penalty.

[a] The date of inspection of materials will be reckoned, as the date of dispatch, provided the due quantity of materials are offered for inspection giving 15 days' time to COMPANY for arranging the inspection i.e the firm has to offer the inspection call 15 days prior to the proposed date of inspection. No tentative date, tentative quantity for inspection should be given and if given the same will be ignored and the same will not be treated as call for inspection. In case the material is offered for inspection on the last week of the scheduled period, the same will be considered as delay in delivery and will be liable for penalty in terms of the contract.

All the ordered materials should be offered for inspection strictly as per delivery schedules as mentioned in the detailed order, without linking to payments by COMPANY.

[b] In case the materials are supplied later than the date of contractual delivery schedule, materials may be accepted by COMPANY subject to levy of penalty as per clause no.24 for Penalty for late delivery. In that case the penalty will be levied from the last date of delivery schedule and up to the TRC date. The delivery period will include the time required for pre-dispatch inspection of materials.

However, if the material is not kept ready for inspection after intimation of the said quantity then all consequences will be to suppliers account and COMPANY will recover the actual expenses of to & fro travelling fares plus Rs.1000/- per day per employee towards reimbursement of other costs.

[c]In order to avoid delay in dispatch of the inspected lot materials, if the materials are found OK then written dispatch instruction will be given by COMPANY inspector at suppliers works and the date on which these written instructions are issued will be reckoned as date of dispatch instructions and materials are to be dispatched to respective consignees within 15 days thereafter OR if written dispatch instructions are not given by COMPANY inspector at works, then materials are to be dispatched to respective consignees within 15 days from date of DI received by you, from COMPANY.

In order to avoid delay in dispatch of the inspected lot of materials, for which Dispatch Instructions are already issued, the Gujarat based Suppliers and out of Gujarat based Suppliers shall arrange the transportation so as to receive the materials at respective Consignee's Stores within 15 days and 21 days respectively, from the date of issue of Dispatch Instructions. If materials are not received at Stores within 30 days, as the case may be, from the date of issue of Dispatch Instructions, special penalty charges shall be recovered at 0.5% per Week or part thereof, maximum up to 3% of the Dispatch Instructions consignment value plus GST as applicable.

All the inspection results for the inspected materials carried out at the first instance will be binding to the supplier irrespective of passing the tests OR failure. If the supplier re-offers the same materials for re-inspection then it will be solely at COMPANY' discretion to accept the same or not. If the subsequent testing's are to be carried out, then all the expenses of the inspector and other expenses incurred by COMPANY will be to tenderers account. This will be binding on you.

23 SUPPLY OF MATERIALS AT COMPANY'S STORES:

The Tenderers will have to agree to supply any of the quantities at any of COMPANY Stores in Gujarat (i.e. F.O.R Destination 220KV Godhra S/S

24 PENALTY FOR LATE DELIVERY:

24.1 Penalty shall be @ 0.5% per Week or part thereof plus GST as applicable on delayed portion subject to maximum 10% plus GST as applicable of the delayed portion Order Value (End Cost with GST and Cess as applicable) in case of supply only, whereas in case of Projects, the ceiling shall be with reference to total contract value with GST and Cess as applicable of the project (Supply + Erection + Civil). For calculating the delayed portion, date of actual receipt of material at store shall be considered.

24.2 In order to avoid delay in dispatch of the inspected lot of materials, for which Dispatch Instructions are already issued, the Gujarat based Suppliers and out of Gujarat based Suppliers shall arrange the transportation so as to receive the materials at respective Consignee's Stores within 30 days respectively, from the date of issue of Dispatch Instructions. If materials are not received at Stores within 30 days, as the case may be, from the date of issue of Dispatch Instructions, special penalty charges shall be recovered at 0.5% per Week or part thereof plus GST as applicable, maximum up to 3% plus GST as applicable of the Dispatch Instructions consignment value. For COMPANY looking to the nature of products / materials the 30 days' limit may be suitably modified with concurrence of respective Managing Director.

24.3 In case of Foreign OEM / Indian Trader of a Foreign OEM, in order to avoid delay in dispatch of the inspected lot of materials, for which the Dispatch Instructions are already issued, the Supplier shall deliver the materials to respective Shipper at Dispatch Port within 30 days from the date of Dispatch Instructions. If materials are not delivered to the respective Shipper within 30 days from the date of Dispatch Instruction, the special penalty charges shall be recovered at 0.5% per Week or part thereof plus GST as applicable, maximum up to 3% plus GST as applicable of the consignment value of the lot of respective Dispatches Instruction. For calculation of penalty date of bill of Lading / Airway Bill / Courier Receipt shall be considered as date of delivery.

24.3.1 General Guide lines.

In order to avoid delay & possible attraction of penalty,

24.3.1.1 The Firm has to offer the Inspection Call 15 days prior to proposed date of inspection and 30 days prior to the due date of Delivery Schedule.

24.3.1.2 If the above condition is fulfilled by firm then any delay in inspection and any delay in issuance of Dispatch Instruction, said delay period will not be considered for penalty purpose.

24.3.1.3 However, the Company shall carry out inspection not later than Seven days from the date intimation from the Supplier for inspection.

24.3.1.4 The Dispatch Instruction will be given within Seven days' time from the date of satisfactory inspection.

24.3.2 Due consideration will be given for waiver/ levy of penalty(excluding GST already collected and paid to the Govt. treasury thereon) only for the reasons absolutely beyond suppliers' control (e.g. Force Majeure conditions as laid down in the DGS & D) for which documentary evidence will have to be provided.

25 Penalty on rejected Materials during testing :-

The representative of the Company may pick up samples from the lots supplied by the Supplier at the Stores of the Company at random for quality check. The samples picked up will be tested for acceptance test / type test or as decided by the Company at

Government approved laboratory or NABL Laboratory, in the presence of representative of supplier and the Company as per relevant ISS/BIS/ Company's specifications. The test results will be binding on the suppliers and Company in general and will not allow re-sampling. If the material fails in any of the tests carried out, the full lot of materials will be considered as rejected, and if replacement is not possible due to utilized/ consumption of the materials then in that case for whole of the rejected lot, Company will deduct maximum up to 30% (Thirty) of the End Cost Price. If the same are not utilized / consumed, then Company may ask for replacement at sole discretion of the Company or may accept with maximum deduction up to 30% (Thirty) of the End Cost Price of the rejected lot plus GST as applicable, and all these will be binding on the supplier.

Due consideration will be given for waiver / levy of penalty (excluding GST already collected and paid to the Govt. treasury thereon) only for the reasons absolutely beyond suppliers control (e.g. Force Majeure conditions as laid down in the DGS & D, Clause reproduced hereunder) for which documentary evidence will have to be provided. The request for extension in delivery giving reasons and supporting documents shall have to be made within one month on completion of the supply only. The request made after one month on completion of the supply shall not be entertained and rejected out rightly without any correspondence.

- 25** No request for waiver / levy of penalty will be entertained / reviewed during the execution of order.

"D.G.S & D. FORCE MAJEURE CLAUSE"

"If, at any time during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, act of the public enemy, civil commotion, sabotage fires, floods, explosion, epidemics, quarantine restrictions, strikes lockouts or acts of God (hereinafter referred to as event)", then provided notice of the happening of any such event is given by either party to the other within twenty one days from the date of occurrence there of neither party shall by reason of such event be entitled to terminate this contract nor shall either party shall have any claim for damages against the other in respect of such non-performance of delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such event has come to end or ceased to exist, and the decision of the Managing Director as to whether the deliveries have been so resumed or not shall be final and conclusive.

Provided further that if the performance in whole or part of any obligation under this contract is prevented or delayed by reasons of any such event for a period exceeding 60 days, either party may at its option terminate the contract provided also that if the contract is terminated under this clause, the Purchaser shall be at liberty to take over from the Supplier at a price to be fixed by the Managing Director of the company, which shall be final, all unused undamaged and acceptable materials bought out components, and stores in course of manufacture in the possession of the Supplier at the time of such termination or such portion thereof as the Purchaser may be deem fit excepting such materials, bought out component and stores as the supplier may with concurrence of the Purchaser elect to retain".

- 26** Extension In Contractual Delivery Date:

It will be supplier's responsibility to ensure that goods are delivered within the stipulated delivery period. However, on account of reasons beyond ones control as laid down in the DGS & D Force Major Conditions COMPANY may consider extension of delivery period with or without statutory variations and with or without price variation.

However, delivery extensions will be considered only after execution of the order fully and upon submission of documentary evidence for the reasons of delay.

Such extension will be subject to the following conditions shown hereunder.

- (a) That no increase in price on account of any statutory increase in or fresh imposition of customs duty, GST and Cess as applicable or on account of any other tax or duty leviable in respect of the stores specified in the said acceptance of the tender which may take place on or after the contractual delivery date of the P.O referred to above shall be admissible on such of the said stores as are delivered after the original contractual delivery date and
- (b) That notwithstanding any stipulation in the contract for increase in price on any other ground, no such increase which has become effective on or after the contractual delivery date of this said P.O shall be admissible on such of the said stores as are delivered after the original contractual delivery date.
- (c) But nevertheless, the purchaser shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty, GST and Cess as applicable or on account of any other tax or duty or on any other ground as stipulated in the P.O., which takes place or on after the contractual delivery date of the said P.O.
- (d) In case Supplier / Contractor has opted for Composition Scheme under GST, no increase in price on account of any statutory increase in GST and Cess as applicable shall be admissible after the original contractual delivery date.

- 27** **REPLACEMENTS OF GOODS BROKEN, DAMAGED OR SHORT:**

In the event of any stores or part thereof being broken or damaged or received short during transit or during the testing and trial at site before commissioning in service the suppliers shall replace the same free of cost. However, COMPANY will arrange recoveries of amount equivalent to cost of such damaged / broken / short supplied materials before actual replacement is given.

- 28** **POST TENDER CORRESPONDENCE / ENQUIRIES:**

Any correspondence or enquiry subsequent to opening of Technical and Commercial bids is not desirable, if the same is

indulged into, it will be considered for disqualifying the tender. The Tenderer will be required to abstain from pursuing / canvassing the matter, directly or indirectly with any Officers of COMPANY, as otherwise the same would also amount to disqualification of the tender.

- 29** Tenderer may submit requisite descriptive literature and all other required documents like technical data, literatures, list of testing equipment's, list of equipment's / machinery of manufacturing the tender item/s etc. duly scanned / photo copy as an attachments with tender. Tenderer will be at full liberty to provide information and data about his products.

30 TEST CERTIFICATES:

Test Certificate for the stores as per relevant BSS / ISS shall be submitted in Triplicate for our approval prior to dispatch of stores and should be dispatched only after the test certificates are approved. Supplier will be responsible for any expenditure that consignee might incur if the goods stand rejected on this account. Further, COMPANY will not be responsible for any delay in payment on this account.

31 TYPE TESTS:

(TO BE SUBMITTED IN "E.M.D. COVER DOCUMENTS" IN PHYSICAL FORM AS PER CLAUSE NO.: 8 OF THIS COMMERCIALS TERMS AND CONDITIONS)

All the necessary Type tests will have to be carried out before submission of the tender and to be submitted along with EMD Cover Documents as per clause no.: 8 of this commercial terms and condition (to be kept in EMD Cover in physical form). The Type Tests which are more **than 07(Seven) years old** will not be considered (except otherwise specifically mentioned in the Guaranteed Technical Particulars i.e. G.T.P's.) and such tenders will be rejected. All the required type tests on one particular item must have been conducted in the span of one year only. If the type tests for the tendered items are not carried out before the submission of the tender, then it will at COMPANY sole discretion to accept them or NOT.

However, depending up on Company requirement, if the Letter of Acceptance (LOA) is placed subject to submission of type tests, then in such cases all the necessary Type tests will have to be carried out by the firm within 30 (Thirty) days of the issue of LOA or at Company discretion, failure to do so the LOA stands cancelled and the detailed purchase order will not be placed and no further correspondences in this matter will be entertained at any cost and will be out rightly ignored.

- 32** The purchaser (i.e. Company) shall have the right to make any changes, additions / deletions or modifications in any terms / conditions of the tender and / or specifications as may be deemed necessary by COMPANY at its sole discretion at any time before the due date of opening of the tender.

- 33** Tenderer should furnish a list of orders for similar / higher items executed by them indicating the name of the party and their order reference to whom they have supplied, to be furnished in Annexure- 6 of tender.

Failure to do this will result on suppliers tender being rejected without any reference. In case of bought out items they should furnish the backup guarantee from their principals.

- 34** The company does not accept the printed conditions of any Tenderer. It will be ignored without any reference; hence tenderers should withdraw such printed conditions if they have any.

- 35** The materials should be offered strictly confirming to ISS / BIS / Tender specifications given in the tender. If the tenderer's desires to quote with any technical deviations they should specifically quote the deviation & the ISS or BIS Nos. in the body of the tender itself under the Annexure-12 of tender only.

If technical deviations furnished by the Tenderer are not agreeable to Company , the offers may be ignored. However it will be solely at COMPANY discretion to consider the technical deviations OR not for considering the Tenderer. No correspondences of the Tenderer after opening of the bid will be entertained in this matter.

37 ADVANCE INTIMATION TO THE CONSIGNEE:

When R.R. is obtained and materials dispatched R.R. No. Wagon No. etc. should be intimated to the consignee in advance, preferably by phone / fax / telegram so that he may arrange to take delivery at the receiving station against indemnity bond, in case R.R. is not received. Also if the unloading requires use of crane, such Advice should also be issued by telegram, to the consignee indicating the weight, size of the package, wagon No. etc. so that he may make arrangements for crane in advance. In case if COMPANY has to incur any extra expenditure for want of advance information, the same would be recovered from the suppliers.

ALL THE SUPPLIERS SHOULD INTIMATE THE CONSIGNEES WELL IN ADVANCE ABOUT THE DELIVERY OF THE MATERIALS AS PER THE "DISPATCH INSTRUCTIONS" GIVEN, SO AS TO FACILITATE FOR UNLOADING OF THE MATERIALS AT SITE.

38 TENDERERS SHOULD FURNISH THE FOLLOWING DETAILS:

Bidders are requested to submit photocopy of each of the documents / details as mentioned in qualifying requirement with

technical bid:

- 39 Revision of prices or any commercial terms affecting the price after opening of technical bids shall not be considered and will be ignored.
- 40 Tenderers should indicate the name of their Partners / Proprietor / Directors of their manufacturing firm and updated Address / Telephone, e-mail ID, Fax Numbers (Office & Residential) etc., along with the name of authorized signatory in the Annexure – 3 of invariably. Bidder are informed that only their employee authorized in writing will only be allowed as their “Authorized Representative” for all purpose to deal with COMPANY in respect of this tender.
- 41 Please give suitable declarations in e-tendering / online format that “I / We declare that we are manufacturer for all the tendered items”. (Please refer Annexure-15 form)
- 42 **GUARANTEE:** Minimum warranty shall be **01 year**. If the goods, stores and equipment’s found defective due to bad design or workmanship the same should be repaired or replaced by you free of charge if reported within **01 year** of their receipt at site You will be responsible for the proper performance of the equipment’s / materials for the respective guarantee period. *Suppliers have to replace/repair failed items within 30 days, failing to which COMPANY may initiate punitive actions.*
- 43 **PERFORMANCE BANK GUARANTEE (PBG) TOWARDS WARRANTY / GUARANTEE:**
Performance Guarantee shall be paid by the successful bidders irrespective of whether they are SSI Unit or exempted by NSIC.
- 43.1 **The successful bidder has to give Bank Guarantee with validity period of additional 01 (One) month i.e. more than actual Guarantee / warrantee period to safeguard Company’s interest in case any eventuality happening on the last day of the Guarantee / Warrantee period after office hours of the Bank or Bank holidays.**
- 43.2 The Performance Bank Guarantee to cover Guarantee / Warrantee period is required to be submitted before the date of completion of last supply and should be valid till the completion of Guarantee Period to be reckoned from the date of last supply.
- 43.3 Performance Guarantee shall be considered as per Tender terms.
The tabular format for performance guarantee towards warrantee is given as under.

Sr.No	Items	Amount	
		For MSME /non MSME unit	For Gujarat based MSME unit
1	Distribution Transformers& meter (All types),Conductors, Cables, Insulators, Steel items, Kit-Kat fuses, L/T.Dist.bboxes, Transformers oil, Line Hardware and PVC pipes	05%(Five) of the contract value in the form of DD/BG to cover execution period.	03%(three) of the contract value in the form of DD/BG to cover execution period.
2	Metal Meter Boxes, G.I.Wires, Stay Wires, Earthing Plates	02%(Two)of the contract value in the form of B/G to cover the Warranty period.	02%(Two) of the contract value in the form of DD/BG to cover execution period
3	Transmission items ,Generation & other	10% (Two) of the contract value in the form of B/G to cover the Warranty period.	04% (Two) of the contract value in the form of B/G to cover the Warranty period

- 43.4 The Micro and Small Scale Industrial (manufacturing) Units registered under Small Scale Industries of Gujarat State and holding subsequent registration with CSPO / NSIC / DGS&D Registration Certificates for the item under Tender shall submit Performance Bank Guarantee as under on submission of attested copies of their SSI (SSI/ MSME Part-II/Udhyogaadhaar memorandum) & CSPO / NSIC / DGS&D Registration Certificates. This benefit of exemption will not be admissible if they take part in the tender indirectly either through their dealers, agents, distributors or other intermediators.
- 43.5 The Supplier / Contractor can submit only one Bank Guarantee considering the Performance Guarantee requirement.
- 43.6 The Bank Guarantee shall be from the Nationalized Banks or any other Banks, as Notified by the Finance Department, Govt. of Gujarat from time to time.
- No relaxation shall be given to the bidders having only one registration numbers from Government of Gujarat but no subsequent registration with CSPO/NSIC/DGS&D registration certificates for the item under tender. No exemption as well as relaxation shall be given to outside Gujarat based parties.

The Performance Guarantee to cover warranty/guarantee for the tendered items wherever applicable as above shall be furnished in the form of D.D./Cash and by Bank Guarantee, by the successful Tenderer for satisfactory performance of the materials, which should be valid for 12 months from the date of commissioning. The PG submitted should be for the full period i.e. 12Months OR whatever applicable as per Technical Specifications as per 43.2 of this clause and should have a clear one time validity for the full period. PG for an interim period will not be allowed.

However, in case of expiry of PG before the said period the same should be got extended / renewed till the completion of said period by the Tenderer at least one month before the expiry of the validity failing which COMPANY will be at liberty to encash the same, without entering into further correspondence, formalities, etc. in the matter.

“NO STAGEWISE BANK GUARANTEES WILL BE ACCEPTABLE IN ANY CASE.”

CORPORATE GUARANTEES ARE NOT ALLOWED.

44 APPROVAL:

— The goods shall be subject to the approval of the concerned consignee after receipt of the stores at site.

45 COMPANY would prefer the offers from manufacturers directly. All the manufacturers should quote for those items, which are actually manufactured at / rolled by their plants. This should be strictly adhered. The Tenderer should ensure that minimum production, manufacturing and routine testing facility required for manufacturing of the tendered products as per IS standard is available in-house. If the same is available elsewhere, then COMPANY reserves right to reject the offer outrightly.

COMPANY reserves the right to inspect, suppliers factory at any time during the currency of the contract in case order is placed on supplier and also to inspect each manufactured lot before testing / packing / dispatch.

46 OTHER CONDITION OF SUPPLY:

COMPANY General Conditions of contract will apply to all supply to contracts and supplier will be deemed to fully aware of COMPANY general conditions of contract for the supply of plant equipment and materials except the conditions modified in this commercial terms and conditions and any ignorance of these conditions will not exempt supplier from their liability to abide by the same. Copies are available from COMPANY Office.

47 Relationship with employee:-

Every bidder should, at the time of submission of bid, give a declaration as under.

“If in any Bidder Company/ firm, the interest (i.e. Shareholding in company and share in partnership firm) of any employee of the tendering Company or his/ her relative as defined in Section 2(77) of the Company’s Act. 2013 is 10 percentage or more, the tendering Company will not deal with such Company/ Firm at all.

Tenderer therefore, must specifically disclose this fact in his technical Bid. Non-disclosure of such facts would immediately disqualify the tenderer for further dealing with the tendering Company.”

48 The materials offered for inspection shall be in duly packed condition ready for putting the embossing of the seal by the inspector on the lead seal which is provided on the packing by the supplier by passing a sealed wire through it, as per our approved method.

The Inspector will inspect only a few packages and select samples at random for testing or testing’s as per relevant ISS / BIS / Tender specifications. On passing of which, he will emboss his marking on the seal thereafter provided on the packages, which will be only few.

49 AUDIT INSPECTION:

From the lots inspected by the User Department Inspector, the Inspector of Audit Inspection Wing may pick up samples from the lots supplied at RSO’s of COMPANY or other stores of COMPANY at random for quality check only.

The samples picked up will be tested for acceptance test / type test or as decided by COMPANY at Government approved laboratory in presence of representatives of supplier and COMPANY as per relevant ISS/BIS/ COMPANY specifications. The test results will be binding on the suppliers and COMPANY, in general will not allow re-sampling. If the material fails in any of the acceptance tests carried out, the full lot of materials will be considered as rejected, and if replacement is not possible due to consumption of the materials then in that case for whole of the rejected lot, COMPANY will deduct maximum upto 30% (Thirty) of the End Cost Price plus GST as applicable. If the same are not utilized / consumed, then COMPANY may ask for replacement at sole discretion of COMPANY or may accept with maximum deduction upto 30% (Thirty) of the End Cost Price plus GST as applicable, and all these will be binding on the supplier.

In case if the materials does not confirm to specifications or fails at Government approved laboratory or other laboratory decided

by COMPANY for testing and if subsequent testing are to be carried out (which will solely at COMPANY discretion), then all Testing fees, expenses of the inspector and other expenses incurred by COMPANY plus GST as applicable will be to supplier's account. The decision in this regard for acceptance as above of COMPANY shall be final and this will be binding on the supplier.

Please refer audit inspection clause of technical specification of tender for applicability of penalty in case of distribution transformer.

50 INSPECTION:

All supplies are to be offered to the inspection and approval of COMPANY. COMPANY will depute an officer or authorize D G S & D, OR any other Govt. or Govt. Approved agencies (Not private) to carry out the inspection on behalf of COMPANY. At least 30 days' notice should be given prior to the dispatch of the stores in case of plants and equipment's and 15 days' notice in case of general stores, in order to enable COMPANY to detail on inspection.

COMPANY also reserves the right to waive the inspection before dispatch and authorize the consignee to carry out the final inspection on receipt of the stores at site.

51 TERMINATION OF CONTRACT:

In case, the supplier fails to deliver the stores / materials / equipment's or any consignment thereof within contractual period of delivery or in case the stores are found not in accordance with prescribed specification and/or the approved sample, COMPANY shall exercise its discretionary power either:

- [a] To recover, from the supplier as agreed, by way of penalty clause above, and/or
- [b] To purchase elsewhere after giving due notice to the supplier on account and at the risk of the supplier such stores not so delivered or other similar description without canceling the contract in respect of the consignment not yet due for delivery and/or
- [c] To cancel the contract.

In the event of the risk purchase of stores of similar description, the opinion of COMPANY shall be final. In the event of action taken under clause (a) or (b) above, the supplier shall liable to pay for any loss and applicable GST/Cess which COMPANY may sustain on that account but the supplier shall not be entitled to any saving on such purchases made against default.

The decision of COMPANY shall be final as regards the acceptability of stores supplied by the supplier and COMPANY shall not be required to give any reason in writing or otherwise at any time for rejection of the stores.

Further, "COMPANY reserves the right to terminate the Contract (i.e. Purchase order) at any time, without assigning any reasons, whatsoever, by giving a notice period of ONE month from the date of Notice of termination of the Contract. Suppliers will not be entitled for any compensations / damages / losses, whatsoever, on account of such termination of the Contract.

52 ARBITRATION:

(1) Amicable Settlement

Any dispute, difference, controversy or claim between the Parties arising out of or relating to this contract with reference to the construction, interpretation, breach, termination or validity thereof (hereinafter referred as "the Dispute") shall, upon the written request of either Party be referred to the authorized representatives of the Disputing Parties for resolution. The authorized representatives shall promptly meet and attempt to negotiate in good faith a resolution of the Dispute within thirty days of the service of the request.

(2) Arbitration

If the Parties fail to amicably resolve the disputes or differences or contrary claims as indicated herewith in sub clause (1) of Clause, arising under or in connection with the present agreement, the same shall be referred to the Arbitration Centre (Domestic and International) High Court of Gujarat at Ahmedabad ("the Centre" for Short), currently functioning in the High Court Complex, Sola, Ahmedabad for appointment of arbitrator and thereupon, the Centre shall appoint a sole arbitrator and conduct the arbitration proceedings in accordance with its rules. If the parties unanimously agree to appoint three arbitrators, then in that case, each party shall appoint one arbitrator from the panel of arbitrators of the Centre, and the Centre shall appoint the third arbitrator, who will act as the Presiding Arbitrator. Such arbitration shall be the sole and exclusive remedy between the parties for all disputes arising under or in connection with this agreement. The arbitration shall take place at the Arbitration centre, Ahmedabad, High Court Complex, Sola, Ahmedabad, Gujarat in accordance with the provisions of the Arbitration and Conciliation Act, 1996 as amended from time to time

53 JURISDICTION:

All questions, disputes or differences arising under out of or in connection with the Tender / Contract if concluded shall be subject to the exclusive jurisdiction of the court under whose jurisdiction the place from which the tender / Acceptance of tender is issued, is situated i.e. Vadodara.

54 Offers on Ex-stock or offers requiring no foreign exchange will be considered. Those offers requiring foreign exchange will not be considered.

55 SUBMISSION OF OFFERS:

The firm having single legal entity and having two or more works / factory and submits offers from two or more different works /

factory, in such case firm have to pay/ submit separate tender fee, E.M.D., vendor registration etc. for all works / factory and if separate tender fee, E.M.D., vendor registration etc. not paid / submitted, COMPANY reserves the right to consider the offer/s against which the tender fee, E.M.D., vendor registration etc. are paid / submitted. If all above are submitted in such case COMPANY will consider only one lowest offer for allocation of quantity if decided.

Many of the tenderers are submitting their offers with the conditions of advance payment along with the order; such conditions are not acceptable by COMPANY.

56 Participation by Foreign Manufacturers (other than propriety items) in:-

56.1.1 The Vendor Registration shall be given to Original Equipment Manufacturer (OEM) only. The Traders / Dealers / Agent shall not be considered for the above registration.

56.1.2 The OEM Vendor while registration shall have to declare the Country of Origin i.e. the place where the OEM's Manufacturing Units exist.

56.1.3 OEM is required to pay Vendor Registration Fees as applicable at the time of registration.

56.1.4 At the time of participation in the Tender, the OEM is required to pay Tender Fees and EMD as applicable for the Tender.

56.1.5 On award of the Contract to such OEM, they shall have to submit Performance Guarantee for successful execution of supply as specified in Letter of Acceptance and for satisfactory performance of the equipment supplied as specified in the Order either in form of remittance or through a Bank guarantee. In case of Bank guarantee issued by Bank situated outside India, the same shall be confirmed by its correspondent Bank in India.

56.1.6 The Foreign OEM must submit all the required documents in English language. In case, if any documents are in any other language than English, the same must be translated in English and should be duly Notarized. The OEM shall be fully responsible for any mistake / misrepresentation or any kind of discrepancy in the same.

56.1.7 Foreign OEMs to confirm for design, manufacturing & testing of equipment as per relevant IS / IEC / ANSI / any International Standards with latest amendments.

56.1.8 OEM shall confirm for free replacement / repair within the Guarantee / Warrantee period of equipment. OEM shall also confirm for services and spares at reasonable rates for Ten Years after Guarantee Period.

56.1.9 All Acceptance Tests shall be carried out in presence of Purchaser Company's Engineer / Representative at OEM's Works without any extra cost to the Purchaser Company. However if required, the Acceptance Test shall be carried out in any NABL approved Laboratory in India for which the cost will be borne by the Firm.

56.1.10 In case the Tender is invited on FOR destination basis, then OEM may avail service related to Customs Clearance, Shipping / Air Freight, Local Transportation, Unloading, and verification through Indian Sole Agency / Firm / Distributor / Representative.

56.1.11 For dispute, if any, the Indian Judicial as defined in the Tender by the Company shall be binding on Foreign OEM.

56.1.12 Foreign OEM to abide & act as per the Indian Govt. Rules & Regulation in To-to. Foreign OEM should obtain GST Registration No. and quote all relevant elements of price bid including GST.

56.1.13 Bid Currency: - Indian Rupees only.

56.1.14 Any statutory variation in Taxes / Duties including GST and cess as applicable in India during contractual delivery schedule shall be payable / receivable as mentioned in clause no. 18.

56.1.15 Normally e-procurement is done through M/s (n) Code Solutions only and if Foreign Bidder wishes to participate directly then they have to request Purchaser for allotment of Digital Key for e-procurement within Fifteen Days from the date of NIT. On request of Foreign Bidder, the Purchaser may forward the request to the Authority issuing e-procurement Key for providing Key to OEM. The necessary charges shall have to be paid by the Bidder directly to (n) Code Solution.

Note: It is to be noted by the Foreign OEM / Bidder that minimum Five Days are required for allotment of e-procurement Key on receipt of payment.

56.1.16 The Contract document shall be signed by the Bidding Company's Representative, who shall be duly authorized by the Board of Directors of the Bidding Company. The bidding document shall contain the Board Resolution in this regards. The bidding documents shall also contain the Specimen Signature of the Authorized Representative duly attested by the CEO / COO / CFO of the Company.

56.2 Tender participation by an Indian Agent / Associate quoting on behalf of the Principal / Manufacturer abroad on FOR destination basis:-

56.2.1 It is preferred that the Manufacturer is expected to quote rates directly in response to Tender. In case, if it is not possible and the Bid is being submitted through their Indian Agent / Associate, the OEM shall authorize such Indian Agent / Associate for the entire tenure of the Contract i.e. Sixty days after the completion of Warranty / Guarantee period.

- 56.2.2 Bidder shall submit the confirmation from OEM for free replacement / repair within the Guarantee / Warrantee period of equipment. OEM shall also confirm for services and spares at reasonable rates for Ten Years after Guarantee Period.
- 56.2.3 The Indian Agent / Associate shall submit Bid on their own Letter Head along with letter (in original) issued from the OEM clearly mentioning that they are bound by the Terms and Conditions of Bid submitted by the Indian Agent / Associate on their behalf and Vendor Registration Letter issued by subsidiary Companies of the GUVNL in the name of OEM.
- 56.2.4 In a Tender, either the Indian Agent on behalf of the Principal / OEM or Principal / OEM itself can bid but both cannot bid simultaneously for the same item / product in the same Tender.
- 56.2.5 If an Agent submits Bid on behalf of the Principal / OEM, the same Agent shall not submit a Bid on behalf of another Principal / OEM in the same Tender for the same item / product.
- 56.2.6 Bid currency: - Indian Rupees only.
- 56.2.7 Any statutory variation in Taxes / Duties in India including GST and cess as applicable during Contractual Delivery Schedule shall be payable / receivable as mentioned in clause no. 18.
- 56.2.8 Indian Agent / Associate have to pay EMD, Tender Fees, PBG as per Tender Condition.
- 56.2.9 The Indian Agent and OEM both are responsible for successful execution of the Contract.
- 56.2.10 Foreign OEM should also confirm that they are having all the testing facilities as required for testing of the equipment as per relevant IS / TEC / ANSI with their latest amendments.
- 56.2.11 Foreign OEMs have to confirm for design, manufacturing & testing of equipment as per relevant IS / IEC / ANSI with latest amendments.
- 56.2.12 Agency quoting for the equipment, OEM should give commitments for full technical / financial back up / after sales support including spares and confirm that the products are as per Technical Specification & type tested as per IEC / IS / Specification from accredited Laboratory.
- 56.2.13 For bidding purpose, the OEM shall permit only one Indian Agent / Associate to participate in the Bid, as its Sole Agency.
- 56.2.14 All Acceptance Tests shall be carried out in presence of Company's Engineer / Representative at OEM's Works without any extra cost to the Company. However if required, the Acceptance Test shall be carried out in any NABL approved Laboratory in India for which the cost will be borne by the Company.
- 56.2.15 For dispute, if any, the Indian Judicial as defined in the Tender by the Company shall be binding on Foreign OEM.
- 56.2.16 Over and above following documents shall be submitted:
 - 56.2.16.1 Attested photo copies of all Agreements with the Principal including Supplementary Agreement covering appointment as Authorized Representative / Agent & terms relating thereto.
 - 56.2.16.2 The nature of services to be rewarded by an Authorized Representative / Agent & the Commission payable to him shall unambiguously reflect in the Contract.
 - 56.2.16.3 PAN No. Disclose Name & Address of Bankers within & outside Country
 - 56.2.16.4 Income Tax No. of Foreign Supplier.
 - 56.2.16.5 Balance Sheet of last 3 years to be submitted.
 - 56.2.16.6 Previous professional background & suitable details regarding the nature of the business undertaken by the Agent.
- 57** Tenderers should agree to submit the Test Certificates in triplicate after inspection is carried out by COMPANY Representative prior to dispatch of materials for COMPANY approval.
- 58** COMPANY reserves the right to cancel any or all the offers / bids or to accept any offer without assigning any reasons. Also in case COMPANY finds that there is an attempt of cartel in the prices, COMPANY reserves the right to consider or reject any or all the parties offers without assigning any reasons thereof.
- 59** COMPANY reserves the right to increase or decrease the quantity against each item/s while placing the order.

60 QUANTITY TOLERANCE:

(When the Order placed is in terms of Weight basis / Length basis)

The quantity tolerance shall be allowed + 3% order-wise for total order quantity for each item except cables.

The weighment recorded at our consignee shall be considered final for purpose of payment. However where the weighbridge facility are not available and / or weigh bridge is out of order or under capacity, material will be accepted on sectional weight basis / weight recorded at any other nearby weighbridge. If the materials are accepted on sectional weight basis and for weighment difference, the tolerance will be allowed as per provisions of IS: 1852 for weight tolerance.

- 61** The tenderers should invariably write the Tender no., Due date of opening of tender, name and address of the Company /

bidder, on sealed covers of EMD Cover Documents, otherwise the tender covers without these details will not be opened which may please be noted.

62 The tenderers are required to furnish the technical information and the Guaranteed technical particulars (GTP) in format of tender only.

63 All the costs of the stamp papers, other than required for payment is to be made through SIDBI / ICICI by COMPANY, are to be borne by you as per the Govt. Of India's latest guidelines.

64 Tenderer should invariably fill up all the details of all the Annexure of tender including the prices in the Price Bid format. This is mandatory.

65 EMBOSSING OR ENGRAVING:

The successful Tenderer wherever possible, will require to emboss / engrave the words "Property of COMPANY" along with the purchase order number on the items such as Insulators, Hardware accessories, Lighting Arrestors, Transformers, Meters, Metal meter boxes, Switches, Distribution boxes, Cable boxes, M.S. Beams and other items as required by COMPANY. Also suppliers should emboss / engrave / affix their company nameplate with details OR manufacturer's name and trademark.

66 If the Tenderer fails to pay the Security Deposit or defaults in execution of the orders placed or if COMPANY suffers any financial loss due to this, then COMPANY will be at liberty to adjust the amount plus GST as applicable from other orders of the same firm or by encashing the Bank Guarantee.

67 MINIMUM TENDERING QUANTITY:

Minimum Tender Quantity to be Offered / Quoted:-

67.1 The Bidder, who submits their Bid for a minimum quantity, as specified below for which the firm participated, shall only be considered for price evaluation for particular item.

Sr. No.	Tender Value	Minimum quantity to be offered by	
		For MSME bidders	For other bidders
1	Up to 1 Cr.	100%	100%
2	Above 1 Cr up to 5Cr.	50%	50%
3	Above 5 Cr up to 10Cr.	25%	40%
4	Above 10 Cr up to 20Cr.	20%	25%
5	Above 20 Cr up to 35Cr.	15%	25%
6	Above 35 Cr. Up to 50 Crs.	10%	25%
7	Above 50 Cr. Up to 100 Crs.	05%	15%
8	Above 100 Crs.	2.5%	10%

COMPANY shall not consider the Bid of any firm, who quotes for lesser quantity than the minimum quantity mentioned in the Tender document.

For itemwise minimum tendering quantity please refer Schedule-A of tender.

68 Please note that any additional conditions / deviations, if any, found in the Commercial terms & conditions (except reference under clause no.34 of this tender document), then the Price Bids of such tenderers will not be opened and no further correspondences in the matter will be allowed.

69 All the above points should be complied by the Tenderers. If not, tenders are likely to be ignored without making any further reference.

70 The firm whose supply against the previous order is pending as on the date of opening of the tender even after completion of their contractual delivery period, such firm will not be eligible for evaluation purpose unless convincing and sufficient reasons satisfactory to COMPANY are furnished by the bidder.

71 PURCHASE AGREEMENT:

The successful bidder has to execute agreement on Non judicial Stamp paper of Rs. 100/- duly Notarized as per agreement document uploaded herewith within 10 days after the payment of S.D. amount/Bank Guarantee.

The cost of Non judicial stamp & Notary charges will be borne by the successful bidder. The agreement shall be executed between SE & the authorized representative of successful bidder as mentioned hereunder.

Agreement:-

71.1 On approval of the offer of successful Bidder, a Contract Agreement is required to be entered into between the COMPANY and the successful Bidder.

71.1.1 An Officer who signs the LOA / Purchase Order be authorized to sign the Agreement documents on behalf of the

Purchaser Company &

71.1.2 From the successful Bidder's side the Agreement can be signed by the Authorized Representative as under :

- 71.1.2.1 If the Authorized Representative is from a Partnership Firm, then a certified copy of the Registered Partnership Deed must be attached along with the signatures of other partners who have authorized the particular partner to execute and sign the Agreement;
- 71.1.2.2 If it is a Private or Public Limited firm, a copy of the Resolution, authorizing the person to execute and sign the Agreement on behalf of the firm, passed by the Board of Directors along with the Company's Seal must be attached with the Agreement; &
- 71.1.2.3 If it is a Proprietary Firm, then the Proprietor himself should execute and sign the Agreement and his full residential address must be available in the file. Upon submission of security deposit and signing of Agreement, COMPANY shall issue a detailed A/T /order incorporating various terms and conditions.
- 72 In case due to any technical snag at bidders end or at service providers for e-tendering, the bidder could not submit their on line tender in prescribed time limit, COMPANY is not held responsible for the same and in that case COMPANY will not entertained any request / representation

73 **Cartel:-**

If, the Company during the procurement process, observes or suspects any activity on the part of bidders or obtains any knowledge which indicates the existence of cartel formation amongst the bidders or apprehends the possibilities of cartel as defined under The Competition Act, 2002, the Board of the Company being a government Company involved in public procurement work, reserve all rights to allot quantities to such bidders, who are not part of the cartel, in any manner deemed fit in the interest of the Company without assigning any reason thereof.

Besides the above the purchaser Company, may initiate actions under the Competition Act/ other laws and / or the bidder(s)/ firm(s) will be black listed / stop deal, at its sole discretion.

- 74 **THE TENDER SHOULD BE SENT BY R.P.A.D. OR BY SPEED POST ONLY AND ADDRESSED TO THE SUPERINTENDING ENGINEER (TR) GETCO, TRANSMISSION CIRCLE OFFICE, Jambuva -390014.**

NO COURIER SERVICE WILL BE ACCEPTED. HAND DELIVERY OF TENDERS WILL NOT BE ACCEPTED.

QUALIFYING REQUIREMENTS

The bidders must submit following satisfactory evidence to the Owner of his capability and adequacy of resources:

Following credentials shall be submitted with the technical bid for qualification.

(A) Technical:

- 1) The bidder should have proven experience of **not less than 3 years** in, manufacture, supply and testing as per IS at the works. Bidder should confirm this & submit the documentary evidence.
- 2) Bidders not meeting the requirement as at (1) above but is authorized by OEM for sales can also participate, provided they have valid ongoing authorization with OEM for offered material valid for three years as on date of bid submission. Submit the authorization, experience certificate & performance letters with bid.
- 3) The bidder shall have to give products with 3 years of guarantee. Guarantee includes replacement/repairing of operating mechanism; broken-wheel, nozzle etc. associated accessories.
- 4) The bidder shall furnish along with the bid, type test report, conducted in accredited National laboratory as per the relevant IS or any equivalent standard for Fire Extinguisher. The type test report shall not be older than Seven (07) years and shall be valid as on the last date of submission of bid.
- 5) The manufacturer shall have adequate design infrastructure and manufacturing facility and capacity and procedures including quality control and demonstrate the same in his bid through relevant documents.
- 6) Notwithstanding anything stated above, the owner reserves the right to assess bidder's capacity to perform the contract, should circumstances warrant such an assessment in the overall interest of the contract and owner.
- 7) The bidder should have supplied at least same nos. of offered qty. of Fire Extinguisher during the last 3 years in Government/Private sector/utilities. Copies of the purchase orders and completion shall be submitted along with the bids.

8) Bidder shall have to submit performance certificates along with the bids as per Annexure-X.

Annexure-X
Performance certificate of M/s...

Sr No	F.Y. (Last 3 Years)	Items Supplied To Government/Private sector/utilities	Purchase Order Reference No. & Date	Fire Extinguisher Type and Categories Items (As per Table-A only)	Quantity	Order Fully Executed. Yes/No	Completion - Gate pass No. & Date	Performance certificates No. & Date
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(*Annexure-X must be certified and types of the Fire Extinguisher should be as per Table-A. Do not fill up the detail for non-listed type of fire Extinguisher in Table-A).**

B] FINANCIAL

1. Payment of Tender fee and E.M.D.
2. Contractor should produce audited copy of the IT Return with Profit and Loss and balance sheet of last three Years.
3. Attested copy of Power of Attorney, if any, for signing the bid documents.
4. The bidder shall be registered under the **“GOODS & SERVICE TAX – ACT”**.
The certified Xerox copy of such registration under GST indicating “GSTIN” shall have to be submitted along with bid by the bidder.
5. The Bidder should submit copy of PAN Card.
6. Bidder’s Minimum Average Annual Turnover (MAAT) for best three years out of last five financial years as annualized **shall not be less than the estimated amount of this tender.**
7. Last quarter’s Liquid Assets should not be less than 20% of estimated amount as on invitation of tender.
Note: For the purpose of arriving at LA Current Assets Less Inventories shall be considered.
8. Bidder’s Net Worth for last 3 financial years should be positive.
9. The bidder should not have been referred to NCLT under Insolvency & Bankruptcy Code (IRP has been appointed or Liquidation proceedings have been initiated under IBC)
10. Bidder shall have to submit Standard product catalogue

Note:

1. Bidder shall have to submit all above documents (self –certified) with physical Technical bid
2. The above-cited requirements are only indicative. The owner reserves the right to requisition any other relevant information and also reserves the right to reject the Bid proposal of any Bidder, if in the Owner’s opinion the Qualification data is incomplete and Bidder is not qualified to perform the Contract satisfactorily.
3. Above technical criteria is for technical scrutiny after opening the technical bid. However, the GETCO reserves the right to award the work to one or more bidders, considering their technical and financial capacity OR to reject any or all tenders or accept any tender without assigning any reason thereof.
4. Bidders qualifying in Technical Bid only will be considered for opening of Price Bid
5. The bidder should clearly indicate the quantity and Single Value Contract executed during last Three (3) years, for the offered equipment in following format,

Sr.	ITEMS SUPPLIED TO	ORDER REFEREN CE No. & DATE	ITEMS	QUANTI TY	ORDER FULLY EXECUTED (YES/NO)	STATUS, IF ORDER UNDER EXECUTION	REMARK

1) SPECIAL NOTES TO BIDDERS

1. In case of any discrepancy arising between this specification & its enclosures, the most stringent of all (as determined by purchaser) shall be followed. Further, if a requirement in this specification or any of the enclosures, calls for a decision from the Purchaser, it shall be bidder’s sole responsibility to clearly bring

out/highlight the same distinctively, so as to enable purchaser to furnish their decision/clarification. If such issues/requirements are not duly addressed by bidder and if such issues/requirements are observed later during order execution stage, it shall be binding on the bidder to comply with the final decision made by the purchaser subsequently, without any other commercial implications.

2. All materials supplied under this contract shall be new and unused. All equipment connected with the above systems shall be ISI, UL or FM marked as per material code indicated as per variant table and enquiry.
3. All mounting hardware/ accessories/fittings etc. required for installation of fire extinguishers shall be included in the scope of bidder and the same shall be included in the base price even if such items are not explicitly mentioned in this specification.
4. The Bidder shall accept full responsibility for the completeness and for the faultless working of all the Fire Extinguishers as a whole.
5. Bidder offer shall be strictly as per these specification requirements. Unsolicited or Alternate offers from the bidders will not be entertained.
6. All such clarifications required by the bidder shall be intimated to GETCO together as a single notice within a week of receipt of enquiry by bidder.

2) INSPECTION AND TESTING

- 2.1 After award of contract, bidder shall submit Quality Plan for GETCO's approval.
- 2.2 Bidder to note that all the cost involved in any of the inspection & testing requirements as per the approved quality plan shall be included in the basic price quoted by the bidder. Bidder shall not be eligible to raise any extra claim on account of any inspection & testing of the complete Fire Extinguishers as per the approved quality plan.
- 2.3 Bidder has to conduct tests for Fire Extinguishers as per mentioned in Technical Specification.

2.4 Inspection

- Bidder shall notify in writing as well as ICMS portal to GETCO, at least two weeks (Ten working days) in advance of the date and the place at which the items will be ready for witnessing of inspection / testing. In case any postponement becomes necessary, the CONTRACTOR shall provide written notification at least 3 days prior to the original scheduled date.
- In case non-conformity, lot will be rejected & fresh inspection shall be arranged at bidder's risk & cost

- 3) Inspection Report- Bidder shall submit, copy of each Inspection Report.

Technical Specifications for Fire Extinguishers

Annexure-A (1)

Technical Specification of Fire Extinguishers

MECHANICAL FOAM TYPE (45 LTR.) FITTED WITH CO2 GAS CARTRIDGE

The Fire Extinguishers shall conform to IS 16018-2012 with latest amendment and ISI marked.

1.0 **CONSTRUCTIONAL FEATURES:**

- 1.1 **Extinguishers body:** Fire extinguishers body (cylindrical) shall be constructed by welded low carbon steel sheet. Cylinder shall be capable of being welded and shall contain maximum of 0.25% carbon, 0.05% sulphur and 0.05% of phosphorus.
- 1.2 **Extinguishing Media:** The Fire Extinguishers shall be filled with Foam Solution. Foam concentrate shall comply with IS 4989 (Part-4).
- 1.3 **Propellant:** The propellant shall be of cartridge operated filled with CO2 gas of minimum 300±3gm. comply with IS 15222-2002 with latest amendments.

- 1.4 Nominal Charge: 45 ltr.**
- 1.5 Filling Tolerance: 45 (± 5% by volume)**
- 1.6 Operating Temperature:** It should have temperature range of -5 to +55 degree centigrade. This shall be marked on Fire Extinguishers.
- 1.7 Effective Discharge Time and Throw:** Minimum discharge time shall be not less than 40 seconds and maximum 210 seconds with minimum throw of 6mtr. when discharged as prescribed in clause 6.2.2.2 of IS 16018. The extinguisher shall commence within 5 seconds of opening the control valve. Not more than 10% of initial charge shall remain within extinguishers after complete discharge.
- 1.8 Caps, valves and closures:** At least four full threads of engagement and are required to relieve pressure with at least two full thread engagements. The inside diameter of filling opening shall be not less than 19 mm.
- 1.8.1** Edges and surface of Fire Extinguishers shall not be sufficiently sharp to constitute a risk of injury to operator.
- 1.8.2** Unless an internal pressure relief is provided a cap, valve or closure shall withstand the burst test pressure specified for the cylinder for 1 min without rupture.
- 1.8.3** Extinguisher collar with external threads shall have sufficient height so that the cap or valve does not contact the dome or bottom with the gasket removed
- 1.8.4** A suitable drain plug be provided in fire extinguishers
- 1.9 Discharge Hose Assemblies:**
- 1.9.1** The extinguishers shall be equipped with hose assembly of 4mtr. Long. A shut-off nozzle shall be fitted at the end of the hose to permit intermittent operation
- 1.9.2** The hose and coupling system shall function throughout the operating temperature range, and coupling systems shall be designed and fitted in such a way that they cannot damage the hose
- 1.9.3** The burst pressure of the hose assembly shall be equal to or greater than the appropriate value given below:
- a) three times the pressure developed in the extinguisher at 55°C, the test being carried out at 27 ± 2°C; and
- b) twice the pressure developed in the extinguisher at 55°C, the test being carried out at 55 ± 5°C.
- 1.10 Safety and Anti-overfill Devices:**
- 1.10.1** The operating pressure of the device shall not exceed the test pressure (PE) nor be less than the maximum service pressure (PMS)
- 1.10.2** Fire extinguisher shall be provided with a device to insure that extinguisher cannot be over filled. As an alternative, the extinguisher body may be marked with the words 'FILL MARK' or 'FULL' to indicate the maximum liquid level.
- 1.11 Control Valve:** Fire extinguishers shall be fitted with a controllable valve at the discharge end of the hose assembly to permit discontinuance of the discharge of the extinguishing medium at any given time. The control valve shall be pass the leakage test as specified in IS 16018
- 1.12 Method of operation:** The extinguishers shall be of upright operative type with by breaking the sealing device. It shall be easy in operation and shall comply the requirement of IS 16018
- 1.13 Safety Locking Devices: A safety locking device shall be fitted in all Fire Extinguishers.** The release of the safety device shall involve an operation distinct from that of the operation mechanism and shall require a force not less than 20 N nor more than 100 N. It shall be possible to determine visually whether the extinguisher may have been operated.
- 1.14 Carriage Assembly:**
- 1.14.1** The carriage assembly of a wheeled fire extinguisher shall be designed so that one man can easily push or pull the extinguisher over level surfaces and grades up to 2 percent. If intended to be stored in the upright position, the carriage shall stand in the upright position with the tyres off the ground. The force, applied at the handle, required to tilt the extinguisher from the vertical storage position to the towing position shall not exceed 400 N. The force, applied at the handle, required to lift the extinguisher from the reclined storage position, shall not exceed 400 N. The

force required to support the handle when it is 80 ± 5 cm from the ground shall not exceed 150 N.

1.14.2 A receptacle or holding device shall be furnished to securely retain the hose assembly and nozzle. The design shall facilitate rapid deployment at the scene of an emergency with the fewest number of operations. The hose shall be stored in such a manner that it will release easily, without kinking, when it is pulled from the stored position when the extinguisher is in the upright or reclined position

1.15 Gasket and O-rings: Any elastomer (rubber facing, O-ring or 'vulcanized in place' seat) used to provide a seating surface shall have the following properties when tested in accordance with IS 3400 (Part 1):

a) *Minimum tensile strength* — 3.4 MPa for silicone rubber (having polyorganosiloxane as its characteristic constituent), 6.9 MPa for fluorocarbons, and 8.3 MPa for other elastomers;

b) *Minimum ultimate elongation* — 100 percent for silicone rubber and 150 percent for other elastomers; and

c) Maximum set of 5.0 mm when 25 mm marks are stretched to 50 mm for silicone rubber, and 62.5 mm for other elastomers, held for 2 min then measured 2 min after release.

Compression Set: A sample of a rubber or rubber like part shall have a compression set not greater than 25 percent of its original thickness after being compressed by one-third of its original thickness. The compression set test shall be conducted on button samples compressed to two-thirds of their original thickness for 24 h at the minimum storage and use temperature at $27 \pm 2^\circ\text{C}$ and $55 \pm 3^\circ\text{C}$.

1.16 Dip Tubes and Filters: The dip tube of water-based extinguishers shall be of materials resistant to the extinguishing medium. The discharge of the extinguishing agent shall be through a filter which is positioned upstream of the smallest section of the discharge passage. Each orifice of the filter shall have an area less than that of the smallest cross-section of the discharge passage. The total area of the combined filter orifices shall be at least equal to 5 times the smallest section of the discharge passage.

2.0 PRESSURE TESTS

2.1 Test Pressure: The operating pressure of the device shall not exceed the test pressure nor be less than maximum service pressure. The test pressure shall be 1.43 times of maximum service pressure but not less than 20 bar. The service pressure shall not exceed 19 bar.

Each cylinder shall be subjected to test pressure for 30 seconds. There should not be any leakage, visible deformation or failure to the Fire Extinguishers.

2.2 Burst Test: The minimum burst pressure shall be 2.7 times of maximum service pressure. The burst test shall not cause the cylinder to fragment. Break shall not occur in the weld at a pressure less than 5.4 times of maximum service pressure or 80 bar whichever is greater. No parts shall be ejected during burst test.

3.0 CERTIFICATION

***Certification of material used:** The manufacturer shall submit a certificate for the cast analysis of the materials supplied.

***Type Test and Batch Test certificate**

The following type tests as mentioned/applicable in IS-16018/IS-15683, shall be performed and the copy of certificate of type tests conducted shall be produced:

- i) Bulk range/throw test (Type test)
- ii) Resistance to temperature test (Type test)
- iii) Long term leakage test (Type test)
- iv) Resistance to impact test (Type test)
- v) Resistance to vibration test (Type test)
- vi) Resistance to internal and external corrosion test (Type test)
- vii) Tapping test (Type test)
- viii) Crushing Tests (Type test)
- ix) Pressure cycling Test (Type test)
- x) Leakage Test (Type test)
- xi) Method of operation (Batch test)
- xii) Safety-Locking Devices (Batch test)

- xiii) Calibration Test for gauges and indicators
- xiv) Burst strength test for gauges and indicators
- xv) Water resistance test for gauges and indicators
- xvi) Leakage test for gauges and indicators
- xvii) Overpressure Test for gauges
- xviii) Test of Exposure to Extinguishing Medium
- xix) Test for hose assemblies
- xx) Internal Corrosion Test
- xxi) Electrical Conductivity Test
- xxii) Performance Test on Fire for its suitability in particular class of Fire

Note: Apart from above mentioned test certificate, any other tests applicable for this fire extinguishers, as specified in IS-16018, shall also be produced.

4.0 MANUFACTURING TESTS

4.3 Pressure gauge, and indicator: Pressure gauge shall be provided in each fire extinguishers. The gauge dial shall indicate in green the operable pressure range. The background of pressure gauge shall be marked in red. The arc of dial from zero pressure point to lower end shall read “recharge” and maximum indicated pressure shall read “overcharged”. All numerals, letters, and characteristics shall be white. Pointer shall be yellow, and the tip of pointer shall end in the arc of pressure indicating dots, and shall have a maximum tip radius of 0.25 mm.

The pressure gauge shall reflect the operating pressure in Bar or Kpa or both.

4.3.1 The maximum indicated gauge pressure shall be between 150% and 250% of the indicated service pressure at 20 degree centigrade but not less than 120% of the maximum service pressure. The length of pointer shall be at least 9.5 mm from center point of dial tip. The minimum length of arc from zero to indicated service pressure shall be 12 mm.

4.3.2 The mark used to indicate the service pressure at 27 degree centigrade should be not less than 0.6 mm and no more than 1.0 mm wide. The gauge shall be marked with the gauge manufacturer’s identifying marks.

4.3.3 An indicator shall be accurate to within 4% of the service pressure at the lower limit of operable range. The error of the pressure gauge at the indicated service pressure shall not exceed $\pm 4\%$ of service pressure.

4.3.4 At the zero pressure mark the error shall not exceed 12% nor fall below service pressure.

4.3.5 The maximum indicated pressure the error shall not exceed $\pm 15\%$ of the service pressure.

4.3.6 **Plastic Components:** Plastic components shall be identifiable and the manufacturer has to submit data for material itself and manufacturing process.

The air-oven ageing, UV light exposure and impact resistance tests, attached with the plastic parts to an extinguishers and then subjected to the appropriate pressure test as mentioned below and certificate of the same shall be attached.

5.0 MARKING AND COLOUR

The red colour conforming to IS 536 shall be used to colour the fire extinguisher body. A small band of “Yellow” colour of approximately 5 percent/prominent of surface area shall be painted on extinguishers body.

5.1 The operating, recharging, and inspection and maintenance instruction shall be clearly reflected on the extinguisher body. The marking shall identify the extinguisher as to type of media i.e. “Mechanical Foam Type” and shall include the manufacturer’s name and model number with rating and classification of fire extinguishers.

5.2 Other information like year of manufacture, factory test pressure shall be permanently marked on the cylinder body. A reference to the range of temperature shall be marked as “acceptable to use at temperature from -5 to +55 Deg. Centigrade.

5.3 The statement like “recharge immediately after any use” and for disposable fire extinguishers “discard immediately after use” shall be marked on the body.

5.4 Each Fire Extinguishers shall be serially numbered.

- 5.5 The Word: “Don’t use on live Electrical Part” and “ જીવંત ઇલેક્ટ્રિક પાર્ટ્સ પર ઉપયોગ કરવો નહી ”In Bold ,Red Color.
- 5.5.1 Affixing sticker showing periodical maintenance, testing & refilling details dates as per IS-2190 (if not operated):
- 6.0 BIS CERTIFICATION MARKING**
The BIS marking shall be provided on each fire extinguisher. Marking shall preferably embossed on the cylinder body.
- 7.0 OPERATING INSTRUCTION**
The operating instruction shall face outward and cover no more than 120 degree arc on the extinguishers body. The surface area of 75.0 cm² shall be provided used for instructions.
The operating instruction shall be arranged in the following way:
- i) The word “INSTRUCTIONS” shall be at the top of the name plate. The minimum letter height shall be 6.0 mm. The word FIRE EXTINGUISHER shall also be added to the word INSTRUCTIONS.
 - ii) Operating instructions shall be in the form of numerically sequenced pictographs.
 - iii) Sequence of pictographs shall illustrate, with picture, the recommended actions necessary for intended operation of the extinguisher in following sequence:
 - a. making ready the extinguisher by disengaging the safety-locking device,
 - b. aiming the extinguishers at the base of the fire, including the recommended distance from the fire at which to begin discharge, and indicating the intended operating attitude of the extinguisher,
 - c. taking whatever action necessary to initiate operation of the extinguisher, and
 - d. describing the intended method of applying the extinguishing media on the fire.
 - e. The height of word used in pictographs shall not be less than 5mm
 - iv) The extinguisher shall be marked with letters ‘AB’ and numerical indicating size of fire as _____.
- 8.0 USE CODE SYMBOLS**
Use code symbols, as mentioned in IS:15683, shall be positioned directly below the operating instructions. A written description for each use code symbol may be included as part of the code. The description should be readable.
Use code symbols shall be placed on the extinguisher for those types of fires for which the extinguisher is classified. If extinguishers is not intended for use because potentially injury to the operator, the use of code symbols with a red slash also be placed on the extinguisher. The red slash shall be from the top left corner of the symbol to the bottom right corner.
The use-code symbols shall have dimensions not less than 16 mm × 16 mm excluding the borders
- 9.0 RECHARGING INSTRUCTION**
The recharging instructions on the marking of a rechargeable extinguisher shall be the intended mass and agent that shall be used in charging, the intended expellant gas pressure or the use of a correct and a fully charged gas cartridge or the following words
“Return to an authorized recharger for recharging in accordance with IS 15683”
- 10.0 INSPECTION INSTRUCTIONS**
The following inspection instructions shall be mentioned:
- i) The seals and tamper indicators are not broken or missing
 - ii) It is full (by weighing or lifting)
 - iii) It is not obviously damaged, corroded, leaking or has a clogged nozzle; and
 - iv) Its pressure gauge reading or indicator is in the operable range or position
- 11.0 TEST FIRE**
The extinguishers shall successfully pass the test fire for Class-A and Class-B fires as explained in IS:15683-2006 with latest amendment. Certificate of the same from manufacturer shall be submitted
- 12.0 MANUALS:**
User Manual: A user manual shall be provided with each fire extinguisher. This manual shall contain the necessary instructions, warnings and cautions for the intended installation, operation and inspection of the extinguisher. The manual shall also have reference of the manufacturer’s service manual for maintenance and recharging of the extinguisher.

Service Manual: The manufacturer shall prepare a service manual for each model extinguisher. It shall be made available upon request and shall,

- a) contain necessary instructions, warnings and cautions, a description of servicing equipment, and a description of recommended procedures for intended servicing;
- b) provide a list of part numbers of all replaceable parts; and
- c) indicate that the pressure gauge attached to the extinguisher shall not be used to determine when the intended charging pressure has been reached, and a pressure regulator shall be used if the pressure source is a tank of high pressure gas.

NOTE:

The Fire Extinguishers shall conform to IS 16018-2012 with latest amendments in all respect.

*** The test certificate to be submitted by the manufacturer of Fire Extinguishers**

The Fire Extinguisher shall pass all the tests i.e. performance, hydraulic pressure etc. as specified in IS: 16018-2012 with latest amendments.

13.0 INSPECTION

Final inspection shall be carried out by the inspector designated by GETCO management to inspect the material at the manufacturer works before the dispatch of material.

The inspection shall include inspection of sheets thickness of cylinders, checking of joints/welding etc. Also, inspection of various dimensions, accessories fixed in Fire Extinguishers, certificate verification etc. shall be done invariably.

Following tests shall be carried at the factory premises:

- a) **Burst pressure test**
- b) **Hydraulic pressure**
- c) **Performance test**

Annexure-A(2)

Technical specifications of Fire Extinguishers

CO2 TYPE 6.5 KG.

The Fire Extinguishers shall conform to IS 16018-2012 with latest amendment and ISI marked.

1.0 CONSTRUCTIONAL FEATURES:

- 1.1 **Extinguishers Body:** The body of cylinder shall comply with IS 7285 i.e. for steel cylinder
- 1.2 **Extinguishing Media:** The Fire Extinguishers shall be filled with 6.5Kg. CO2 gas comply with IS:15222
- 1.3 **Fill Density:** The fill density for carbon dioxide fire extinguishers shall not exceed 0.667 kg/l.
- 1.4 **Nominal Charge: 6.5 Kg.**
- 1.5 **Filling Tolerance: 6.5 Kg.(+0, -5% by mass)**
- 1.6 **Operating Temperature:** It should have temperature range of -5 to +55 degree centigrade. This shall be marked on Fire Extinguishers.
- 1.7 **Effective Discharge Time:** Minimum discharge time shall be not less than 15 seconds.
- 1.8 **Caps, valves and closures:** At least four full threads of engagement and are required to relieve pressure with at least two full thread engagements. The inside diameter of filling opening shall be not less than 19 mm.
 - 1.8.1 Edges and surface of Fire Extinguishers shall not be sufficiently sharp to constitute a risk of injury to operator.
 - 1.8.2 Unless an internal pressure relief is provided a cap, valve or closure shall withstand the burst test pressure specified for the cylinder for 1 min without rupture.
 - 1.8.3 Extinguisher collar with external threads shall have sufficient height so that the cap or valve does not contact the dome or bottom with the gasket removed
- 1.9 **Discharge Hose Assemblies:**

- 1.9.1** The extinguishers shall be equipped with hose assembly of minimum 1.5 mtr. Long. A discharge horn shall be fitted at the end of the hose to permit intermittent operation.
- 1.9.2** The hose and coupling system shall function throughout the operating temperature range, and coupling systems shall be designed and fitted in such a way that they cannot damage the hose
- 1.9.3** The burst pressure of the hose assembly shall be equal to or greater than the appropriate value given below:
- a) 1.5 times the pressure developed in the extinguisher at 55°C, the test being carried out at $27 \pm 2^\circ\text{C}$; and
 - b) 1.25 times the pressure developed in the extinguisher at 55°C, the test being carried out at $55 \pm 5^\circ\text{C}$.
- 1.10 Safety and Anti-overfill Devices:**
- 1.10.1** The operating pressure of the device shall not exceed the test pressure (PE) nor be less than the maximum service pressure (PMS)
- 1.10.2** Fire extinguisher shall be provided with a device to insure that extinguisher cannot be over filled. As an alternative, the extinguisher body may be marked with the words 'FILL MARK' or 'FULL' to indicate the maximum liquid level.
- 1.10.3** Cylinders shall be provided with a safety device in accordance with PESO regulations.
- 1.11 Control Valve:** Fire extinguishers shall be fitted with a controllable valve at the discharge end of the hose assembly to permit discontinuance of the discharge of the extinguishing medium at any given time. The control valve shall be pass the leakage test as specified in IS 16018-2012 with latest revision
- 1.12 Method of operation:** The extinguishers shall be of upright operative type and shall be actuated by operating main CO₂ cylinder valve i.e. discharge horn fitted at the end of discharge pipe shall direct the CO₂ gas on fire. It shall be easy in operation and shall comply the requirement of IS 16018-2012 with latest revision
- 1.13 Safety Locking Devices: A safety locking device shall be fitted in all Fire Extinguishers.** The release of the safety device shall involve an operation distinct from that of the operation mechanism and shall require a force not less than 20 N nor more than 100 N. It shall be possible to determine visually whether the extinguisher may have been operated.
- 1.14 Carriage Assembly:**
- 1.14.1** The carriage assembly of a wheeled fire extinguisher shall be designed so that one man can easily push or pull the extinguisher over level surfaces and grades up to 2 percent. If intended to be stored in the upright position, the carriage shall stand in the upright position with the tyres off the ground. The force, applied at the handle, required to tilt the extinguisher from the vertical storage position to the towing position shall not exceed 400 N. The force, applied at the handle, required to lift the extinguisher from the reclined storage position, shall not exceed 400 N. The force required to support the handle when it is 80 ± 5 cm from the ground shall not exceed 150 N.
- 1.14.2** A receptacle or holding device shall be furnished to securely retain the hose assembly and nozzle. The design shall facilitate rapid deployment at the scene of an emergency with the fewest number of operations. The hose shall be stored in such a manner that it will release easily, without kinking, when it is pulled from the stored position when the extinguisher is in the upright or reclined position
- 1.15 Gasket and O-rings:** Any elastomer (rubber facing, O-ring or 'vulcanized in place' seat) used to provide a seating surface shall have the following properties when tested in accordance with IS 3400 (Part 1):
- a) *Minimum tensile strength* — 3.4 MPa for silicone rubber (having polyorganosiloxane as its characteristic constituent), 6.9 MPa for fluorocarbons, and 8.3 MPa for other elastomers;
 - b) *Minimum ultimate elongation* — 100 percent for silicone rubber and 150 percent for other elastomers; and
 - c) Maximum set of 5.0 mm when 25 mm marks are stretched to 50 mm for silicone rubber, and 62.5 mm for other elastomers, held for 2 min then measured 2 min after release.
- Compression Set:** A sample of a rubber or rubber like part shall have a compression set not greater than 25 percent of its original thickness after being compressed by one-third of its original thickness. The

compression set test shall be conducted on button samples compressed to two-thirds of their original thickness for 24 h at the minimum storage and use temperature at $27 \pm 2^\circ\text{C}$ and $55 \pm 3^\circ\text{C}$.

1.16 Horn for Carbon Dioxide Extinguisher:

1.16.1 The horn connection shall be made in such a manner as to prevent loosening or detachment. If the connection is a screw thread, then it shall be secured against loosening by either mechanical means or a suitable adhesive. When security is provided by mechanical means such as lock nuts, lock washers, spring washers, etc, the torque to loosen the assembly shall be equal to or greater than 20 Nm. When adhesives are used, the torque to loosen the assembly shall be equal to or greater than 10 Nm.

1.16.2 The discharge horn shall be subjected to pass the test specified in IS clause 8.13.3 of 16018-2012

2.0 PRESSURE TESTS

Co2 type Fire extinguishers shall be tested according to the PESO regulations

3.0 CERTIFICATION

***Certification of material used:** The manufacturer shall submit a certificate for the cast analysis of the materials supplied.

***Type Test and Batch Test certificate**

The following type tests as mentioned/applicable in IS-16018/IS-15683, shall be performed and the copy of certificate of type tests conducted shall be produced:

- i) Bulk time/throw test (Type test)
- ii) Resistance to temperature test (Type test)
- iii) Long term leakage test (Type test)
- iv) Resistance to impact test (Type test)
- v) Resistance to vibration test (Type test)
- vi) Resistance to internal and external corrosion test (Type test)
- vii) Tapping test (Type test)
- viii) Crushing Tests (Type test)
- ix) Pressure cycling Test (Type test)
- x) Leakage Test (Type test)
- xi) Method of operation (Batch test)
- xii) Safety-Locking Devices (Batch test)
- xiii) Test of Exposure to Extinguishing Medium
- xiv) Test for hose assemblies
- xv) Test for discharge horn
- xvi) Test of discharge assembly
- xvii) Electrical Conductivity Test
- xviii) Performance Test on Fire for its suitability in particular class of Fire

Note: Apart from above mentioned test certificate, any other tests applicable for this fire extinguishers, as specified in IS:16018-2012 with latest amendments, shall also be produced.

4.0 MANUFACTURING TESTS

5.1.1 **Plastic Components:** Plastic components shall be identifiable and the manufacturer has to submit data for material itself and manufacturing process.

The air-oven ageing, UV light exposure and impact resistance tests, attached with the plastic parts to an extinguishers and then subjected to the appropriate pressure test as mentioned below and certificate of the same shall be attached.

6.0 MARKING AND COLOUR

The red colour conforming to IS 536 shall be used to colour the fire extinguisher body. A small band of "Black" colour of approximately 5 percent/prominent of surface area shall be painted on extinguishers body

6.1 The operating, recharging, and inspection and maintenance instruction shall be clearly reflected on the extinguisher body. The marking shall identify the extinguisher as to type of media i.e. "Carbon Dioxide

Type” and shall include the manufacturer’s name and model number with rating and classification of fire extinguishers.

6.2 Other information like year of manufacture, factory test pressure shall be permanently marked on the cylinder body. A reference to the range of temperature shall be marked as “acceptable to use at temperature from -5 to +55 Deg. Centigrade.

6.3 The statement like “recharge immediately after any use” and for disposable fire extinguishers “discard immediately after use” shall be marked on the body.

6.4 Each Fire Extinguishers shall be serially numbered.

6.5 Affixing sticker showing periodical maintenance, testing & refilling details dates as per IS-2190 (if not operated):

6.0 BIS CERTIFICATION MARKING

The BIS marking shall be provided on each fire extinguisher. Marking shall preferably embossed on the cylinder body.

7.0 OPERATING INSTRUCTION

The operating instruction shall face outward and cover no more than 120 degree arc on the extinguishers body. The surface area of 75.0 cm² shall be provided used for instructions.

The operating instruction shall be arranged in the following way:

a) The word “INSTRUCTIONS” shall be at the top of the name plate. The minimum letter height shall be 6.0 mm. The word FIRE EXTINGUISHER shall also be added to the word INSTRUCTIONS.

b) Operating instructions shall be in the form of numerically sequenced pictographs.

c) Sequence of pictographs shall illustrate, with picture, the recommended actions necessary for intended operation of the extinguisher in following sequence:

i) making ready the extinguisher by disengaging the safety-locking device,

ii) aiming the extinguishers at the base of the fire, including the recommended distance from the fire at which to begin discharge, and indicating the intended operating attitude of the extinguisher,

iii) taking whatever action necessary to initiate operation of the extinguisher, and

iv) describing the intended method of applying the extinguishing media on the fire.

v) The height of word used in pictographs shall not be less than 5mm

d) The extinguisher shall be marked with letters ‘BC’ and numerical indicating size of fire as _____.

8.0 USE CODE SYMBOLS

Use code symbols, as mentioned in IS:15683, shall be positioned directly below the operating instructions. A written description for each use code symbol may be included as part of the code. The description should be readable.

Use code symbols shall be placed on the extinguisher for those types of fires for which the extinguisher is classified. If extinguishers is not intended for use because potentially injury to the operator, the use of code symbols with a red slash also be placed on the extinguisher. The red slash shall be from the top left corner of the symbol to the bottom right corner.

The use-code symbols shall have dimensions not less than 16 mm × 16 mm excluding the borders

9.0 RECHARGING INSTRUCTION

The recharging instructions on the marking of a rechargeable extinguisher shall be the intended mass and agent that shall be used in charging, the intended expellant gas pressure or the use of a correct and a fully charged gas cartridge or the following words

“Return to an authorized recharger for recharging in accordance with IS 15683”

10.0 INSPECTION INSTRUCTIONS

The following inspection instructions shall be mentioned:

a) The seals and tamper indicators are not broken or missing

b) It is full (by weighing or lifting)

c) It is not obviously damaged, corroded, leaking or has a clogged nozzle; and

- d) Its pressure gauge reading or indicator is in the operable range or position
- 11.0 TEST FIRE**
The extinguishers shall successfully pass the test fire for Class-B fires as explained in IS:15683-2006 with latest amendment. Certificate of the same from manufacturer shall be submitted
- 12.0 MANUALS:**
User Manual: A user manual shall be provided with each fire extinguisher. This manual shall contain the necessary instructions, warnings and cautions for the intended installation, operation and inspection of the extinguisher. The manual shall also have reference of the manufacturer's service manual for maintenance and recharging of the extinguisher.
Service Manual: The manufacturer shall prepare a service manual for each model extinguisher. It shall be made available upon request and shall,
a) contain necessary instructions, warnings and cautions, a description of servicing equipment, and a description of recommended procedures for intended servicing;
b) provide a list of part numbers of all replaceable parts; and
c) indicate that the pressure gauge attached to the extinguisher shall not be used to determine when the intended charging pressure has been reached, and a pressure regulator shall be used if the pressure source is a tank of high pressure gas.
NOTE:
The Fire Extinguishers shall conform to IS 16018-2012 in all respect.
*** The test certificate to be submitted by the manufacturer of Fire Extinguishers**
The Fire Extinguisher shall pass all the tests i.e. performance, hydraulic pressure etc. as specified in IS: 16018-2012 with latest amendments.
- 13.0 INSPECTION**
Final inspection shall be carried out by the inspector designated by GETCO management to inspect the material at the manufacturer works before the dispatch of material.
The inspection shall include inspection of sheets thickness of cylinders, checking of joints/welding etc. Also, inspection of various dimensions, accessories fixed in Fire Extinguishers, certificate verification etc. shall be done invariably.
Following tests shall be carried at the factory premises:
a) **Burst pressure test**
b) **Hydraulic pressure**
c) **Performance test**

Annexure-A(3)

Technical specification of fire extinguishers

CO2 TYPE 22.5 KG.

The Fire Extinguishers shall conform to IS 16018-2012 with latest amendment and ISI marked.

1.0 CONSTRUCTIONAL FEATURES:

- 1.1 Extinguishers Body:** The body of cylinder shall comply with IS 7285 i.e. for steel cylinder
1.2 Extinguishing Media: The Fire Extinguishers shall be filled with 22.5Kg. CO2 gas comply with IS:15222
1.3 Fill Density: The fill density for carbon dioxide fire extinguishers shall not exceed 0.667 kg/l.
1.4 Nominal Charge: 22.5 Kg.
1.5 Filling Tolerance: 22.5 Kg.(+0, -5% by mass)

- 1.6 Operating Temperature:** It should have temperature range of -5 to +55 degree centigrade. This shall be marked on Fire Extinguishers.
- 1.7 Effective Discharge Time:** Minimum discharge time shall be not less than 15 seconds.
- 1.8 Caps, valves and closures:** At least four full threads of engagement and are required to relieve pressure with at least two full thread engagements. The inside diameter of filling opening shall be not less than 19 mm.
- 1.8.1** Edges and surface of Fire Extinguishers shall not be sufficiently sharp to constitute a risk of injury to operator.
- 1.8.2** Unless an internal pressure relief is provided a cap, valve or closure shall withstand the burst test pressure specified for the cylinder for 1 min without rupture.
- 1.8.3** Extinguisher collar with external threads shall have sufficient height so that the cap or valve does not contact the dome or bottom with the gasket removed
- 1.9 Discharge Hose Assemblies:**
- 1.9.1** The extinguishers shall be equipped with hose assembly of minimum 1.5 mtr. Long. A discharge horn shall be fitted at the end of the hose to permit intermittent operation.
- 1.9.2** The hose and coupling system shall function throughout the operating temperature range, and coupling systems shall be designed and fitted in such a way that they cannot damage the hose
- 1.9.3** The burst pressure of the hose assembly shall be equal to or greater than the appropriate value given below:
- a) 1.5 times the pressure developed in the extinguisher at 55°C, the test being carried out at 27 ± 2°C; and
- b) 1.25 times the pressure developed in the extinguisher at 55°C, the test being carried out at 55 ± 5°C.
- 1.10 Safety and Anti-overfill Devices:**
- 1.10.1** The operating pressure of the device shall not exceed the test pressure (PE) nor be less than the maximum service pressure (PMS)
- 1.10.2** Fire extinguisher shall be provided with a device to insure that extinguisher cannot be over filled. As an alternative, the extinguisher body may be marked with the words 'FILL MARK' or 'FULL' to indicate the maximum liquid level.
- 1.10.3** Cylinders shall be provided with a safety device in accordance with PESO regulations.
- 1.11 Control Valve:** Fire extinguishers shall be fitted with a controllable valve at the discharge end of the hose assembly to permit discontinuance of the discharge of the extinguishing medium at any given time. The control valve shall be pass the leakage test as specified in IS 16018-2012 with latest revision
- 1.12 Method of operation:** The extinguishers shall be of upright operative type and shall be actuated by operating main CO2 cylinder valve i.e. discharge horn fitted at the end of discharge pipe shall direct the CO2 gas on fire. It shall be easy in operation and shall comply the requirement of IS 16018-2012 with latest revision
- 1.13 Safety Locking Devices: A safety locking device shall be fitted in all Fire Extinguishers.** The release of the safety device shall involve an operation distinct from that of the operation mechanism and shall require a force not less than 20 N nor more than 100 N. It shall be possible to determine visually whether the extinguisher may have been operated.
- 1.14 Carriage Assembly:**
- 1.14.1** The carriage assembly of a wheeled fire extinguisher shall be designed so that one man can easily push or pull the extinguisher over level surfaces and grades up to 2 percent. If intended to be stored in the upright position, the carriage shall stand in the upright position with the tyres off the ground. The force, applied at the handle, required to tilt the extinguisher from the vertical storage position to the towing position shall not exceed 400 N. The force, applied at the handle,

required to lift the extinguisher from the reclined storage position, shall not exceed 400 N. The force required to support the handle when it is 80 ± 5 cm from the ground shall not exceed 150 N.

1.14.2 A receptacle or holding device shall be furnished to securely retain the hose assembly and nozzle. The design shall facilitate rapid deployment at the scene of an emergency with the fewest number of operations. The hose shall be stored in such a manner that it will release easily, without kinking, when it is pulled from the stored position when the extinguisher is in the upright or reclined position

1.15 Gasket and O-rings: Any elastomer (rubber facing, O-ring or 'vulcanized in place' seat) used to provide a seating surface shall have the following properties when tested in accordance with IS 3400 (Part 1):

a) *Minimum tensile strength* — 3.4 MPa for silicone rubber (having polyorganosiloxane as its characteristic constituent), 6.9 MPa for fluorocarbons, and 8.3 MPa for other elastomers;

b) *Minimum ultimate elongation* — 100 percent for silicone rubber and 150 percent for other elastomers; and

c) Maximum set of 5.0 mm when 25 mm marks are stretched to 50 mm for silicone rubber, and 62.5 mm for other elastomers, held for 2 min then measured 2 min after release.

Compression Set: A sample of a rubber or rubber like part shall have a compression set not greater than 25 percent of its original thickness after being compressed by one-third of its original thickness. The compression set test shall be conducted on button samples compressed to two-thirds of their original thickness for 24 h at the minimum storage and use temperature at $27 \pm 2^\circ\text{C}$ and $55 \pm 3^\circ\text{C}$.

1.16 Horn for Carbon Dioxide Extinguisher:

1.16.1 The horn connection shall be made in such a manner as to prevent loosening or detachment. If the connection is a screw thread, then it shall be secured against loosening by either mechanical means or a suitable adhesive. When security is provided by mechanical means such as lock nuts, lock washers, spring washers, etc, the torque to loosen the assembly shall be equal to or greater than 20 Nm. When adhesives are used, the torque to loosen the assembly shall be equal to or greater than 10 Nm.

1.16.2 The discharge horn shall be subjected to pass the test specified in IS clause 8.13.3 of 16018-2012

2.0 PRESSURE TESTS

Co2 type Fire extinguishers shall be tested according to the PESO regulations

3.0 CERTIFICATION

***Certification of material used:** The manufacturer shall submit a certificate for the cast analysis of the materials supplied.

***Type Test and Batch Test certificate**

The following type tests as mentioned in IS-15683, shall be performed and the copy of certificate of type tests conducted shall be produced:

- i) Bulk time/throw test (Type test)
- ii) Resistance to temperature test (Type test)
- iii) Long term leakage test (Type test)
- iv) Resistance to impact test (Type test)
- v) Resistance to vibration test (Type test)
- vi) Resistance to internal and external corrosion test (Type test)
- vii) Tapping test (Type test)
- viii) Crushing Tests (Type test)
- ix) Pressure cycling Test (Type test)
- x) Leakage Test (Type test)
- xi) Method of operation (Batch test)
- xii) Safety-Locking Devices (Batch test)
- xiii) Test of Exposure to Extinguishing Medium

- xiv) Test for hose assemblies
- xv) Test for discharge horn
- xvi) Test of discharge assembly
- xvii) Electrical Conductivity Test
- xviii) Performance Test on Fire for its suitability in particular class of Fire

Note: Apart from above mentioned test certificate, any other tests applicable for this fire extinguishers, as specified in IS:16018-2012 with latest amendments, shall also be produced.

4.0 MANUFACTURING TESTS

5.1.2 Plastic Components: Plastic components shall be identifiable and the manufacturer has to submit data for material itself and manufacturing process.

The air-oven ageing, UV light exposure and impact resistance tests, attached with the plastic parts to an extinguishers and then subjected to the appropriate pressure test as mentioned below and certificate of the same shall be attached.

7.0 MARKING AND COLOUR

The red colour conforming to IS 536 shall be used to colour the fire extinguisher body. A small band of "Black" colour of approximately 5 percent/prominent of surface area shall be painted on extinguishers body

7.1 The operating, recharging, and inspection and maintenance instruction shall be clearly reflected on the extinguisher body. The marking shall identify the extinguisher as to type of media i.e. "Carbon Dioxide Type" and shall include the manufacturer's name and model number with rating and classification of fire extinguishers.

7.2 Other information like year of manufacture, factory test pressure shall be permanently marked on the cylinder body. A reference to the range of temperature shall be marked as "acceptable to use at temperature from -5 to +55 Deg. Centigrade.

7.3 The statement like "recharge immediately after any use" and for disposable fire extinguishers "discard immediately after use" shall be marked on the body.

7.4 Each Fire Extinguishers shall be serially numbered.

7.5 Affixing sticker showing periodical maintenance, testing & refilling details dates as per IS-2190 (if not operated):

6.0 BIS CERTIFICATION MARKING

The BIS marking shall be provided on each fire extinguisher. Marking shall preferably embossed on the cylinder body.

7.0 OPERATING INSTRUCTION

The operating instruction shall face outward and cover no more than 120 degree arc on the extinguishers body. The surface area of 75.0 cm² shall be provided used for instructions.

The operating instruction shall be arranged in the following way:

- a) The word "INSTRUCTIONS" shall be at the top of the name plate. The minimum letter height shall be 6.0 mm. The word FIRE EXTINGUISHER shall also be added to the word INSTRUCTIONS.
- b) Operating instructions shall be in the form of numerically sequenced pictographs.
- c) Sequence of pictographs shall illustrate, with picture, the recommended actions necessary for intended operation of the extinguisher in following sequence:
 - i) making ready the extinguisher by disengaging the safety-locking device,
 - ii) aiming the extinguishers at the base of the fire, including the recommended distance from the fire at which to begin discharge, and indicating the intended operating attitude of the extinguisher,
 - iii) taking whatever action necessary to initiate operation of the extinguisher, and

- iv) describing the intended method of applying the extinguishing media on the fire.
- v) The height of word used in pictographs shall not be less than 5mm
- d) The extinguisher shall be marked with letters 'BC' and numerical indicating size of fire as _____.

8.0 USE CODE SYMBOLS

Use code symbols, as mentioned in IS:15683, shall be positioned directly below the operating instructions. A written description for each use code symbol may be included as part of the code. The description should be readable.

Use code symbols shall be placed on the extinguisher for those types of fires for which the extinguisher is classified. If extinguishers is not intended for use because potentially injury to the operator, the use of code symbols with a red slash also be placed on the extinguisher. The red slash shall be from the top left corner of the symbol to the bottom right corner.

The use-code symbols shall have dimensions not less than 16 mm × 16 mm excluding the borders

9.0 RECHARGING INSTRUCTION

The recharging instructions on the marking of a rechargeable extinguisher shall be the intended mass and agent that shall be used in charging, the intended expellant gas pressure or the use of a correct and a fully charged gas cartridge or the following words

"Return to an authorized recharger for recharging in accordance with IS 15683"

10.0 INSPECTION INSTRUCTIONS

The following inspection instructions shall be mentioned:

- a) The seals and tamper indicators are not broken or missing
- b) It is full (by weighing or lifting)
- c) It is not obviously damaged, corroded, leaking or has a clogged nozzle; and
- d) Its pressure gauge reading or indicator is in the operable range or position

11.0 TEST FIRE

The extinguishers shall successfully pass the test fire for Class-B fires as explained in IS:15683-2006 with latest amendment. Certificate of the same from manufacturer shall be submitted

12.0 MANUALS:

User Manual: A user manual shall be provided with each wheeled fire extinguisher. This manual shall contain the necessary instructions, warnings and cautions for the intended installation, operation and inspection of the extinguisher. The manual shall also have reference of the manufacturer's service manual for maintenance and recharging of the extinguisher.

Service Manual: The manufacturer shall prepare a service manual for each model extinguisher. It shall be made available upon request and shall,

- a) contain necessary instructions, warnings and cautions, a description of servicing equipment, and a description of recommended procedures for intended servicing;
- b) provide a list of part numbers of all replaceable parts; and
- c) indicate that the pressure gauge attached to the extinguisher shall not be used to determine when the intended charging pressure has been reached, and a pressure regulator shall be used if the pressure source is a tank of high pressure gas.

NOTE:

The Fire Extinguishers shall conform to IS 16018-2012 in all respect.

*** The test certificate to be submitted by the manufacturer of Fire Extinguishers**

The Fire Extinguisher shall pass all the tests i.e. performance, hydraulic pressure etc. as specified in IS: 16018-2012 with latest amendments.

13.0 INSPECTION

Final inspection shall be carried out by the inspector designated by GETCO management to inspect the material at the manufacturer works before the dispatch of material.

The inspection shall include inspection of sheets thickness of cylinders, checking of joints/welding etc. Also, inspection of various dimensions, accessories fixed in Fire Extinguishers, certificate verification etc. shall be done invariably.

Following tests shall be carried at the factory premises:

- a) Burst pressure test
- b) Hydraulic pressure
- c) Performance test

Annexure- A (4)

Technical Specification of Fire Extinguishers

DRY POWDER ABC TYPE (MAP-50%) WITH EXTERNAL CO₂ CYLINDER (50 KG. CAPACITY)

(TROLLEY MOUNTED)

The Fire Extinguishers shall conform to IS 16018-2012 with latest amendment and ISI marked.

1.0 CONSTRUCTIONAL FEATURES:

- 1.1 **Extinguishers body:** Fire extinguishers body (cylindrical) shall be constructed by welded low carbon steel sheet. Cylinder shall be capable of being welded and shall contain maximum of 0.25% carbon, 0.05% sulphur and 0.05% of phosphorus.
- 1.2 **Extinguishing Media:** The Fire Extinguishers shall be filled with 50Kg. (50% Mono Ammonium Phosphate based) Dry Powder comply with IS-4308 (latest amendment)
- 1.3 **Propellant:** The propellant shall be fitted with external CO₂ gas cylinder of 2Kg. capacity CO₂ gas shall comply with IS 15222-2002 with latest amendments.
- 1.4 **Nominal Charge: 50 Kg.**
- 1.5 **Filling Tolerance: 50 Kg.(± 2% by mass)**
- 1.6 **Operating Temperature:** It should have temperature range of -5 to +55 degree centigrade. This shall be marked on Fire Extinguishers.
- 1.7 **Effective Discharge Time and Throw:** Minimum discharge time shall be not less than 30 seconds and maximum 210 seconds with minimum throw of 6mtr. when discharged as prescribed in clause 6.2.2.2 of IS 16018. The extinguisher shall commence within 5 seconds of opening the control valve. Not more than 10% of initial charge shall remain within extinguishers after complete discharge.
- 1.8 **Caps, valves and closures:** At least four full threads of engagement and are required to relieve pressure with at least two full thread engagements. The inside diameter of filling opening shall be not less than 25 mm.
 - 1.8.1 Edges and surface of Fire Extinguishers shall not be sufficiently sharp to constitute a risk of injury to operator.
 - 1.8.2 Unless an internal pressure relief is provided a cap, valve or closure shall withstand the burst test pressure specified for the cylinder for 1 min without rupture.
 - 1.8.3 Extinguisher collar with external threads shall have sufficient height so that the cap or valve does not contact the dome or bottom with the gasket removed
 - 1.8.4 A suitable drain plug be provided in fire extinguishers
- 1.9 **Discharge Hose Assemblies:**
 - 1.9.1 The extinguishers shall be equipped with hose assembly of minimum 4 mtr. long. A shut-off nozzle shall be fitted at the end of the hose to permit intermittent operation
 - 1.9.2 The hose and coupling system shall function throughout the operating temperature range, and coupling systems shall be designed and fitted in such a way that they cannot damage the hose
 - 1.9.3 The burst pressure of the hose assembly shall be equal to or greater than the

appropriate value given below:

- a) three times the pressure developed in the extinguisher at 55°C, the test being carried out at $27 \pm 2^\circ\text{C}$; and
- b) twice the pressure developed in the extinguisher at 55°C, the test being carried out at $55 \pm 5^\circ\text{C}$.

1.10 **Safety and Anti-overfill Devices:**

1.10.1 The operating pressure of the device shall not exceed the test pressure (PE) nor be less than the maximum service pressure (PMS)

1.10.2 Fire extinguisher shall be provided with a device to insure that extinguisher cannot be over filled. As an alternative, the extinguisher body may be marked with the words 'FILL MARK' or 'FULL' to indicate the maximum liquid level.

1.11 **Control Valve:** Fire extinguishers shall be fitted with a controllable valve at the discharge end of the hose assembly to permit discontinuance of the discharge of the extinguishing medium at any given time. The control valve shall be pass the leakage test as specified in IS 16018-2012 with latest revision

1.12 **Method of operation:** The extinguishers shall be of upright operative type and shall be actuated by operating external CO₂ cylinder valve and opening of control valve i.e. discharge nozzle fitted at the end of discharge pipe. It shall be easy in operation and shall comply the requirement of IS 16018-2012 with latest revision

1.13 **Safety Locking Devices: A safety locking device shall be fitted in all Fire Extinguishers.** The release of the safety device shall involve an operation distinct from that of the operation mechanism and shall require a force not less than 20 N nor more than 100 N. It shall be possible to determine visually whether the extinguisher may have been operated.

1.14 **Carriage Assembly:**

1.14.1 The carriage assembly of a wheeled fire extinguisher shall be designed so that one man can easily push or pull the extinguisher over level surfaces and grades up to 2 percent. If intended to be stored in the upright position, the carriage shall stand in the upright position with the tyres off the ground. The force, applied at the handle, required to tilt the extinguisher from the vertical storage position to the towing position shall not exceed 400 N. The force, applied at the handle, required to lift the extinguisher from the reclined storage position, shall not exceed 400 N. The force required to support the handle when it is 80 ± 5 cm from the ground shall not exceed 150 N.

1.14.2 A receptacle or holding device shall be furnished to securely retain the hose assembly and nozzle. The design shall facilitate rapid deployment at the scene of an emergency with the fewest number of operations. The hose shall be stored in such a manner that it will release easily, without kinking, when it is pulled from the stored position when the extinguisher is in the upright or reclined position

1.15 **Gasket and O-rings:** Any elastomeric (rubber facing, O-ring or 'vulcanized in place' seat) used to provide a seating surface shall have the following properties when tested in accordance with IS 3400 (Part 1):

a) *Minimum tensile strength* — 3.4 MPa for silicone rubber (having polyorganosiloxane as its characteristic constituent), 6.9 MPa for fluorocarbons, and 8.3 MPa for other elastomers;

b) *Minimum ultimate elongation* — 100 percent for silicone rubber and 150 percent for other elastomers; and

c) Maximum set of 5.0 mm when 25 mm marks are stretched to 50 mm for silicone rubber, and 62.5 mm for other elastomers, held for 2 min then measured 2 min after release.

Compression Set: A sample of a rubber or rubber like part shall have a compression set not greater than 25 percent of its original thickness after being compressed by one-third of its original thickness. The compression set test shall be conducted on button samples compressed to two-thirds of their original thickness for 24 h at the minimum storage and use temperature at $27 \pm 2^\circ\text{C}$ and $55 \pm 3^\circ\text{C}$.

2.0 **PRESSURE TESTS**

2.1 Test Pressure: The operating pressure of the device shall not exceed the test pressure nor be less than maximum service pressure. The test pressure shall be 1.43 times of maximum service pressure but not less than 20 bar. The service pressure shall not exceed 19 bar.
Each cylinder shall be subjected to test pressure for 30 seconds. There should not be any leakage, visible deformation or failure to the Fire Extinguishers.

2.3 Burst Test: The minimum burst pressure shall be 2.7 times of maximum service pressure. The burst test shall not cause the cylinder to fragment. Break shall not occur in the weld at a pressure less than 5.4 times of maximum service pressure or 80 bar whichever is greater. No parts shall be ejected during burst test.

3.0 CERTIFICATION

***Certification of material used:** The manufacturer shall submit a certificate for the cast analysis of the materials supplied.

***Type Test and Batch Test certificate**

The following type tests as mentioned/applicable in IS-16018/IS-15683, shall be performed and the copy of certificate of type tests conducted shall be produced:

- i) Bulk range/throw test (Type test)
- ii) Resistance to temperature test (Type test)
- iii) Long term leakage test (Type test)
- iv) Resistance to impact test (Type test)
- v) Resistance to vibration test (Type test)
- vi) Resistance to internal and external corrosion test (Type test)
- vii) Tapping test (Type test)
- viii) Crushing Tests (Type test)
- ix) Pressure cycling Test (Type test)
- x) Leakage Test (Type test)
- xi) Method of operation (Batch test)
- xii) Safety-Locking Devices (Batch test)
- xiii) Calibration Test for gauges and indicators
- xiv) Burst strength test for gauges and indicators
- xv) Water resistance test for gauges and indicators
- xvi) Leakage test for gauges and indicators
- xvii) Overpressure Test for gauges
- xviii) Test of Exposure to Extinguishing Medium
- xix) Test for hose assemblies
- xx) Electrical Conductivity Test
- xxi) Performance Test on Fire for its suitability in particular class of Fire

Note: Apart from above mentioned test certificate, any other tests applicable for this fire extinguishers, as specified in IS-16018, shall also be produced.

4.0 MANUFACTURING TESTS

4.1 Pressure gauge, and indicator:

4.1.1 Pressure gauge shall be provided in each fire extinguishers. The gauge dial shall indicate in green the operable pressure range. The background of pressure gauge shall be marked in red. The arc of dial from zero pressure point to lower end shall read "recharge" and maximum indicated pressure shall read "overcharged". All numerals, letters, and characteristics shall be white. Pointer shall be yellow, and the tip of pointer shall end in the arc of pressure indicating dots, and shall have a maximum tip radius of 0.25 mm.

The pressure gauge shall reflect the operating pressure in Bar or Kpa or both.

4.1.2 The maximum indicated gauge pressure shall be between 150% and 250% of the indicated service pressure at 20 degree centigrade but not less than 120% of the maximum service pressure. The length of pointer shall be at least 9.5 mm from centre point of dial tip. The minimum length of arc from zero to indicated service pressure shall be 12 mm.

- 4.1.3 The mark used to indicate the service pressure at 27 degree centigrade should be not less than 0.6 mm and no more than 1.0 mm wide. The gauge shall be marked with the gauge manufacturer's identifying marks.
- 4.1.3 An indicator shall be accurate to within 4% of the service pressure at the lower limit of operable range. The error of the pressure gauge at the indicated service pressure shall not exceed $\pm 4\%$ of service pressure.
- 4.1.4 At the zero pressure mark the error shall not exceed 12% nor fall below service pressure.
- 4.1.5 The maximum indicated pressure the error shall not exceed $\pm 15\%$ of the service pressure.

4.2 **Plastic Components:** Plastic components shall be identifiable and the manufacturer has to submit data for material itself and manufacturing process.

The air-oven ageing, UV light exposure and impact resistance tests, attached with the plastic parts to an extinguishers and then subjected to the appropriate pressure test as mentioned below and certificate of the same shall be attached.

5.0 MARKING AND COLOUR

The red colour conforming to IS 536 shall be used to colour the fire extinguisher body. A small band of "Blue" colour of approximately 5 percent/prominent of surface area shall be painted on extinguishers body.

- 5.1 The operating, recharging, and inspection and maintenance instruction shall be clearly reflected on the extinguisher body. The marking shall identify the extinguisher as to type of media i.e. "Dry Powder Type" and shall include the manufacturer's name and model number with rating and classification of fire extinguishers.
- 5.2 Other information like year of manufacture, factory test pressure shall be permanently marked on the cylinder body. A reference to the range of temperature shall be marked as "acceptable to use at temperature from -5 to +55 Deg. Centigrade.
- 5.3 The statement like "recharge immediately after any use" and for disposable fire extinguishers "discard immediately after use" shall be marked on the body.
- 5.4 Each Fire Extinguishers shall be serially numbered.
- 5.5 Affixing sticker showing periodical maintenance, testing & refilling details dates as per IS-2190 (if not operated):

6.0 BIS CERTIFICATION MARKING

The BIS marking shall be provided on each fire extinguisher. Marking shall preferably embossed on the cylinder body.

7.0 OPERATING INSTRUCTION

The operating instruction shall face outward and cover no more than 120 degree arc on the extinguishers body. The surface area of 75.0 cm² shall be provided used for instructions.

The operating instruction shall be arranged in the following way:

- a) The word "INSTRUCTIONS" shall be at the top of the name plate. The minimum letter height shall be 6.0 mm. The word FIRE EXTINGUISHER shall also be added to the word INSTRUCTIONS.
- b) Operating instructions shall be in the form of numerically sequenced pictographs.
- c) Sequence of pictographs shall illustrate, with picture, the recommended actions necessary for intended operation of the extinguisher in following sequence:
 - a. making ready the extinguisher by disengaging the safety-locking device,
 - b. aiming the extinguishers at the base of the fire, including the recommended distance from the fire at which to begin discharge, and indicating the intended operating attitude of the extinguisher,
 - c. taking whatever action necessary to initiate operation of the extinguisher, and

- d. describing the intended method of applying the extinguishing media on the fire.
 - e. The height of word used in pictographs shall not be less than 5mm
- d) The extinguisher shall be marked with letters 'ABC' and numerical indicating size of fire as _____.

8.0 USE CODE SYMBOLS

Use code symbols, as mentioned in IS:15683, shall be positioned directly below the operating instructions. A written description for each use code symbol may be included as part of the code. The description should be readable.

Use code symbols shall be placed on the extinguisher for those types of fires for which the extinguisher is classified. If extinguishers is not intended for use because potentially injury to the operator, the use of code symbols with a red slash also be placed on the extinguisher. The red slash shall be from the top left corner of the symbol to the bottom right corner.

The use-code symbols shall have dimensions not less than 16 mm × 16 mm excluding the borders

9.0 RECHARGING INSTRUCTION

The recharging instructions on the marking of a rechargeable extinguisher shall be the intended mass and agent that shall be used in charging, the intended expellant gas pressure or the use of a correct and a fully charged gas cartridge or the following words

“Return to an authorized recharger for recharging in accordance with IS 15683”

10.0 INSPECTION INSTRUCTIONS

The following inspection instructions shall be mentioned:

- a) The seals and tamper indicators are not broken or missing
- b) It is full (by weighing or lifting)
- c) It is not obviously damaged, corroded, leaking or has a clogged nozzle; and
- d) Its pressure gauge reading or indicator is in the operable range or position

11.0 TEST FIRE

The extinguishers shall successfully pass the test fire for Class-A and Class-B fires as explained in IS:15683-2006 with latest amendment. Certificate of the same from manufacturer shall be submitted

12.0 MANUALS:

User Manual: A user manual shall be provided with each wheeled fire extinguisher. This manual shall contain the necessary instructions, warnings and cautions for the intended installation, operation and inspection of the extinguisher. The manual shall also have reference of the manufacturer's service manual for maintenance and recharging of the extinguisher.

Service Manual: The manufacturer shall prepare a service manual for each model extinguisher. It shall be made available upon request and shall,

- a) contain necessary instructions, warnings and cautions, a description of servicing equipment, and a description of recommended procedures for intended servicing;
- b) provide a list of part numbers of all replaceable parts; and
- c) indicate that the pressure gauge attached to the extinguisher shall not be used to determine when the intended charging pressure has been reached, and a pressure regulator shall be used if the pressure source is a tank of high pressure gas.

NOTE:

The Fire Extinguishers shall conform to IS 16018-2012 in all respect.

*** The test certificate to be submitted by the manufacturer of Fire Extinguishers**

The Fire Extinguisher shall pass all the tests i.e. performance, hydraulic pressure etc. as specified in IS: 16018-2012 with latest amendments.

13.0 INSPECTION

Final inspection shall be carried out by the inspector designated by GETCO management to inspect the material at the manufacturer works before the dispatch of material.

The inspection shall include inspection of sheets thickness of cylinders, checking of joints/welding etc. Also, inspection of various dimensions, accessories fixed in Fire Extinguishers, certificate verification etc. shall be done invariably.

Following tests shall be carried at the factory premises:

- a) Burst pressure test

- b) Hydraulic pressure
- c) Performance test

Annexure-A (5)
Technical Specification of Fire Extinguishers

DRY POWDER ABC TYPE (9 KG.) STORED PRESSURE FILLED WITH MAP-50%

The Fire Extinguishers shall conform to IS 15683-2018 with latest amendment and ISI marked.

1.0 CONSTRUCTIONAL FEATURES:

- 1.1 Extinguishers body:** Fire extinguishers body (cylindrical) shall be constructed by welded low carbon steel sheet. Cylinder shall be capable of being welded and shall contain maximum of 0.25% carbon, 0.05% sulphur and 0.05% of phosphorus.
- 1.2 Filler material:** Shall be compatible with steel. Dry Powder i.e. Mono Ammonium Phosphate base, at least 50%, suitable for class-A, B and C shall be filled and shall conform to IS 4308. Quantity of powder shall be not less than 9 Kg. ± 2% by mass.
- 1.3 Propellant:** Nitrogen gas shall be used having maximum dew point of -55 degree centigrade.
- 1.4 Thickness:** Thickness of sheet shall be not less than 1.0 mm.
- 1.5 Carrying handle:** The handle shall be 90 mm long. A clearance of 25mm between extinguishers body and carrying handle.
- 1.6 Mounting facilities:** There shall be facility to mound the Fire Extinguishers on the wall. Mounting hook shall be provided having both horizontal and vertical motion of 6mm required to remove Fire Extinguishers from the wall. The hanger loop shall be located in such a way that the operating mechanism shall be clearly visible.
- 1.7 Operating Temperature:** It should have temperature range of +5 to +60 degree centigrade. This shall be marked on Fire Extinguishers.
- 1.8 Effective Discharge Time and Throw:** Minimum discharge time shall be not less than 15 seconds and minimum throw of dry powder shall be 2 mtr. when discharged as prescribed in IS 15683.
- 1.9 Caps, valves and closures:**
 - 1.9.1 At least four full threads of engagement and are required to relieve pressure with at least two full thread engagements. The inside diameter of filling opening shall be 19 mm.
 - 1.9.2 Edges and surface of Fire Extinguishers shall not be sufficiently sharp to constitute a risk of injury to operator.
- 1.10 Hose Assemblies:** The extinguishers shall be equipped with hose assembly of 400mm length. The hose and coupling shall function throughout the operating range and the coupling system shall not damage to the hose.

2.0 PRESSURE TESTS

- 2.1 Test Pressure:** The operating pressure of the device shall not exceed the test pressure nor be less than maximum service pressure. The test pressure shall be 1.43 times of maximum service pressure but not less than 20 bar. The service pressure shall not exceed 19 bar. Each cylinder shall be subjected to test pressure for 30 seconds. There should not be any leakage, visible deformation or failure to the Fire Extinguishers.
- 2.2 Burst Test:** The minimum burst pressure shall be 2.7 times of maximum service pressure. The burst test shall not cause the cylinder to fragment. Break shall not occur in the weld at a pressure less than 5.4 times of maximum service pressure or 80 bar whichever is greater. No parts shall be ejected during burst test.

3.0 CERTIFICATION

- *Certification of material used:** The manufacturer shall submit a certificate for the cast analysis of the materials supplied.
- *Type Test and Batch Test certificate**

The following type tests as mentioned in IS-15683-2018, shall be performed and the copy of certificate of type tests conducted shall be produced:

- i) Bulk range/throw test (Type test)
- ii) Resistance to temperature test (Type test)
- iii) Long term leakage test (Type test)
- iv) Resistance to impact test (Type test)
- v) Resistance to vibration test (Type test)
- vi) Resistance to internal and external corrosion test (Type test)
- vii) Tapping test (Type test)
- viii) Crushing Tests (Type test)
- ix) Pressure cycling Test (Type test)
- x) Leakage Test (Type test)
- xi) Method of operation (Batch test)
- xii) Safety-Locking Devices (Batch test)
- xiii) Calibration Test for gauges and indicators
- xiv) Burst strength test for gauges and indicators
- xv) Water resistance test for gauges and indicators
- xvi) Leakage test for gauges and indicators
- xvii) Overpressure Test for gauges
- xviii) Test of Exposure to Extinguishing Medium
- xix) Test for hose assemblies
- xx) Electrical Conductivity Test
- xxi) Performance Test on Fire for its suitability in particular class of Fire

Note: Apart from above mentioned test certificate, any other tests applicable for this fire extinguishers, as specified in IS 15683-2018, shall also be produced.

4.0 MANUFACTURING TESTS

4.1 **Method of operation:** Each Fire Extinguisher shall be operated upright by pressing the valve fitted on the top of fire extinguishers body.

4.2 **Safety Lock:** Safety locking device shall be made of corrosion resistant materials. Locking devices shall be visible when extinguishers are mounted on wall. It should be operable with one finger. A temper indicator shall be provided.

4.3 **Pressure gauge, and indicator:** Pressure gauge shall be provided in each fire extinguishers. The gauge dial shall indicate in green the operable pressure range. The background of pressure gauge shall be marked in red. The arc of dial from zero pressure point to lower end shall read "recharge" and maximum indicated pressure shall read "overcharged". All numerals, letters, and characteristics shall be white. Pointer shall be yellow, and the tip of pointer shall end in the arc of pressure indicating dots, and shall have a maximum tip radius of 0.25 mm.

The pressure gauge shall reflect the operating pressure in Bar or Kpa or both.

4.3.1 The maximum indicated gauge pressure shall be between 150% and 250% of the indicated service pressure at 20 degree centigrade but not less than 120% of the maximum service pressure. The length of pointer shall be at least 6 mm. The length of arc from zero to indicated service pressure shall be 9 mm.

4.3.2 The mark used to indicate the service pressure at 27 degree centigrade should be not less than 0.6 mm and no more than 1.0 mm wide.
The gauge shall be marked with the gauge manufacturer's identifying marks.

4.3.3 An indicator shall be accurate to within 4% of the service pressure at the lower limit of operable range. The error of the pressure gauge at the indicated service pressure shall not exceed $\pm 4\%$ of service pressure.

4.3.4 At the zero pressure mark the error shall not exceed 12% nor fall below service pressure.

4.3.5 The maximum indicated pressure the error shall not exceed $\pm 15\%$ of the service pressure.

4.3.6 **Plastic Components:** Plastic components shall be identifiable and the manufacturer has to submit data for material itself and manufacturing process.

The air-oven ageing, UV light exposure and impact resistance tests, attached with the plastic parts to an extinguishers and then subjected to the appropriate pressure test as mentioned below and certificate of the same shall be attached.

5.0 MARKING AND COLOUR

The red colour conforming to IS 536 shall be used to colour the fire extinguisher body. A small band of 'blue' colour 5% of total surface area shall be painted.

5.1 The operating, recharging, and inspection and maintenance instruction shall be clearly reflected on the extinguisher body. The marking shall identify the extinguisher as to type of media i.e. "Dry Chemical Powder type" and shall include the manufacturer's name and model number with rating and classification of fire extinguishers.

5.2 Other information like year of manufacture, factory test pressure shall be permanently marked on the cylinder body. A reference to the range of temperature shall be marked as "acceptable to use at temperature from -5 to +55 Deg. Centigrade.

5.3 The statement like "recharge immediately after any use" and for disposable fire extinguishers "discard immediately after use" shall be marked on the body.

5.4 Refilling due date:

6.0 BIS CERTIFICATION MARKING

The BIS marking shall be provided on each fire extinguisher. Marking shall preferably embossed on the cylinder body.

7.0 OPERATING INSTRUCTION

The operating instruction shall face outward and cover no more than 120 degree arc on the extinguishers body. The surface area of 75.0 cm² shall be provided used for instructions.

The operating instruction shall be arranged in the following way:

- a) The word "INSTRUCTIONS" shall be at the top of the name plate. The minimum letter height shall be 6.0 mm. The word FIRE EXTINGUISHER shall also be added to the word INSTRUCTIONS.
- b) Operating instructions shall be in the form of numerically sequenced pictographs.
- c) Sequence of pictographs shall illustrate, with picture, the recommended actions necessary for intended operation of the extinguisher in following sequence:
 - i) making ready the extinguisher by disengaging the safety-locking device,
 - ii) aiming the extinguishers at the base of the fire, including the recommended distance from the fire at which to begin discharge, and indicating the intended operating attitude of the extinguisher,
 - iii) taking whatever action necessary to initiate operation of the extinguisher, and
 - iv) describing the intended method of applying the extinguishing media on the fire.
- d) The extinguisher shall be marked with letters 'ABC' and numerical indicating size of fire as 4A/144B.

8.0 USE CODE SYMBOLS

Use code symbols, as mentioned in IS:15683, shall be positioned directly below the operating instructions. A written description for each use code symbol may be included as part of the code. The description should be readable.

Use code symbols shall be placed on the extinguisher for those types of fires for which the extinguisher is classified. If extinguishers is not intended for use because potentially injury to the operator, the use of code symbols with a red slash also be placed on the extinguisher. The red slash shall be from the top left corner of the symbol to the bottom right corner.

9.0 RECHARGING INSTRUCTION

The recharging instructions on the marking of a rechargeable extinguisher shall be the intended mass and agent that shall be used in charging, the intended expellant gas pressure or the use of a correct and a fully charged gas cartridge or the following words

"Return to an authorized recharger for recharging in accordance with IS 15693"

10.0 INSPECTION INSTRUCTIONS

The following inspection instructions shall be mentioned:

- a) The seals and tamper indicators are not broken or missing
- b) It is full (by weighing or lifting)
- c) It is not obviously damaged, corroded, leaking or has a clogged nozzle; and
- d) Its pressure gauge reading or indicator is in the operable range or position

11.0 TEST FIRE

The extinguishers shall successfully pass the test fire for Class-A and Class-B fires as explained in IS:15683-2006 with latest amendment. Certificate of the same from manufacturer shall be submitted

NOTE:

All Fire Extinguishers shall conform to IS 15683 in all respect.

*** The test certificate to be submitted by the manufacturer of Fire Extinguishers**

The Fire Extinguisher shall pass all the tests i.e. performance, hydraulic pressure etc. as specified in IS: 15683.

12.0 INSPECTION

Final inspection shall be carried out by the inspector assigned by the GETCO management to inspect the material at the manufacturer works before the dispatch of material.

The inspection shall include inspection of sheets thickness of cylinders, checking of joints/welding etc. Also, inspection of various dimensions, accessories fixed in Fire Extinguishers, certificate verification etc. shall be done invariably.

Following tests shall be carried at the factory premises:

- a) **Burst pressure test**
- b) **Hydraulic pressure**
- c) **Performance test**

Annexure-A (6)

Technical Specification of Fire Extinguishers

MECH. FOAM (9 LTR.) STORED PRESSURE

The Fire Extinguishers shall conform to IS 15683-2018 with latest amendment and ISI marked.

1.0 CONSTRUCTIONAL FEATURES:

- 1.1 Extinguishers body:** Fire extinguishers body (cylindrical) shall be constructed by welded low carbon steel sheet. Cylinder shall be capable of being welded and shall contain maximum of 0.25% carbon, 0.05% sulphur and 0.05% of phosphorus.
- 1.2 Filler material:** Shall be compatible with steel. Mechanical Foam suitable for class-A and B Fire and shall be filled with Water added with Foam Concentrate (AFFF). The Mech. Foam concentrate shall conform to IS 4989 Part-4. Quantity of Mechanical Foam shall be not less than 9 Ltr.(filling tolerance 0 to 5% by volume). The surface tension shall not be more than 19 dyne/cm
- 1.3 Propellant:** Nitrogen gas shall be used having maximum dew point of -55 degree centigrade.
- 1.4 Thickness:** Thickness of sheet shall be not less than 1.0 mm.
- 1.5 Carrying handle:** The handle shall be 90 mm long. A clearance of 25mm between extinguishers body and carrying handle.
- 1.6 Mounting facilities:** There shall be facility to mound the Fire Extinguishers on the wall. Mounting hook shall be provided having both horizontal and vertical motion of 6mm required to remove Fire Extinguishers from the wall. The hanger loop shall be located in such a way that the operating mechanism shall be clearly visible.

- 1.7 Operating Temperature:** It should have temperature range of +5 to +60 degree centigrade. This shall be marked on Fire Extinguishers.
- 1.8 Effective Discharge Time and Throw:** Minimum discharge time shall be not less than 9 seconds and minimum throw of dry powder shall be 2 mtr. when discharged as prescribed in IS 15683.
- 1.9 Caps, valves and closures:**
- 1..9.1 At least four full threads of engagement and are required to relieve pressure with at least two full thread engagements. The inside diameter of filling opening shall be 19 mm.
- 1.9.1 Edges and surface of Fire Extinguishers shall not be sufficiently sharp to constitute a risk of injury to operator.
- 1.10 Hose Assemblies:** The extinguishers shall be equipped with hose assembly of 400mm length. The hose and coupling shall function throughout the operating range and the coupling system shall not damage to the hose.

2.0 PRESSURE TESTS

- 2.1 Test Pressure:** The operating pressure of the device shall not exceed the test pressure nor be less than maximum service pressure. The test pressure shall be 1.43 times of maximum service pressure but not less than 20 bar. The service pressure shall not exceed 19 bar.
- Each cylinder shall be subjected to test pressure for 30 seconds. There should not be any leakage, visible deformation or failure to the Fire Extinguishers.
- 1.2 Burst Test:** The minimum burst pressure shall be 2.7 times of maximum service pressure. The burst test shall not cause the cylinder to fragment. Break shall not occur in the weld at a pressure less than 5.4 times of maximum service pressure or 80 bar whichever is greater. No parts shall be ejected during burst test.

3.0 CERTIFICATION

***Certification of material used:** The manufacturer shall submit a certificate for the cast analysis of the materials supplied.

***Type Test and Batch Test certificate**

The following type tests as mentioned in IS-15683, shall be performed and the copy of certificate of type tests conducted shall be produced:

- i) Bulk range/throw test (Type test)
- ii) Resistance to temperature test (Type test)
- iii) Long term leakage test (Type test)
- iv) Resistance to impact test (Type test)
- v) Resistance to vibration test (Type test)
- vi) Resistance to internal and external corrosion test (Type test)
- vii) Tapping test (Type test)
- viii) Crushing Tests (Type test)
- ix) Pressure cycling Test (Type test)
- x) Leakage Test (Type test)
- xi) Method of operation (Batch test)
- xii) Safety-Locking Devices (Batch test)
- xiii) Calibration Test for gauges and indicators
- xiv) Burst strength test for gauges and indicators
- xv) Water resistance test for gauges and indicators
- xvi) Leakage test for gauges and indicators
- xvii) Overpressure Test for gauges
- xviii) Test of Exposure to Extinguishing Medium
- xix) Test for hose assemblies
- xx) Electrical Conductivity Test
- xxi) Performance Test on Fire for its suitability in particular class of Fire

Note: Apart from above mentioned test certificate, any other tests applicable for this fire extinguishers, as specified in IS-15683 with latest amendments, shall also be produced.

4.0 MANUFACTURING TESTS

4.1 **Method of operation:** Each Fire Extinguisher shall be operated upright by pressing the valve fitted on the top of fire extinguishers body.

4.2 **Safety Lock:** Safety locking device shall be made of corrosion resistant materials. Locking devices shall be visible when extinguishers are mounted on wall. It should be operable with one finger. A temper indicator shall be provided.

4.3 **Pressure gauge, and indicator:** Pressure gauge shall be provided in each fire extinguishers. The gauge dial shall indicate in green the operable pressure range. The background of pressure gauge shall be marked in red. The arc of dial from zero pressure point to lower end shall read "recharge" and maximum indicated pressure shall read "overcharged". All numerals, letters, and characteristics shall be white. Pointer shall be yellow, and the tip of pointer shall end in the arc of pressure indicating dots, and shall have a maximum tip radius of 0.25 mm.

The pressure gauge shall reflect the operating pressure in Bar or Kpa or both.

4.3.1 The maximum indicated gauge pressure shall be between 150% and 250% of the indicated service pressure at 20 degree centigrade but not less than 120% of the maximum service pressure. The length of pointer shall be at least 6 mm. The length of arc from zero to indicated service pressure shall be 9 mm.

4.3.2 The mark used to indicate the service pressure at 27 degree centigrade should be not less than 0.6 mm and no more than 1.0 mm wide. The gauge shall be marked with the gauge manufacturer's identifying marks.

4.3.3 An indicator shall be accurate to within 4% of the service pressure at the lower limit of operable range. The error of the pressure gauge at the indicated service pressure shall not exceed $\pm 4\%$ of service pressure.

4.3.4 At the zero pressure mark the error shall not exceed 12% nor fall below service pressure.

4.3.5 The maximum indicated pressure the error shall not exceed $\pm 15\%$ of the service pressure.

4.3.6 **Plastic Components:** Plastic components shall be identifiable and the manufacturer has to submit data for material itself and manufacturing process.

The air-oven ageing, UV light exposure and impact resistance tests, attached with the plastic parts to an extinguishers and then subjected to the appropriate pressure test as mentioned below and certificate of the same shall be attached.

5.0 MARKING AND COLOUR

The red colour conforming to IS 536 shall be used to colour the fire extinguisher body. A small band of 'Yellow' colour 5% of total surface area shall be painted.

5.1 The operating, recharging, and inspection and maintenance instruction shall be clearly reflected on the extinguisher body. The marking shall identify the extinguisher as to type of media i.e. "Mechanical Foam" and shall include the manufacturer's name and model number with rating and classification of fire extinguishers.

5.2 Other information like year of manufacture, factory test pressure shall be permanently marked on the cylinder body. A reference to the range of temperature shall be marked as "acceptable to use at temperature from +5 to +60 Deg. Centigrade.

5.3 The statement like "recharge immediately after any use" and for disposable fire extinguishers "discard immediately after use" shall be marked on the body.

5.4 The Word: "Don't use on live Electrical Part" and "જીવંત ઇલેક્ટ્રિક પાર્ટ્સ પર ઉપયોગ કરવો નહીં." In Bold ,Red Color.

5.5 Affixing sticker showing periodical maintenance, testing & refilling details dates as per IS-2190 (if not operated):

6.0 BIS CERTIFICATION MARKING

The BIS marking shall be provided on each fire extinguisher. Marking shall preferably embossed on the cylinder body.

7.0 OPERATING INSTRUCTION

The operating instruction shall face outward and cover no more than 120 degree arc on the extinguishers body. The surface area of 75.0 cm² shall be provided used for instructions.

The operating instruction shall be arranged in the following way:

- a) The word "INSTRUCTIONS" shall be at the top of the name plate. The minimum letter height shall be 6.0 mm. The word FIRE EXTINGUISHER shall also be added to the word INSTRUCTIONS.
- b) Operating instructions shall be in the form of numerically sequenced pictographs.
- c) Sequence of pictographs shall illustrate, with picture, the recommended actions necessary for intended operation of the extinguisher in following sequence:
 - 1. making ready the extinguisher by disengaging the safety-locking device,
 - 2. aiming the extinguishers at the base of the fire, including the recommended distance from the fire at which to begin discharge, and indicating the intended operating attitude of the extinguisher,
 - 3. taking whatever action necessary to initiate operation of the extinguisher, and
 - 4. describing the intended method of applying the extinguishing media on the fire.
- d) The extinguisher shall be marked with letters 'AB' and numerical indicating size of fire as 2A/89B.

8.0 USE CODE SYMBOLS

Use code symbols, as mentioned in IS:15683, shall be positioned directly below the operating instructions. A written description for each use code symbol may be included as part of the code. The description should be readable.

Use code symbols shall be placed on the extinguisher for those types of fires for which the extinguisher is classified. If extinguishers is not intended for use because potentially injury to the operator, the use of code symbols with a red slash also be placed on the extinguisher. The red slash shall be from the top left corner of the symbol to the bottom right corner.

9.0 RECHARGING INSTRUCTION

The recharging instructions on the marking of a rechargeable extinguisher shall be the intended mass and agent that shall be used in charging, the intended expellant gas pressure or the use of a correct and a fully charged gas cartridge or the following words

"Return to an authorized recharger for recharging in accordance with IS 15693"

10.0 INSPECTION INSTRUCTIONS

The following inspection instructions shall be mentioned:

- a) The seals and tamper indicators are not broken or missing
- b) It is full (by weighing or lifting)
- c) It is not obviously damaged, corroded, leaking or has a clogged nozzle; and
- d) Its pressure gauge reading or indicator is in the operable range or position

11.0 TEST FIRE

The extinguishers shall successfully pass the test fire for Class-A and Class-B fires as explained in IS:15683-2006 with latest amendment. Certificate of the same from manufacturer shall be submitted

NOTE:

All Fire Extinguishers shall conform to IS 15683 in all respect.

*** The test certificate to be submitted by the manufacturer of Fire Extinguishers**

The Fire Extinguisher shall pass all the tests i.e. performance, hydraulic pressure etc. as specified in IS: 15683.

12.0 INSPECTION

Final inspection shall be carried out by the inspector assigned by the GETCO management to inspect the material at the manufacturer works before the dispatch of material.

The inspection shall include inspection of sheets thickness of cylinders, checking of joints/welding etc. Also, inspection of various dimensions, accessories fixed in Fire Extinguishers, certificate verification etc. shall be done invariably.

Following tests shall be carried at the factory premises:

- d) Burst pressure test
- e) Hydraulic pressure
- f) Performance test

Annexure-A(7)

Technical Specification of Fire Extinguishers

DRY POWDER TYPE (25 KG.) FILLED WITH MAP-50% & FITTED EXTERNAL CO2 CYLINDER

The Fire Extinguishers shall conform to IS 16018-2012 with latest amendment and ISI marked.

1.0 CONSTRUCTIONAL FEATURES:

- 1.1 **Extinguishers body:** Fire extinguishers body (cylindrical) shall be constructed by welded low carbon steel sheet. Cylinder shall be capable of being welded and shall contain maximum of 0.25% carbon, 0.05% sulphur and 0.05% of phosphorus.
- 1.2 **Extinguishing Media:** The Fire Extinguishers shall be filled with 25 Kg. (50% Mono Ammonium Phosphate based) Dry Powder comply with IS-4308 (latest amendment)
- 1.3 **Propellant:** The propellant shall be fitted with external CO2 gas cylinder of 1Kg. capacity.
- 1.4 **Nominal Charge: 25 Kg.**
- 1.5 **Filling Tolerance: 25 Kg.(± 2% by mass)**
- 1.6 **Operating Temperature:** It should have temperature range of -5 to +55 degree centigrade. This shall be marked on Fire Extinguishers.
- 1.7 **Effective Discharge Time and Throw:** Minimum discharge time shall be not less than 30 seconds and maximum 210 seconds with minimum throw of 6mtr. when discharged as prescribed in clause 6.2.2.2 of IS 16018. The extinguisher shall commence within 5 seconds of opening the control valve. Not more than 10% of initial charge shall remain within extinguishers after complete discharge.
- 1.8 **Caps, valves and closures:** At least four full threads of engagement and are required to relieve pressure with at least two full thread engagements. The inside diameter of filling opening shall be not less than 25 mm.
 - 1.8.1 Edges and surface of Fire Extinguishers shall not be sufficiently sharp to constitute a risk of injury to operator.
 - 1.8.2 Unless an internal pressure relief is provided a cap, valve or closure shall withstand the burst test pressure specified for the cylinder for 1 min without rupture.
 - 1.8.3 Extinguisher collar with external threads shall have sufficient height so that the cap or valve does not contact the dome or bottom with the gasket removed
 - 1.8.4 A suitable drain plug be provided in fire extinguishers
- 1.9 **Discharge Hose Assemblies:**
 - 1.9.1 The extinguishers shall be equipped with hose assembly of minimum 1.5 mtr. Long. A shut-off nozzle shall be fitted at the end of the hose to permit intermittent operation
 - 1.9.2 The hose and coupling system shall function throughout the operating temperature range, and coupling systems shall be designed and fitted in such a way that they cannot damage the hose
 - 1.9.3 The burst pressure of the hose assembly shall be equal to or greater than the appropriate value given below:
 - a) three times the pressure developed in the extinguisher at 55°C, the test being carried out at 27 ± 2°C; and
 - b) twice the pressure developed in the extinguisher at 55°C, the test being carried out at 55 ± 5°C.
- 1.10 **Safety and Anti-overfill Devices:**
 - 1.10.1 The operating pressure of the device shall not exceed the test pressure (PE) nor be less than the maximum service pressure (PMS)
 - 1.10.2 Fire extinguisher shall be provided with a device to insure that extinguisher cannot be over filled. As an alternative, the extinguisher body may be marked with the words 'FILL MARK' or 'FULL' to indicate the maximum liquid level.
- 1.11 **Control Valve:** Fire extinguishers shall be fitted with a controllable valve at the discharge end of the hose assembly to permit discontinuance of the discharge of the extinguishing medium at any given time. The control valve shall be pass the leakage test as specified in IS 16018-2012 with latest revision

- 1.12 **Method of operation:** The extinguishers shall be of upright operative type and shall be actuated by operating external CO₂ cylinder valve and opening of control valve i.e. discharge nozzle fitted at the end of discharge pipe. It shall be easy in operation and shall comply the requirement of IS 16018-2012 with latest revision
- 1.13 **Safety Locking Devices: A safety locking device shall be fitted in all Fire Extinguishers.** The release of the safety device shall involve an operation distinct from that of the operation mechanism and shall require a force not less than 20 N nor more than 100 N. It shall be possible to determine visually whether the extinguisher may have been operated.
- 1.14 **Carriage Assembly:**
- 1.14.1 The carriage assembly of a wheeled fire extinguisher shall be designed so that one man can easily push or pull the extinguisher over level surfaces and grades up to 2 percent. If intended to be stored in the upright position, the carriage shall stand in the upright position with the tyres off the ground. The force, applied at the handle, required to tilt the extinguisher from the vertical storage position to the towing position shall not exceed 400 N. The force, applied at the handle, required to lift the extinguisher from the reclined storage position, shall not exceed 400 N. The force required to support the handle when it is 80 ± 5 cm from the ground shall not exceed 150 N.
- 1.14.2 A receptacle or holding device shall be furnished to securely retain the hose assembly and nozzle. The design shall facilitate rapid deployment at the scene of an emergency with the fewest number of operations. The hose shall be stored in such a manner that it will release easily, without kinking, when it is pulled from the stored position when the extinguisher is in the upright or reclined position
- 1.15 **Gasket and O-rings:** Any elastomer (rubber facing, O-ring or 'vulcanized in place' seat) used to provide a seating surface shall have the following properties when tested in accordance with IS 3400 (Part 1):
- Minimum tensile strength* — 3.4 MPa for silicone rubber (having polyorganosiloxane as its characteristic constituent), 6.9 MPa for fluorocarbons, and 8.3 MPa for other elastomers;
 - Minimum ultimate elongation* — 100 percent for silicone rubber and 150 percent for other elastomers; and
 - Maximum set of 5.0 mm when 25 mm marks are stretched to 50 mm for silicone rubber, and 62.5 mm for other elastomers, held for 2 min then measured 2 min after release.
- Compression Set:** A sample of a rubber or rubber like part shall have a compression set not greater than 25 percent of its original thickness after being compressed by one-third of its original thickness. The compression set test shall be conducted on button samples compressed to two-thirds of their original thickness for 24 h at the minimum storage and use temperature at 27 ± 2°C and 55 ± 3°C.

2.0 PRESSURE TESTS

- 2.1 **Test Pressure:** The operating pressure of the device shall not exceed the test pressure nor be less than maximum service pressure. The test pressure shall be 1.43 times of maximum service pressure but not less than 20 bar. The service pressure shall not exceed 19 bar. Each cylinder shall be subjected to test pressure for 30 seconds. There should not be any leakage, visible deformation or failure to the Fire Extinguishers.
- 4.4 **Burst Test:** The minimum burst pressure shall be 2.7 times of maximum service pressure. The burst test shall not cause the cylinder to fragment. Break shall not occur in the weld at a pressure less than 5.4 times of maximum service pressure or 80 bar whichever is greater. No parts shall be ejected during burst test.

3.0 CERTIFICATION

***Certification of material used:** The manufacturer shall submit a certificate for the cast analysis of the materials supplied.

***Type Test and Batch Test certificate**

The following type tests as mentioned/applicable for extinguishers in IS-16018/IS-15683, shall be performed and the copy of certificate of type tests conducted shall be produced:

- Bulk range/throw test (Type test)
- Resistance to temperature test (Type test)

- iii) Long term leakage test (Type test)
- iv) Resistance to impact test (Type test)
- v) Resistance to vibration test (Type test)
- vi) Resistance to internal and external corrosion test (Type test)
- vii) Tapping test (Type test)
- viii) Crushing Tests (Type test)
- ix) Pressure cycling Test (Type test)
- x) Leakage Test (Type test)
- xi) Method of operation (Batch test)
- xii) Safety-Locking Devices (Batch test)
- xiii) Calibration Test for gauges and indicators
- xiv) Burst strength test for gauges and indicators
- xv) Water resistance test for gauges and indicators
- xvi) Leakage test for gauges and indicators
- xvii) Overpressure Test for gauges
- xviii) Test of Exposure to Extinguishing Medium
- xix) Test for hose assemblies
- xx) Electrical Conductivity Test
- xxi) Performance Test on Fire for its suitability in particular class of Fire

Note: Apart from above mentioned test certificate, any other tests applicable for this fire extinguishers, as specified in IS-16018, shall also be produced.

4.0 MANUFACTURING TESTS

4.1 Pressure gauge, and indicator: Pressure gauge shall be provided in each fire extinguishers. The gauge dial shall indicate in green the operable pressure range. The background of pressure gauge shall be marked in red. The arc of dial from zero pressure point to lower end shall read "recharge" and maximum indicated pressure shall read "overcharged". All numerals, letters, and characteristics shall be white. Pointer shall be yellow, and the tip of pointer shall end in the arc of pressure indicating dots, and shall have a maximum tip radius of 0.25 mm.

The pressure gauge shall reflect the operating pressure in Bar or Kpa or both.

4.1.1 The maximum indicated gauge pressure shall be between 150% and 250% of the indicated service pressure at 20 degree centigrade but not less than 120% of the maximum service pressure. The length of pointer shall be at least 9.5 mm from center point of dial tip. The minimum length of arc from zero to indicated service pressure shall be 12 mm.

4.1.2 The mark used to indicate the service pressure at 27 degree centigrade should be not less than 0.6 mm and no more than 1.0 mm wide. The gauge shall be marked with the gauge manufacturer's identifying marks.

4.1.3 An indicator shall be accurate to within 4% of the service pressure at the lower limit of operable range. The error of the pressure gauge at the indicated service pressure shall not exceed $\pm 4\%$ of service pressure.

4.1.4 At the zero pressure mark the error shall not exceed 12% nor fall below service pressure.

4.1.5 The maximum indicated pressure the error shall not exceed $\pm 15\%$ of the service pressure.

4.2 Plastic Components: Plastic components shall be identifiable and the manufacturer has to submit data for material itself and manufacturing process.

The air-oven ageing, UV light exposure and impact resistance tests, attached with the plastic parts to an extinguishers and then subjected to the appropriate pressure test as mentioned below and certificate of the same shall be attached.

5 MARKING AND COLOUR

The red colour conforming to IS 536 shall be used to colour the fire extinguisher body. A small band of "Blue" colour of approximately 5 percent/prominent of surface area shall be painted on extinguishers body.

- 5.1 The operating, recharging, and inspection and maintenance instruction shall be clearly reflected on the extinguisher body. The marking shall identify the extinguisher as to type of media i.e. "Dry Powder Type" and shall include the manufacturer's name and model number with rating and classification of fire extinguishers.
- 5.2 Other information like year of manufacture, factory test pressure shall be permanently marked on the cylinder body. A reference to the range of temperature shall be marked as "acceptable to use at temperature from -5 to +55 Deg. Centigrade.
- 5.3 The statement like "recharge immediately after any use" and for disposable fire extinguishers "discard immediately after use" shall be marked on the body.
- 5.4 Each Fire Extinguishers shall be serially numbered.
- 5.5 Affixing sticker showing periodical maintenance, testing & refilling details dates as per IS-2190 (if not operated):

6.0 BIS CERTIFICATION MARKING

The BIS marking shall be provided on each fire extinguisher. Marking shall preferably embossed on the cylinder body.

7.0 OPERATING INSTRUCTION

The operating instruction shall face outward and cover no more than 120 degree arc on the extinguishers body. The surface area of 75.0 cm² shall be provided used for instructions.

The operating instruction shall be arranged in the following way:

- a) The word "INSTRUCTIONS" shall be at the top of the name plate. The minimum letter height shall be 6.0 mm. The word FIRE EXTINGUISHER shall also be added to the word INSTRUCTIONS.
- b) Operating instructions shall be in the form of numerically sequenced pictographs.
- c) Sequence of pictographs shall illustrate, with picture, the recommended actions necessary for intended operation of the extinguisher in following sequence:
 - a. making ready the extinguisher by disengaging the safety-locking device,
 - b. aiming the extinguishers at the base of the fire, including the recommended distance from the fire at which to begin discharge, and indicating the intended operating attitude of the extinguisher,
 - c. taking whatever action necessary to initiate operation of the extinguisher, and
 - d. describing the intended method of applying the extinguishing media on the fire.
 - e. The height of word used in pictographs shall not be less than 5mm
- d) The extinguisher shall be marked with letters 'ABC' and numerical indicating size of fire as _____.

8.0 USE CODE SYMBOLS

Use code symbols, as mentioned in IS:15683, shall be positioned directly below the operating instructions. A written description for each use code symbol may be included as part of the code. The description should be readable.

Use code symbols shall be placed on the extinguisher for those types of fires for which the extinguisher is classified. If extinguishers is not intended for use because potentially injury to the operator, the use of code symbols with a red slash also be placed on the extinguisher. The red slash shall be from the top left corner of the symbol to the bottom right corner.

The use-code symbols shall have dimensions not less than 16 mm × 16 mm excluding the borders

9.0 RECHARGING INSTRUCTION

The recharging instructions on the marking of a rechargeable extinguisher shall be the intended mass and agent that shall be used in charging, the intended expellant gas pressure or the use of a correct and a fully charged gas cartridge or the following words

"Return to an authorized recharger for recharging in accordance with IS 15683"

10.0 INSPECTION INSTRUCTIONS

The following inspection instructions shall be mentioned:

- a) The seals and tamper indicators are not broken or missing
- b) It is full (by weighing or lifting)
- c) It is not obviously damaged, corroded, leaking or has a clogged nozzle; and
- d) Its pressure gauge reading or indicator is in the operable range or position

11.0 TEST FIRE

The extinguishers shall successfully pass the test fire for Class-A and Class-B fires as explained in IS:15683-2006 with latest amendment. Certificate of the same from manufacturer shall be submitted

12.0 MANUALS:

User Manual: A user manual shall be provided with each fire extinguisher. This manual shall contain the necessary instructions, warnings and cautions for the intended installation, operation and inspection of the extinguisher. The manual shall also have reference of the manufacturer's service manual for maintenance and recharging of the extinguisher.

Service Manual: The manufacturer shall prepare a service manual for each model extinguisher. It shall be made available upon request and shall,

- a) contain necessary instructions, warnings and cautions, a description of servicing equipment, and a description of recommended procedures for intended servicing;
- b) provide a list of part numbers of all replaceable parts; and
- c) indicate that the pressure gauge attached to the extinguisher shall not be used to determine when the intended charging pressure has been reached, and a pressure regulator shall be used if the pressure source is a tank of high pressure gas.

NOTE:

The Fire Extinguishers shall conform to IS 16018-2012 in all respect.

*** The test certificate to be submitted by the manufacturer of Fire Extinguishers**

The Fire Extinguisher shall pass all the tests i.e. performance, hydraulic pressure etc. as specified in IS: 16018-2012 with latest amendments.

13.0 INSPECTION

Final inspection shall be carried out by the inspector designated by GETCO management to inspect the material at the manufacturer works before the dispatch of material.

The inspection shall include inspection of sheets thickness of cylinders, checking of joints/welding etc. Also, inspection of various dimensions, accessories fixed in Fire Extinguishers, certificate verification etc. shall be done invariably.

Following tests shall be carried at the factory premises:

- a) **Burst pressure test**
- b) **Hydraulic pressure**
- c) **Performance test**

Note:

(1) Quote your price as per technical specification. No Deviation will be allowed. Material required as per sample and specification only.

(2) Standard product catalogue shall be submitted

(3) In case GETCO does not get exact specification, has reserved right to accept best suitable specification for acceptance.

*****Supply with all accessories, Loading/Unloading, Transportation, Insurance, freight All Inclusive with rate, No other Charges will be paid by GETCO.**

Sign of Contractor

'Superintending Engineer
Circle Office, Jambuva

E. M. D. BANK GUARANTEE FORMAT

FOR TENDER NO.: COMPANY / _____
(BANK GUARANTEE ON NON-JUDICIAL STAMP PAPER OF Rs.300/-)

WHEREAS M/s. _____ (name & address of the Firm) having their registered office at _____ (address of the firms Registered Office) (hereinafter called the 'Tenderer') wish to participate in the tender No. _____ for _____ of (Supply / Erection / Supply & Erection Work) (Name of the material / equipment / Work) for _____ COMPANY Ltd. and WHEREAS a Bank Guarantee for (hereinafter called the "Beneficiary") Rs. _____ (amount of EMD) valid till _____ (mention here date of validity of this Guarantee which will be 4 (FOUR) months beyond initial validity of Tender's Offer) which is required to be submitted by the Tenderer along with the Tender.

We, _____ (name of the Bank and address of the Branch giving the Bank Guarantee) having our Registered Office at _____ (address of Bank's Registered Office) hereby give this Bank Guarantee No. _____ dated _____ and hereby agree unequivocally and unconditionally to pay immediately on demand in writing from the COMPANY Ltd. or any Officer authorized by it in this behalf any amount not exceeding Rs. _____ (amount of E.M.D.), (Rupees _____ (in words) to the said COMPANY Ltd. on behalf of the Tenderer.

We _____ (name of the Bank) also agree that withdrawal of the Tender or part thereof by the Tenderer within its validity or Non-submission of Security Deposit by the Tenderer within one month from the date tender or a part thereof has been accepted by the COMPANY Ltd. would constitute a default on the part of the Tenderer and that this Bank Guarantee is liable to be invoked and encashed within its validity by the Beneficiary in case of any occurrence of a default on the part of the Tenderer and that the encashed amount is liable to be forfeited by the Beneficiary.

This agreement shall be valid and binding on this Bank upto and inclusive of _____ (mention here the date of validity of Guarantee) and shall not be terminable by notice or by Guarantor change in the constitution of the Bank or the firm of Tenderer Or by any reason whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, conceded with or without our knowledge or consent by or between the Tenderer and the COMPANY.

"Notwithstanding anything contrary contained in any law for the time being in force or banking practice, this Guarantee shall not be assignable, transferable by the beneficiary (i.e. GUVNL or Subsidiaries). Notice or invocation by any person such as assignee, transferee or agent of beneficiary shall not be entertained by the Bank. Any invocation of the Guarantee can be made only by the beneficiary directly."

NOTWITHSTANDING anything contained hereinbefore, our liability under this guarantee is restricted to Rs. _____ (Amt. of E.M.D.) (Rupees _____) (in words). Our Guarantee shall remain in force till _____ (Date of validity of the Guarantee). Unless demands or claims under this Bank Guarantee are made to us in writing on or before _____ (Date of validity of the Guarantee), all rights of Beneficiary under this Bank Guarantee shall be forfeited and we shall be released and discharged from all liabilities there under:

Place:

Date:

Please Mention here Complete Postal Address of the Bank with Branch Code, Telephone and Fax Nos.

Signature of the Bank's
Authorised Signatory with
Official Round Seal.

NAME OF DESIGNATED BANKS:

1. All Nationalized Banks including Public Sector Banks IDBI Bank Ltd.
2. Private Sector Banks authorized by RBI to undertake the state Government business, which are (i) Axis Bank (ii) ICICI Bank (iii) HDFC Bank

Note: The Banks shall be the Banks recognized / notified by the Finance Department, Government of Gujarat (GoG) from time to time.

ON STAMP PAPER OF RS.300/-
FORM OF BANKER'S UNDERTAKING

[For Performance Guarantee (PG) for supply period
as per Commercial Terms and Conditions of Tender]

We, Bank of _____ hereby agree unequivocally and unconditionally to pay immediately on demand in writing from the COMPANY Ltd.. or any Officer authorized by it in this behalf any amount up to and not exceeding Rs. _____ (in words) Rupees _____ to the said COMPANY Ltd.on behalf of M/s. _____ who have entered into a contract for the supply/works specified below:

L.O.A. No. _____ dated _____.

This agreement shall be valid and binding on this Bank upto and inclusive of _____ and shall not be terminable by notice or by change in the constitution of the Bank or the firm of Contractors / Suppliers or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alterations made, given conceded or agreed, with or without our knowledge or consent, by or between parties to the said within written contract.

“Notwithstanding anything contrary contained in any law for the time being in force or banking practice, this Guarantee shall not be assignable, transferable by the beneficiary (i.e. GUVNL or Subsidiaries). Notice or invocation by any person such as assignee, transferee or agent of beneficiary shall not be entertained by the Bank. Any invocation of the Guarantee can be made only by the beneficiary directly.”

“NOTWITHSTANDING” anything contained herein before, our liability under this guarantee is restricted to Rs. _____ (Rupees _____ only). Our guarantee shall remain in force until _____ (Date of validity of the Guarantee). Unless demands or claims under this Bank Guarantee are made to us in writing on or before _____ (Date of validity of the Guarantee), all rights of Beneficiary under this Bank Guarantee shall be forfeited and we shall be released and discharged from all liabilities there under:

Place:

Date:

Please Mention here Complete Postal Address of the Bank with Branch Code, Telephone and Fax Nos.	Signature of the Bank's Authorised Signatory with Official Round Seal.
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NAME OF DESIGNATED BANKS:

1. All Nationalized Banks including Public Sector Banks IDBI Bank Ltd.
2. Private Sector Banks authorized by RBI to undertake the state Government business, which are (i) Axis Bank (ii) ICICI Bank (iii) HDFC Bank

Note: The banks shall be the Banks recognized / notified by the Finance Department, Government of Gujarat (GoG) from time to time.

ON STAMP PAPER OF RS.300/-

FORM OF BANKER'S UNDERTAKING

[For Performance Guarantee (PG) for Warrantee Period

as per commercial terms and conditions of tender]

We, Bank of _____ hereby agree unequivocally and unconditionally to pay immediately on demand in writing from the COMPANY Ltd. or any Officer authorized by it in this behalf any amount up to and not exceeding Rs. _____ (in words) Rupees _____ to the said COMPANY Ltd. on behalf of M/s. _____ who have entered into a contract for the supply/works specified below:

P. O. (A/T). No. _____ dated _____.

This agreement shall be valid and binding on this Bank upto and inclusive of _____ and shall not be terminable by notice or by change in the constitution of the Bank or the firm of Contractors / Suppliers or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alterations made, given conceded or agreed, with or without our knowledge or consent, by or between parties to the said within written contract.

Notwithstanding anything contrary contained in any law for the time being in force or banking practice, this Guarantee shall not be assignable, transferable by the beneficiary (i.e. GUVNL or Subsidiaries). Notice or invocation by any person such as assignee, transferee or agent of beneficiary shall not be entertained by the Bank. Any invocation of the Guarantee can be made only by the beneficiary directly.

NOTWITHSTANDING anything contained herein before, our liability under this guarantee is restricted to Rs. _____ (Rupees _____ only). Our guarantee shall remain in force until _____ (Date of validity of the Guarantee). Unless demands or claims under this Bank Guarantee are made to us in writing on or before _____ (Date of validity of the Guarantee), all rights of the Beneficiary under this Bank Guarantee shall be forfeited and we shall be released and discharged from all liabilities there under:

Place:

Date:

Please Mention here Complete Postal Address of the Bank with Branch Code, Telephone and Fax Nos.	Signature of the Bank's Authorised Signatory with Official Round Seal.
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NAME OF DESIGNATED BANKS:

1. All Nationalized Banks including Public Sector Banks IDBI Bank Ltd.
2. Private Sector Banks authorized by RBI to undertake the state Government business, which are (i) Axis Bank (ii) ICICI Bank (iii) HDFC Bank

Note: The Banks shall be the Banks recognized / notified by the Finance Department, Government of Gujarat (GoG) from time to time.

ANNEXURE – 1
(TO BE SUBMITTED)

Subject: Supply of _____

Reference: Tender enquiry No.: COMPANY/ /
Due on date: / / 2025 .

In connection with the above subject and reference I/ We confirm the following:

1. I / We, the under signed have read and examined the Tender Specifications in tender mentioned under reference along with the Commercial terms and conditions.
2. I / We, declare that our Technical Bid is strictly in line with the Tender specifications (except the deviations shown in Annexure of Technical Deviations as per clause no.35 of this tender document).
3. Further, I / We also agree that additional conditions / deviations, if any, found in the Commercial terms & conditions (except reference under clause no.35 of this tender document), our offer shall be out rightly rejected without assigning any reason thereof.

Seal of the Firm

Signature of the Authorised Representatives of the firm

Date:

Name:

Status:

Name of the Tendering Firm / Agency:

ANNEXURE – 2

(TO BE SUBMITTED)

I / WE, confirm that following documents are filled in / submitted in format of the technical bid.

Sr. No	Details	Confirmation (Tick <input type="checkbox"/> any one)
1	Firm's details as per "Annexure –3"	YES / NO
2	Copy of the un-priced schedule i.e. "Annexure – 4". (Description and quantity of items offered in price schedule without price)	YES / NO
3	Delivery schedule as per "Annexure- 5"	YES / NO
4	Past experience details as per "Annexure-6"	YES / NO
5	List of Performance certificates as per "Annexure-7"	YES / NO
6	List of Type test reports as per "Annexure-8"	YES / NO
7	Certificate –A	YES / NO
8	Confirmation of COMPANY technical specification	YES / NO
9	Guaranteed Technical Particulars submitted in COMPANY Performa only.	YES / NO
10	ANNEXURE - 10	YES / NO
11	ANNEXURE - 11	YES / NO
12	ANNEXURE - 12	YES / NO
13	ANNEXURE - 13	YES / NO
14	ANNEXURE - 14: Undertaking in regard to Stop Deal / Black List thereof	YES / NO
15	ANNEXURE–15: Declaration as manufacturer of tender Item/s	YES / NO
16	Important Instruction	YES / NO

Signature of Bidder
Date: _____ Place

Company's Round Seal

ANNEXURE – 3
DETAILS OF THE FIRM

(TO BE SUBMITTED)

These details are necessary to create the database of suppliers

Supplier Name			
Works/factory at			
Within Gujarat / Outside Gujarat			
Pvt. Firm / Public Ltd. / State Govt. Under taking / Central Govt. undertaking		(Indicate the relevant status)	
Supplier Category		Manufacturer/Authorized dealer/distributor/Trader/Agent	
Vendor Registration Letter No. & Date			
Vendor Registration Fee for New Entrants/Re-registration		Not applicable/Paid / Not Paid	
Vendor Registration /Re-registration fee paid Date			
Vendor Registration Validity Period		From Date_____ to Date_____	
VAT / TIN No. and VAT / TIN Date, if applicable			
GST Registration No. and GST Date			
MSEs / SSI Certificate /EM No. and Date			
NSIC/DGS&D/CSPO Certificate No. (Should be revalidated since last 3 yrs.)@			
NSIC/ DGS&D/CSPO Certificate Date. @			
Whether under NSIC/ DGS&D/CSPO scheme. If Yes then Monetary limit. @		Rs.	
Custom No. and Date (If applicable)			
ISO Certification Details			
Name of ISO Certification Agency			
Validity Period of ISO Certification		From Date_____ to Date_____	
Address of	Registered Office	Factory / Works	Authorized Representative (As per cond. no.:40 above)
Contact person name			
Designation			
Address			
City & Pin code			
State			
Country			
Phone Nos.(Office)			
Phone Nos.(Residence)			
Fax Nos.			
STD Code.			
Mobile No.			
Web site address			
Email-id			
Specimen signature			

ANNEXURE – 3 (Continued)

DETAILS OF PARTNERS / DIRECTORS OF FIRM / COMPANY				
Sr. No.:	Name of Partners / Directors DIN no. as applicable	e- mail ID	Address of Office & Contact Phone / Fax No. / Mobile No.	Address of Residence & Contact Phone / Fax No./ Mobile No.
1				
2				
3				
4				
Name of Authorized Signatory:				

@ Applicable for Gujarat based (Works in Gujarat) bidders only.

Signature of Bidder
Date:

Company's Round Seal
Place

ANNEXURE – 4

UN – PRICED SCHEDULE (COPY WITHOUT PRICES)

(TO BE SUBMITTED)

Sr. No.	Details of the Items / Equipments Offered	Quantity Offered	Firm's Per Annum Production Capacity for the offered item / items @

@ No. of shift per day in operation at factory/works considered for working out annual production capacity may be mentioned.

Signature of Bidder
Date: Place

Company's Round Seal

**ANNEXURE - 5
DELIVERY SCHEDULE**

(TO BE SUBMITTED)

Tenderer should furnish their Delivery Schedule of the tendered items in the following table in online / e-tendering only

Approval of drawing / prototype sample, if applicable is to be completed in commencement period only (as indicated by COMPANY in the tender)

Sr. No.	Details of the Items / Equipments Offered	Tenderer's Commencement Period asper tender	Tenderer's Delivery Schedule after Commencement period.

Note:

The bid will be rejected if offered delivery is more than the requirement of tender, without going in to further correspondence with bidder.

Signature of Bidder
Date: Place

Company's Round Seal

ANNEXURE- 6

DETAILS OF THE EXPERIENCE FOR SUPPLY OF TENDER ITEM /SIMILAR TYPE OF TENDER ITEM IN LAST FIVE YEARS FROM THE DUE DATE OF TENDER:

(TO BE SUBMITTED)

Sr. No	ITEMS SUPPLIED TO	ORDER REFERENCE No. & DATE	Name of ITEMS	ORDER QUANTIT Y	ORDER FULLY EXECUTED YES/NO	STATUS, IF ORDER UNDER EXECUTION	Qty. on hand if order under execution	REMARKS
A	GUVNL (Formerly GEB) COMPANY/UGVCL/DGVCL/PGVCL/GETCO/GSECL (List of orders to be submitted in “EMD Cover Document” in physical form. Refer clause no. 8)							
1)								
2)								
3)								
4)								
5)								
B	OTHER STATE ELECTRICITY BOARD:							
1)								
2)								
3)								
4)								
5)								
C	PRIVATE FIRMS:							

1)								
2)								
3)								
4)								
5)								

Signature of Bidder
Date: Place

Company's Round Seal

ANNEXURE – 7
LIST OF PERFORMANCE CERTIFICATES

(PHOTO COPY/IES OF PERFORMANCE REPORT/S TO BE SUBMITTED)

Sr. No.	Name of the Authority by whom certificate is issued	Reference No. & Date	Details of items supplied
1	2	3	4

Signature of Bidder
Date: _____ Place

Company's Round Seal

ANNEXURE- 8

LIST OF TYPE TESTS REPORTS

(PHOTO COPY/IES OF TYPE TEST REPORT/S DULY NOTARIZED OF EACH OFFERED ITEM AS PER REQUIREMENT OF TENDER TO BE SUBMITTED IN PHYSICAL FORM IN “EMD COVERDOCUMENTS “as per clause no. 8)

Sr. No	Type Test Report No. & Date	Tests Carried out at (Name of Laboratory)	Rating & Type / Designation of Item / Equipment	Name of the test Conducted	Results Of the Tests.

ANNEXURE – 9

LIST OF THE TENDER DRAWINGS

(DRAWING OF EACH OF ITEM OFFERED AS PER REQUIREMENT OF TENDER TO BE SUBMITTED IN PHYSICAL FORM WITH E.M.D. COVER)

Sr. No.	Description / drawing of	Drawing Number	Number of Sheets
1	2	3	4

Signature of Bidder
Date: Place

Company's Round Seal

ANNEXURE – 10

(TO BE SUBMITTED)

1	PRICES: [FIRM /VARIABLE]	FIRM /VARIABLE
2	<p>GST :[In percentage]</p> <p>(If opted for Composition under GST, please mention “C” instead of percentage)</p> <p>(In case different rate of GST applicable on different items, details shall be provided separate annexure)</p> <p>Please quote your GST Registration No.& Date of the location wherefrom Supplier / Contractor intends to supply goods / services)</p>	_____ %
	<p>SALES TAX: [In percentage]</p> <p>(Please Specify EXCLUSIVE / Inclusive in Ex-work price /EXEMPTED/ NOT APPLICABLE)</p> <p>Please quote your Sales Tax Registration No. & Date.</p> <p>Goods offered are First sale or second</p>	
4	<p>PENALTY TERMS OF TENDER AGREED:</p> <p>(Clause no.:25) (Please Specify YES / NO.)</p>	YES / NO
5	<p>PERFORMANCE GUARANTEE TO COVER EXECUTION PERIOD (SECURITY) TERMS OF TENDER AGREED: (Cl.no.9)(Please Specify YES / NO.)</p>	YES / NO
6	<p>PERFORMANCE GUARANTEE TO COVER WARRANTY PERIOD TERMS OF TENDER AGREED: (Wherever applicable): (Cl.no.43) (Please Specify YES / NO.)</p>	YES / NO
7	<p>DELIVERY TERMS OF TENDER AGREED:</p> <p>(Please Specify YES / NO.) (It should not be different than declared / mentioned in Annexure-5) (Please refer Cl. no. 23 of comm. T & C and as per schedule-A of tender)</p>	YES / NO
8	<p>VALIDITY OF THE OFFER OF TENDER AGREED (clause no.:10)(Please Specify YES / NO.)</p>	YES / NO
9	<p>PAYMENT TERMS OF TENDER AGREED:</p> <p>(Clause no.:20) (Please Specify YES / NO.)</p>	YES / NO
10	<p>ITEMS OFFERED : Brief description :</p>	1.
		2.
		3.
		4.
		5.
11	<p>QUANTITY OFFERED (It should not be different than declared / mentioned in Annexure-4)</p>	1.
		2.
		3.
		4.
		5.

Note: %age/amount of GST/Cess will be considered as offered in price bid.

ANNEXURE – 11

(SCANNED / PHOTO COPY OF EACH OF FOLLOWING TO BE SUBMITTED)

Vendors must furnish documents as stated in qualifying requirement along with technical Bid :

Note: In case of non-attachment of mandatory document or attachment of wrong document, bid/offer may be rejected at the discretion of COMPANY.

ANNEXURE – 12

(TO BE SUBMITTED)

TECHNICAL& COMMERCIAL DEVIATIONS, IF ANY,TOBE FURNISHED IN THIS ANNEXURE ONLY

Signature of Bidder
Date: Place

Company's Round Seal

TO BE DISCUSSED
ANNEXURE – 13
(To be submitted in online mode)
(UNDERTAKING IN REGARD TO QUOTED PRICE)

(All bidders will have to furnish the following undertaking duly filled in, for all the quoted item/s of the tender along with online Technical)

<p>[A] Bidder shall mention confirmed/Not confirmed in provided box.</p> <p>“This is to certify / confirm that during past 3 months from the last date of submission of the above tender, we have not quoted/offered the unit ex-worksprice with excise duty / VAT/GST/Cessfor the tendered item/s (with similar specifications as per the above tender of COMPANY) at the unit ex-works price with excise duty/ VAT/GST/Cess to other subsidiary company of GUVNL, which is lower than the unit ex-works price with excise duty/VAT/GST/Cess quoted/offered in the above tender by us for the aforesaid tendered item.</p>	Confirmed/ not confirmed																
<p>[B] If not confirmed at [A] above, please fill up the following.</p> <p>The unit ex-works price with excise duty/VAT/GST/Cess quoted/offered (with similar specifications as per the above tender of COMPANY) by us to other subsidiary company of GUVNL at the prices lower than this tender during the last three (3) months are given below:</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 10%;">Sr. No.</th> <th style="width: 30%;">Name of tender item</th> <th style="width: 20%;">Name of buyer</th> <th style="width: 40%;">Unit ex-work price with excise duty/VAT/GST/Cess in Rs.</th> </tr> </thead> <tbody> <tr> <td>#</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>#up to 25 Nos. of Rows</p>	Sr. No.	Name of tender item	Name of buyer	Unit ex-work price with excise duty/VAT/GST/Cess in Rs.	#												
Sr. No.	Name of tender item	Name of buyer	Unit ex-work price with excise duty/VAT/GST/Cess in Rs.														
#																	
<p>[C] Bidder shall mention accepted/Not accepted in provided box.</p> <p>We further accept and confirm that if the above prices as per [B] quoted/offered are lower than the prices of this tender or if subsequently it comes to the knowledge of COMPANY that we have quoted/offered the unit ex-works price with excise duty /VAT/GST/Cess or tendered item/s (with similar specifications as per the above tender of COMPANY) to other subsidiary company of GUVNL, which is lower than the unit ex-works price with excise duty /VAT/GST/Cess quoted/offered by us in the present tender of COMPANY for the tendered item/s during past 3 months from the last date of submission of this tender and till LOA is placed under this tender by COMPANY, COMPANY is authorized to place the LOA / A/T for the above tendered item/s at lowest of the such lower unit ex-works price with excise duty /VAT/GST/Cess quoted/offered by us during this period and we undertake to accept the LOA / A/T at such lowest unit ex-works price with excise duty/VAT/GST/Cess.”</p>	Accepted/ not accepted																

NOTE:

BIDDERS MUST MENTIONED / PROVIDE TEXT / WORDS OF “CONFIRMED / NOT CONFIRMED” IN BOX OF PART [A] and “ACCEPTED / NOT ACCEPTED” IN BOX OF PART [C] OF ABOVE ANNEXURE -13 IN ONLINE MODE. THE WORDS OTHER THAN ABOVE SHOULD NOT BE ALLOWED / CONSIDERED OTHERWISE THE BID MAY BE REJECTED WITHOUT GOING IN TO FURTHER CORRESPONDANCE WITH BIDDER.

ANNEXURE – 14

(UNDERTAKING IN REGARD TO STOP DEAL / BANNED FOR BUSINESS DEALING / BLACK LIST THEREOF).

Sub: Undertaking in regard to Stop Deal / Banned for Business dealing / Black List Thereof.

Ref: Tender No.:

I / We _____ authorized signatory of M/S
_____ here by certify that M/S
_____ and their proprietor / any partner / any directors of the firm is not stop
deal and/or banned for business dealing and/or black listed by GUVNL and/or their any subsidiary company viz. GSECL /
GETCO / DGVCL / COMPANY / UGVCL / PGVCL.

Seal of the Firm

Signature of the Tenderer

ANNEXURE-15

(TO BE SUBMITTED)

Ref.:

Date:

"I / We declare that we are manufacturer for all the tendered items".

Confirm / Not Confirm: _____

Name of Bidder / Manufacturer: _____

Address of the works: _____

(TO BE SUBMITTED)

Tender for Supply of _____

Tender No. COMPANY/
Due On:

On Firm's Letter Head

CERTIFICATE – "A"

I _____ / We _____ authorised signatory of
M/s. _____ hereby certify that
M/s. _____ is not related with other firms who have submitted tenders for the
same items under this inquiry / Tender.

Seal of the Firm

Signature of the Tenderer

With Designation

Place:

Date:

(TO BE SUBMITTED)

Gujarat Energy Transmission Corporation Ltd.
REGD. OFFICE: 2nd FLOOR, SARDAR PATEL VIDYUT BHAVAN, RACE COURSE,
VADODARA-390 007

Tender No. COMPANY/

Due On:

IMPORTANT INSTRUCTIONS

1. The Tenderer should clearly give certificate along with the Technical Bid:

“This is to confirm and certify that the offer submitted by me is strictly in accordance with COMPANY Tender specifications, Guaranteed Technical Particulars and drawing as mentioned in the Tender Specifications. There is no commercial or Technical deviation (except the deviations shown in Annexure of Technical Deviations as per clause no.35 of this tender document) in the offer from COMPANY Tender Specification. I undertake to abide by COMPANY Technical specification / Guaranteed Technical Particulars / Drawing, I undertake to supply materials strictly as per COMPANY Technical specification / Guaranteed Technical Particulars / Drawing, even if any technical deviations are mentioned by me. I also undertake to abide by all commercial conditions of COMPANY, including delivery schedule.”

(Signature of the Tenderer)

2. Any offer without above certificate will not be considered and the tender will be outrightly ignored in the absence of above certificate.
3. After opening of the Tender, if it is found that the offer given by the Tenderer is not according to COMPANY specifications, Guaranteed Technical Specifications, Drawing and commercial terms and conditions and false certificate is given by the Tenderer, then COMPANY will not deal with the firm for the present Tender. It is, therefore requested that the Tenderer should take care in giving their offer and submission of documents, including Type Test certificate.
4. The conditional tenders will not be accepted.

VENDOR REGISTRATION APPLICATION FORM:

1.
 - a) Name of the Firm
 - b) Year of Establishment.
 - c) The date of commencement of commercial production.
 - d) PAN / TAN No. (Attach certified copy).
 - e) GST Registration No. (Attach Certified copy).
2. Address of the Factory / Works from where material will be supplied
 - a) Full Address:
 - b) Telephone No.
 - c) Fax No.
 - d) e - mail ID.
3. Address of the Registered Office.
 - a) Full Address:
 - b) Telephone No.
 - c) Fax No.
 - d) e-mail ID.
4. Whether Proprietary or Partnership or Pvt. Ltd., or Public Ltd.(Copy of Income Tax Returns for 3 years in case of Proprietary Firm, Partnership Deed in case of Partnership Firm and Memorandum and Article of Association in case of Company)
5. Name of the Proprietor / Partners / Directors.
6.
 - a) List of items / materials to be registered for supply with rating / description. The relevant IS Number shall be mentioned.
 - b) Details of Registration nonrefundable fees of Rs. _____ vide Cheque / D.D. No. _____ dated _____ issuing Bank _____. (Attach a copy of Money Receipt issued by the Company)
7. Whether the Factory is owned by the Firm (documentary evidence of Ownership must be produced). In case Firm does not own factory but utilize the facility for manufacturing / fabrication of equipment's / stores for which Firm has applied on Live & License or other basis, the Firm should furnish valid Legal Agreement that factory of (here indicate the Name of the Firm whose factory is being utilized) has been put at the Firm's disposal at least for Five Years at the time of Registration / Re-registration for the equipment's / stores for which the Firms have applied.
8. Name and Full Address of the Bankers and Account No. along with details of credit facilities sanctioned.
 - a) Total investment excluding Loan Capital (Pl. attach Certified True Copy of the last 3 years' Balance Sheets)
 - b) Total turnover for last Three Years.
 - c) Copies of Income Tax Return for last 3 years.
9. Loan Capital with Bank Limit.
10. Copy of latest Income Tax Clearance Certificate.
11. Product manufactured with complete description.

12. Area of land occupied by the Factory.
13. Built up area of the Factory.
14. No. of Working Shifts in the Factory.
15. Factory License No. (Notarized Copy)
16. SSI and NSIC/ DGS&D/ CSPO Certificate No.(Notarized Copy)
17. Value of Plant and Machinery certified by SSI in case of SSI Units, along with the date of assessment of said value.
18. If registered under the Companies' Act or any other Act, give Registration No. and Date of Registration etc. along with copy of Registration Certificate.
19. Whether the product manufactured carry ISI mark (Please specify YES / NO)
20. Whether registered with other Power Utilities DGS&D, Other Govt. and Semi-Govt. Deptt. and validity thereof. (attach a copy such Registration Certificate)
21. Details of machinery installed with their capacities.
22. Details of testing equipment with their capacities and details of Calibration.
23. a) Qualified personnel working in the Factory / Office, their academic Qualification and Experience.

Particulars	Name	Qualification	Experience
a) Managerial			
b) Production / Work Staff			
c) Quality Control Staff			
b) Other Personnel working in the Factory and their experience.			
a) Skilled			
b) Unskilled			
c) Other.			
24. a) Is testing record maintained and if so, since when
b) Type Tests as per Standards (This is must for Registration)
25. Method adopted for Quality Control
26. Is the person in charge for Quality Control independent of production control?
27. Distinguished marks or method employed to identify materials, if any.
28. Source of supply of Raw Materials (with address)
29. a) Production Capacity per annum (quantity)
b) Maximum production per annum (in quantity as well as value) achieved so far.
30. a) Details of order executed indicating quantity, value, Purchaser's Name, Order No. and Date, Quantity Supplied till actual completion date, (self certified statement to be attached).

- b) Please confirm whether your Firm and/or proprietor/ partner/ director of the firm is not under Stop Deal / banned for business dealing / Blacklisted by any Power Utility or Offices, Submit details. This is must (Affidavit by Director is required)
31. Estimate of stocks of raw material held and the estimated Production on single shift basis from the stock so available.
 32. Result of sample testing.
 33. List of items holding ISO 9001 Certificate.
 34. Remarks.

Signature

Date:

Place:

Annexure A
(On duly Notarized Non-Judicial Stamp Paper of Rs. 100/-)

UNDERTAKING

We, M/s. _____ address _____, do hereby declare that the name of our Company / Firm has been changed from M/s. _____ to M/s. _____ pursuant to MOA / Amalgamation.

We, through this Undertaking confirm that there is neither change in the infrastructure facilities nor in the products / items and that change is only in the Name / Ownership / Control of the Company / Firm only.

We shall be liable and responsible, to execute the Orders placed vide A/T No. _____ and Vendor Registration given by _____ (Name of subsidiary Company), and agree to fulfill all the obligations related to it.

(Shri : _____)
For and On behalf of
M/s. _____

Place: _____
Date: _____

Non-judicial stamp paper of Rs. 300/- duly Notarized

A G R E E M E N T

THIS AGREEMENT made on this day of Two thousand

BETWEEN

..... (Name of the Company), having Registered Office at and represented by (Name and designation of the Authorized Officer (Herein after called "**The Supplier**", which expression where the context so requires or admits shall include his legal heir, administrators, executors, assignees and legal representatives) of the **ONE PART**.

AND

..... (Name of the Company), having Registered Office at and represented by (Name and designation of the Authorized Officer (Herein after called "**The Purchaser / purchaser Company**", which expression where the context so requires or admits shall include his administrators, executors, authorized person, assignees and legal representatives) of the **OTHER PART**.

WHEREAS, the Supplier willingly submitted bids for the Tender No. of the Purchaser company for supply of [**Name of the material / items to be supplied by the Supplier**] as specified and as per delivery instructions provided in the Acceptance of Tender (AT) / Letter of Acceptance (LOA) issued vide No. dtd. by the Purchaser company at the accepted respective prices or rates mentioned against the said items / materials.

AND WHEREAS THE PURCHASER Company has accepted the tender of the Supplier for the supply for the total sum of Rs. _____ (Rupees _____ only) *including / excluding taxes upon the terms and subject to the conditions herein mentioned in the agreement.

AND WHEREAS, a list is made out in the "**SCHEDULE**" hereunder written and all of which said documents of the Schedule are deemed to form part of this agreement and included in the expression "**the Supply**" wherever herein used, upon the terms and subject to the conditions hereinafter mentioned.

NOW THIS AGREEMENT WITNESSES AS UNDER AND IT IS HEREBY AGREED AND DECLARED THAT:-

- (1) The Supplier has accepted the Terms and Conditions set out in the Tender Notice No. dtd. as well as in the form of Acceptance of Tender (AT) / Letter of Acceptance (LOA) No. dtd. which will hold good & valid during the period of this Agreement.
- (2) The Supplier shall do and perform for all supplies and things mentioned and described in this agreement or which are implied therein or therefrom respectively or are reasonably necessary for the in-time and in manner supplies as mentioned and subject to the general / commercial terms & conditions and stipulations contained in this agreement.
- (3) In consideration of the due provision, executions, completion of the Supply, as agreed to by the Supplier as aforesaid, the Purchaser company hereby agrees to pay all the sums of money as and when they become due and payable to the supplier under the provisions of the agreement and such payment to be made at such times and in such manner as provided in the agreement.
- (4) In respect of the said Tender as per the terms & conditions of this Agreement, the Supplier has deposited amount in Cash or DD or has provided valid Bank Guarantee of Rs. (Rupees only) with the Purchaser Company towards performance guarantee of execution period i.e. for security deposit of the supply material / items.
- (5) Upon breach by the Supplier of any of the conditions of this Agreement, the Purchaser Company may give a notice in writing to rescind, determine and put to an end to the A/T without prejudice to the right of the Purchaser company to claim damages for antecedent breaches thereof on the part of the Supplier and also to claim reasonable

compensation / risk & cost purchase for the loss occasioned by the Purchaser Company due to failure of the Supplier to fulfill the Order as certified in writing by the Purchaser for which Certificate shall be conclusive evidence of the amount of such compensation payable by the Supplier to the Purchaser.

- (6) The Purchaser Company shall not be bound to take the whole or any part of the ordered quantity herein or therein mentioned in the LOA / AT and may cancel the contract at any time after giving **ONE MONTH'S NOTICE IN WRITING** without compensating the Supplier.
- (7) This Agreement shall remain in force till the expiry of satisfactory performance of the Supply during Guarantee / Warranty period including for the quantity mentioned in the repeat order, if any as per the terms & conditions of the LOA / AT.
- (8) Any Notice in connection with the Supply including the Notice for termination may be given by the Purchaser or any Authorized Officer for the said purpose as per the Commercial Terms & Conditions of the LOA / AT.
- (9) If subject to the circumstances beyond control i.e. Force Majeure conditions, the Supplier fails to deliver the materials, the same shall be governed as per the Tender Documents.
- (10) The agreed value, extent of supply, delivery dates, specifications, and other relevant matters may be altered by mutual agreement as per the policy of the purchaser Company and if so altered shall not be deemed or construed to mean or apply to affect or alter other general / commercial terms & conditions of the agreement and the agreement so altered or revised shall be and shall always be deemed to have been adhered subject to and without prejudice to said stipulation.
- (11) The following is the Schedule forming part of this agreement as provided herein above:

SCHEDULE

List of documents :

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

In witness whereof the parties hereto have set their hands and seals this day, month and year first above written.

Place :

Date :

1. Signed, Sealed and delivered by :

(Signature with Name, Designation & Official seal / stamp).

For and on behalf of M/s. _____ (Supplier) **(Complete Name, Address of the authorized person of the Supplier with Authority letter or Board's Resolution in case of company)**

In the presence of Name, full Address & Signatures:

- i) _____

ii) _____

2. Signed, Sealed and Delivered by :

(Signature with Name, Designation & Official seal / Stamp).

For and on behalf of _____ (Purchaser) (Complete Name, Designation & Location / Address of the authorized officer as per DOP of the Purchase Company)

In the presence of Name, Full Address & Signature:

i) _____

ii) _____

GUJARAT ENERGY TRANSMISSION CORPORATION LTD



TRANSMISSION CIRCLE
JAMBUVA, VADODARA-390 014

Tender No: JTC/ 26-27/ 05 (web tender)

NAME OF WORK / PURCHASE

Tender for purchase of various types of Fire Extinguishers as per Specifications for various S/S under Dahod and Godhra AM Divisions under Jambuva Circle

PRICE BID

Tender – JTC / 26-27 / 05 (Web Tender)

SCHEDULE - A

Tender for purchase of various types of Fire Extinguishers as per Specifications for various S/S under Dahod and Godhra AM Divisions under Jambuva Circle

Sr. No.	Work Description	Qty	Rate (Rs.)	Amount (Rs.)
1	Dry Chemical Powder –DCP- 9 KG as per specifications	17 Nos.		
2	Dry Chemical Powder –DCP-25 KG as per specifications	07 Nos.		
3	Co2 type -6.5 KG as per specifications	17 Nos.		
4	Co2 type -22.5 KG as per specifications	15 Nos.		
5	Mechanical Foam type- 50 ltr as per specifications	10 Nos.		
		A) Sub Total Rs.		
		B) GST @_____%		
		C) Total with GST Rs.		

I/We have read and clearly understood the terms, conditions, schedule- A and Technical specifications put by GETCO on WEB site.

I/We hereby accept all the conditions and specifications of this tender document and accordingly. I/We am/are willing to supply the same as per Tender's specification. Total amount of My Tender is Rs._____Amt.in Rs.

_____)

Note :

- (1) Bidder should quote price for supply items including all taxes as per Schedule – A, Over all lowest will be considered as L1 party during commercial evaluation. Rates should be quoted on firm price basis.
- (2) Rates are inclusive of all type of freight, transit insurance, packing & forwarding , transportation , Loading, Unloading and all other charges etc.
- (3) Applicable GST rate needs to be a mentioned above and in case of tenders option for composition scheme, “ C “ shall be mentioned and amount (in Rs.) shall be “ 0” (Zero)
- (4) I / We agree to supply the articles noted above at the rates herein tendered by me / us subject to the condition of tender and supply at the Tender Inquiry which I / We have carefully read and which I / We have thoroughly understood and to which I / We agree.
- (5) I / We have by agree to keep this offer open for 120 days after the returnable date of the tenders and shall be bound by communication of acceptance dispatched within the prescribed time.
- (6) Supplier should send specification, test results, with drawing, product Catalog in technical bid
- (7) Successful contractor has to submit manufacturer Warranty document to Engineer – In –Charge.
- (8) The contractor shall have to supply the best quality of materials, as per the specifications and relevant I.S. codes.
- (9) No collection of materials shall be made before it is got approved from the Engineer-in-charge.
- (10) Materials, if and when rejected by the Engineer-in-charge shall be immediately removed from FOR destination

- (11) Supply should be made properly with complete technical specifications as per the specifications under the supervision of Engineer In-Charge.
- (12) The procurement of various materials shall be either from the manufacturers or their main authorized dealers/distributors to ensure that no duplicate/spurious makes are used in the works. Any misleading in such case, GETCO reserves the rights for decision in the matter and same shall be binding to the tenderer/contractor.
- (13) The successful tenderer shall have to supply as per " TECHNICAL SPECIFICATION " of the tender.
- (14) GETCO reserves the right to reject part or full quantity, if supplied quantity will be found undersize or improper in quality or not as per the specification. Contractor will have to replace the improper material quantity at their own expense or amount of the same will be deducted from his bill.

Yours faithfully,

(Signature of tenderer)

(With Company's Seal)