

**Tender Document for “Supply, Installation, Testing and Commissioning of 50 kVA (or higher) Diesel Generator with allied works at Indian Bank, Executive flat, No 2, 1<sup>st</sup> Cross street, Sait Colony, Egmore, Chennai - 600 008”.**

**Through GeM Portal only  
TECHNICAL BID**

**HO:EST:SVM:12:2023-24**

**Date: 04.08.2023**

**This Tender has 75 pages**



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## FORM OF TENDER

To,  
Assistant General Manager (Estate),  
Indian Bank Corporate Office,  
Premises, Estate & Expenditure Dept,  
No. 254-260, Avvai Shanmugam Salai,  
Royapettah, Chennai – 600 014.

Dear Sir/s,

**Sub: “Supply, Installation, Testing and Commissioning of 50 kVA (or higher) Diesel Generator with allied works at Indian Bank, Executive flat, No 2, 1<sup>st</sup> Cross street, Sait Colony, Egmore, Chennai 600 008”**

Having duly examined the tender documents including the drawings, specifications, designs bill of quantities relating to the works specified in the under written memorandum and having visited / inspected the site of the said works and having acquired all the requisite information relating there to as affecting this tender, I/We hereby offer to execute the works specified therein at the rates specified in the Bill of quantities (**while submitting Price Bid**) and in accordance, in all respects, with the specifications, designs, drawings and instructions in writing referred to in the conditions of tender, the Articles of Agreement, Special Conditions, if any, the Bill of quantities and Conditions of Contract and with such materials are as specified, by and in all other respects in accordance with such conditions in the Bill of quantities and conditions of contract so far as applicable.

Thanking You,

Tenderers Name & Signature

Date and Company Seal:



### **NOTICE INVITING TENDER (through GeM Portal)**

Indian Bank, Corporate Office, Estate Department, Chennai invites 2 bid system through GeM portal from reputed and resourceful bidders for executing “**Supply, Installation, Testing and Commissioning of 50 kVA (or higher) Diesel Generator with allied works at Indian Bank, Executive flat, No 2, 1<sup>st</sup> Cross street, Sait Colony, Egmore, Ch -08**”.

1.	Name of Work	“Supply, Installation, Testing and Commissioning of 50 kVA (or higher) Diesel Generator with allied works at Indian Bank, Executive flat, No 2, 1 <sup>st</sup> Cross street, Sait Colony, Egmore, Chennai 600 008”.
2.	Estimated cost of work	Rs. 14.7 Lakhs (Rupees Fourteen Lakhs and Seventy Thousand Only)
3.	Period of completion	30 days reckoned from the 7 <sup>th</sup> day of issue of the work order or handing over of site whichever is later.
4.	Validity of Tender	120 days from the date of opening of Technical Bid
5.	Earnest Money Deposit (EMD)	Rs. 30,000/- (Rupees Thirty Thousand only) in NEFT / DD / Bank Guarantee.  Bank/Branch: Indian Bank, Harbour Branch IFSC : IDIB000H003 A/c Name : HO Expenditure Dept A/c Number : 432438421 .  UTR details (NEFT Mode) to be submitted along with Technical Bid.
6.	Initial Security Deposit (ISD)	2% of the Bid Amount (Including EMD amount)
7.	Retention Money (RM)	5% against each RA bill
8.	Total Security Deposit EMD+ISD+RM	7% of the cost. (50% will be released after 15days of payment of the final bill and the balance 50% will be released after the Defect liability Period of One year).
9.	Value of work for Interim Payment	Rs 8,00,000/- (Rupees Eight Lakhs Only)



10	Tender Documents	The Tender Documents can be downloaded from the GeM Portal Only
11.	Cost of Tender documents	<b>Free of cost.</b>
12.	Liquidated Damages	1% for delay per week of the contract value subject to maximum of 10% of contract value.
13	Dates for downloading the Tender documents (through GeM Portal)	<b>04.08.2023 to 29.08.2023</b>
14.	Last date of submission of Tenders (Through GeM Portal only)	<b>29.08.2023- 15.00hrs.</b>
15.	Date of Opening of Technical bid	<b>29.08.2023- 15.30hrs</b> through GeM portal.
16.	Date of Opening of Financial bid	Will be intimated later to the qualified Tenderers only.
17.	Defect Liability Period	12 Months from the date of Virtual Completion of work.
18.	Bank Account Details (for EMD)	<b>Bank/Branch: Indian Bank, Harbour Branch</b> <b>IFSC : IDIB000H003</b> <b>A/c Name : HO Expenditure Dept</b> <b>A/c Number : 432438421</b>

**Note:**

1. The Final Financial price bid will be decided through the GeM portal
2. The bank reserves the right to reject any or all tenders/bids without assigning any reason.
3. The rates quoted by the Tenderer shall be based only on the specifications and conditions of the tender documents.
4. Bank is not liable to make any payment to tenderers either for inspection of site or for preparation to submit the tender/bid, regardless of the conduct or outcome of the bidding



process.

5. Bank reserves the right to cancel the tender of the bidder who fails to submit their tender in the prescribed format of bank.
6. The Companies who are registered with Micro, Small & Medium Enterprises and also those having valid NSIC certificate under Government Store Purchase Programme are exempted from the submission of Tender document fee/EMD on submission of requisite proof in the form of valid certification from MSME and NSIC.

ASSISTANT GENERAL MANAGER (ESTATE)

Indian Bank, Corporate Office  
Premises, Estate & Expenditure Dept,  
First Floor,  
No. 254-260, Avvai Shanmugam Salai,  
Royapettah, Chennai – 600014  
Ph : 044 - 2527 8800

044 – 2813 4401

044 – 2813 4498

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# Pre-Qualification Document

**“Supply, Installation, Testing and Commissioning of 50 kVA (or higher) Diesel Generator with allied works at Indian Bank, Executive flat, No 2, 1<sup>st</sup> Cross street, Sait Colony, Egmore, Chennai 600 008”.**



**Sub: “Supply, Installation, Testing and Commissioning of 50 kVA (or higher) Diesel Generator with allied works at Indian Bank, Executive flat, No 2, 1<sup>st</sup> Cross street, Sait Colony, Egmore, Chennai 600 008”.**

The intending bidders shall fulfill the following minimum **Criteria for pre-qualification** bidding for the above jobs: -

1.0 The Tenderers shall be themselves manufactures / authorized dealers of manufacturers who have executed the work of Supply, Installation, Testing and Commissioning of Diesel Generator work at Government, / Public Sector Undertakings / PSBs /IT / reputed business organizations. **The authorized dealer / contractor shall produce authorization letter from the manufacturer for participation in the Tender.**

## 2.0 EXPERIENCE

S.no	Eligible Work	Value – Rs. In Lakhs
1	Three similar completed works each costing not less than	6
2	Two similar completed works each costing not less than	8
3	One similar completed work each costing not less than	12

In the Last five years ending 31.03.2023. Similar nature means Supply, Installation, testing and commissioning of DG sets of Capacity of 50 kVA and above.

3.0 **TURNOVER:** Average annual turnover from the works for the last three years ending 31<sup>st</sup> March 2023 should not be less than **Rs. 15 Lakhs** as per the audited balance sheet. If the audited statement as of 31.03.2023 is not available, preceding 3 years statement shall be submitted.

4.0 **Profit / Loss:** - Tenderer should be a Net Profit making firm and should not have made losses in the last three financial years out of past 5 years. Certificate(s) from Chartered Accountant / Statutory auditors specifying the net worth of the





Applicants, as at the close of the preceding financial year.

5.0 **Solvency Certificate:** - The contractor should have a solvency of the amount of **Rs 6 Lakhs** duly certified by any Scheduled Bank **obtained on or after 01.04.2022.**

6.0 The tenderer should have after sales service center at Chennai. Address proof along with the contact details/ Land Line Number shall be furnished..

#### **Other conditions**

- Mode of Application is through GeM Portal.
- Interested parties meeting the above Tender criteria can download the tender document from GeM Portal and submit experience profile, proof of meeting the above criteria, attested copies of completion / work in progress certificates from the clients, audited certified balanced sheet for the last 3 (three) years, EPF /GST, Registration as Contractor with various PSUs, State PWDs, CPWD, MES, Railways and Autonomous Bodies (if any), details of Technical and Administrative employees, etc., through GeM Portal. Application not accompanied by any of the above documents and EMD will be rejected at the discretion of Indian Bank.
- No Joint Venture or consortium of firms shall be allowed.
- Indian Bank reserves the right to verify the authenticity of the documents submitted by the contractors. Indian Bank also reserves the right to reject any or all applications, split the works or cancel the process without assigning any reason whatsoever may be.
- The Panel of pre-qualified contractors shall be initially valid for three year. However Indian Bank reserves the right to curtail or extend at its sole discretion.
- The bidder should possess the necessary testing instruments like Megger, clip on meter, earth resistance tester etc for carrying out the tests at any time.
- The contractors fulfilling the above eligibility criteria & Prequalified during this Tender process shall be empaneled for a period of 3 years from the date of Pre - Qualification. However Indian Bank reserves the right to curtail or extend at its sole discretion.



## **SECTION I**

### **INSTRUCTIONS TO TENDERERS**

#### **General**

#### **1.0 SCOPE OF TENDER BID**

- 1.1 The Employer, as defined in the Tender document, hereinafter called “the Owner,” wishes to receive tender documents.
- 1.2 Throughout these bidding documents, the terms “bid” and “tender” and their derivatives (“bidder”/“tenderer”), “bided /tendered”, “bidding”/“tendering”, etc. are Synonymous. Day means calendar day. Singular also means plural.
- 1.3 The approximate Estimated Value of the works is as indicated in the tender document

#### **2.0 ELIGIBLE TENDERERS**

- 2.1 This Invitation to Tender bid is open to all experienced and reputed contractors involved in “**Supply, Installation, Testing and Commissioning of 50 kVA (or higher) Diesel Generator with allied works at Indian Bank, Executive flat, No 2, 1<sup>st</sup> Cross street, Sait Colony, Egmore, Chennai 600 008**” whether Individual or Sole Proprietor, Partnership firm, Private limited, or Public limited Company who satisfy the qualifying criteria. Joint ventures are not accepted.
- 2.2 The tenderers are required to forward the documents as indicated in the tender documents.

#### **3.0 QUALIFYING CRITERIA**

As given in Page No. 8 of this tender document.

Additional Requirement: Even though the tenderers meet the above qualifying criteria, they are liable to be disqualified if they have

- (a) Made misleading or false representation in the forms, statements and attachment in proof of the qualification requirements;
- (b) Records of poor performance such as abandoning the work, not properly completing the contract, inordinate delays in completion, litigation history or financial failures etc.
- (c) Their business banned by any Central Govt. Department/ Public Sector Undertakings or Enterprises of Central Govt.
- (d) Not submitted all the supporting documents or not furnished the relevant details as per the prescribed format.



- (e) Any one of the partners (in case of partnership firm) or any Directors in case of pvt ltd., or public ltd firm being convicted by a Court of law.

- 3.1 Tenderer shall submit the general information about them as per ProformaNo-I
- 3.2 Tenderer shall submit the list of major plant & machinery available with the firm as per Proforma No.- II

#### 4.0 SITE VISIT

- 4.1 The tenderer is advised to visit **(upon prior approval)**, and examine the Site of Works and its surroundings and obtain for itself on its own responsibility and cost all information that may be necessary for preparing the bid and entering into a contract for construction of the Works.
- 4.2 The tenderer and any of its personnel or agents will be granted permission by the Employer /Owner to enter upon its premises and lands for the purpose of such visit **(upon prior approval)**, but only upon the express condition that the tenderer, its personnel, and agents, will release and indemnify the Employer/Owner and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
- 4.3 Before submitting a Bid, the Tenderer shall be deemed to have satisfied himself by actual inspection of the site and locality of the works, Traffic conditions/restrictions, Availability of parking space, Transportation of materials that all conditions liable to be encountered during the execution of the works are taken into account and that the rates entered in the Price Bid document are adequate and all inclusive for the completion of work to the entire satisfaction of the Employer/Owner.

#### 5.0 BID OPENING

- 5.1 Part-I of the Bid (Technical Bid) will be opened through GeM Portal and the date and time intimated in the Notice Inviting tender (NIT)) mentioned in "Tender document" in presence of Tenderers or authorized representatives of Tenderers who wish to attend the opening of Bids. **Bank will decide the Final Financial price through GeM Portal. Advance intimation will be given to all qualifying bidders of Technical Bid about the date, time. Mode of submission of Tender is accepted only through GeM Portal. No Hardcopy of Tender is accepted for evaluation.**



## 6.0 PROCESS TO BE CONFIDENTIAL

- 6.1 Information relating to the examination, clarification, evaluation and comparison of bids, and recommendations for Tender shall not be disclosed to tenderers or any of their persons not officially concerned with such process until the Tender process is finalized.

## 7.0 EXAMINATION OF BIDS AND DETERMINATION OF RESPONSIVENESS

- 7.1 The Employer shall examine the bids to determine whether they are complete, whether the documents have been properly signed and whether the bids are generally in order, and all documents as per tender document have been submitted.
- 7.2 Prior to the detailed evaluation, Employer shall determine whether each bid is of acceptable quality, is generally complete and is substantially responsive to the tender documents. For purposes of this determination, a substantially responsive bid is one that confirms to all the documents as specified in the Tender document without material deviations, objections, Conditionality or reservation, material deviation, objection, conditionality or reservation is one;
- a) That affects in any substantial way the scope, quality or performance of the contract.
  - b) That limits in any substantial way, inconsistent with the bidding documents, the Employers' rights or the successful Tenderer's obligations under the tender document or
  - c) Whose rectification would unfairly affect the competitive position of other Tenderers who are presenting substantially responsive bids.
- 7.3 If a bid is determined to be not substantially responsive, it shall be rejected by the Employer.

## 8.0 EVALUATION OF TENDER BIDS

- 8.1 The bids, which are determined as substantially responsive, shall be evaluated based upon the criteria as given in qualifying criteria.
- 8.2 No Tenderer is permitted to canvass to Employer on any matter relating to this Bid. Any Tenderer found doing so is liable to be disqualified and his/their bid is liable to be rejected.
- 8.3 The Employer may visit few of the works completed by the tenderers, whom they claim satisfying the eligibility criteria (As a part of tender process).



- 9.0** The application should be type-written. The applicant should sign and stamp each page of the application.
- 10.0** Overwriting should be avoided. Correction, if any should be made by neatly crossing out, initialing, dating and rewriting. Pages of the Tender documents are numbered. Additional sheets, if any, added by the contractor, should also be numbered by him.
- 11.0** Any information furnished by the applicant found to be incorrect either immediately or at a later date, would render him liable to be debarred from Tender / tendering / taking up of work in Indian bank. If such applicant happens to be pre-qualified/ enlisted contractor, his name shall be removed from the pre-qualified list of contractors.
- 12.0** All information called for in the enclosed forms should be furnished against the relevant columns. If for any reason, information is furnished on a separate sheet, this fact should be mentioned against the relevant column. Even if no information is to be provided in a column, a 'NIL' or 'NO SUCH CASE' entry should be made in that column. If any particulars! Query is not applicable in case of the applicant, it should be stated as "not applicable". The applicants are cautioned that not giving complete information called for in the application forms or not giving it in clear terms or making any change in the prescribed forms or deliberately suppressing the information may result in the applicant being rejected. Applications/Tender document submitted through GeM Portal Only. The Application/Tender document received after the due date and time of submission shall not be considered.

### **2.3. SUBMISSION OF BIDS THROUGH GeM PORTAL**

The Bid documents, to be uploaded as part of GeM Portal bid submission, are as follows:

- a. Eligibility Criteria, along with all supporting documents required.
- b. All Annexure as per this tender on Bidder's letter head with authorizing person's signature and Bidder seal on all pages.
- c. All supporting documents and product literature in support of Technical specifications.
- d. Relevant brochures
- e. Compliance to Technical Specifications as per Technical Bid.
- f. Any other information sought by the Bank with relevant to this tender. Bidder should upload all the copies of relevant documents without fail in support of



their bid and as per the instructions given in tender documents. If the files to be uploaded are in PDF format, ensure to upload it in “Searchable” PDF Format. After filling data in predefined forms bidders need to click on final submission link to submit their encrypted bid.

Please take care to scan documents so that total size of documents to be uploaded remains minimum. **All documentation evidence provided to the Bank shall be in PDF Format. The Scanned Documents shall be OCR enabled for facilitating “search” on the scanned document.** Utmost care may be taken to name the files/documents to be uploaded on GeM portal.

## 2.4. BID RELATED INFORMATION

Bidders must ensure that all documents uploaded on GeM portal as files or zipped folders, contain valid files and are not corrupt or damaged due to any processing at bidder PC system like zipping etc. It shall be the responsibility of bidder themselves for proper extractability of uploaded zipped files.

Any error/virus creeping into files/folder from client end PC system cannot be monitored by GeM Portal software/server and will be bidder’s responsibility only.

In addition to uploading the documents in GeM portal, Bidders should also submit the following in a sealed envelope, super scribing with the tender Reference number, due date, Name of the Bidder, etc.

- a) Earnest Money Deposit/Bid Security

**Note:** Companies registered as Micro/Small Units under MSE/NSIC should submit documentary proof for claiming exemption for Cost of Bid document and EMD.

**The following ‘Four Key Instructions’ for bidders must be assiduously adhered to**

- a. Obtain individual Digital Signing Certificate (DSC or DC) well in advance before tender submission deadline on GeM portal.
- b. Register your organization on GeM portal well in advance before tender submission deadline on GeM portal
- c. Get your organization’s concerned executives trained on GeM portal well in advance before tender submission deadline on GeM portal
- d. Submit your bids well in advance of tender submission deadline on GeM portal (Bank will not be responsible any problem arising out of internet connectivity issues).

**Note:** While the first three instructions mentioned above are especially relevant to first-time users of the GeM portal, the fourth instruction is relevant at all times.



## Proforma – I

### General Information

All Individual /Sole Proprietor/Partnership firm/Private limited/Public limited Company applying for pre-qualification are requested to complete the information in this form.

1	Name of Tenderer	
2	Head Office Address	
3	Address on which Correspondence should be done.	
	Tel. No.	
	Mobile no.	
	Fax No.	
	E-mail address	
4	Place of incorporation / registration	
5	Constitution of tenderer	
i)	Specify, if the tenderer is	
	a) An individual	
	b) A proprietary firm	
	c) A firm in partnership	
	d) A Limited Company or Corporation	
ii)	Attach a copy of Proprietorship or Partnership Deed or Article of Association or Incorporation of Company as the case may be .	
6	Bank solvency	
7	Turn Over for the years given below	
	2019 - 2020	
	2020 - 2021	
	2021 - 2022	
	2022 - 2023	
8	Give particulars of registration with Govt. / Semi Govt. / Public Sector Undertakings / Local Bodies.	
9.	Other details: a) EPF No. b) Labour license no c) PAN No. d) GST Registration No. (Copies to be enclosed)	



10.	Any other information considered necessary but not included above	
11.	Names and Titles of Directors and officers with designation to be concerned with this work with Designation of individuals authorized to act for the organization	
12.	Was the applicant ever required to suspend works for a period of more than six months continuously after commencement of works. If so, give the name of the project and give reasons thereof.	
13.	Has the applicant or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give the name of the project and give reasons thereof.	
14.	Has the applicant or any constituent partner in case of partnership firm, ever been debarred / black listed for tendering in any organization at any time? If so, give details	
15.	Has the applicant or any constituent partner in case of partnership firm, ever been convicted by a court of law? If So, give details	
16.	Detailed description and value of works successfully completed during the last five years as mentioned in Page no. 8	
17.	Furnish names and address of previous organization for which you have executed similar work in the recent past (At least three)	

**Note: Only self attested copies to be furnished.**

**Date & Place**

**Signature & seal of the applicant**







**PROFORMA II(a)**

**DETAILS OF KEY TECHNICAL AND ADMINISTRATIVE PERSONNEL EMPLOYED BY  
THE FIRM / COMPANY**

S.no	Designation	No of staffs	Names	Qualification	Professional Experience	Years of Experience in this firm

**Seal and Signature of the applicant**

**Date and Place**



**FINANCIAL INFORMATION**

I Financial Analysis – Details to be furnished duly supported by figures in Balance Sheet/Profit and Loss Account for the last three years ended 31.03.2022 duly certified by the Chartered Accountant, as submitted by the applicant to the Income-Tax Department (Copies to be attached).

FINANCIAL YEARS	17-18	18-19	19-20	20-21	21-22
(i) Gross Annual turn-over in Works: mentioned in the NIT					
(ii) Profit or Loss					
(iii) Financial position:					
(a) Cash					
(b) Current Assets					
I Current Liabilities					
IV) Net Working capital (b-c)					
(b)Current Ratio:					
Current Assets/Current Liabilities (b/c)					
I Acid Test Ratio:					
Quick Assets/Current Liabilities (a/c)					
V. Income Tax clearance Certificate					
VI. Solvency certificate from Bankers (Scheduled Bank) of Applicant.					
VII. Financial arrangements for carrying out the proposed work					

Date and Place

**SIGNATURE OF APPLICANT(S)**

**Signature of Chartered Accountant with seal of the Applicant**



## PROFORMA IIIA

### LIST OF SIMILAR WORKS SATISFYING QUALIFICATION CRITERIA COMPLETED DURING THE LAST 5 YEARS

S.No	Clients Name & Address	Name of the work & Location	Scope of work carried out by the bidder	Agreement/ Letter of Award No. & Date	Contract Value	Date of start	Date of completion	Reasons for delay in Completion, if any	Ref. Or Document (with page no.) in support of meeting Qualification Criterion



**PROFORMA IIIB**

**LIST OF WORKS ON HAND**

S.No	Clients Name & Address	Name of the work & Location	Scope of work	Agreement/ Letter of Award No. & Date	Contract Value	Date of start



**PROFORMA – IV**

**Certificate of Credit Facility  
(Solvency) (On Bank's letter Head)**

This is to certify that M/s \_\_\_\_\_, is a reputed firm / company with a good financial standing.

The firm / company is enjoying a fund based credit facility of Rs. \_\_\_\_\_ to meet its working capital requirements.

**Signature**

**Name, Designation &**

**Address of Bank**

**BANK'S SEAL**

**NOTE: The above certificate shall be from Scheduled Bank.**



## PROFORMA V

### PERFORMANCE REPORT FOR WORKS REFERRED TO IN PROFORMAIII (A)

1. Name of the work / Project & Location.
2. Scope of work.
3. Agreement No.
4. Estimated Cost
5. Tendered Cost
6. Value of work done
7. Date of Start
8. Date of completion
  - a. Stipulated date of completion.
  - b. Actual date of completion.
9. Amount of compensation levied for delayed Completion if any.
10. Performance report based on quality of work, Time Management, and Resources :  
Very Good/Good/Fair/Poor

**Date and Place**

**SUPERINTENDING ENGINEER /**  
**CHIEF PROJECT MANAGER**  
**OR EQUIVALENT.**



## SPECIAL INSTRUCTIONS TO TENDERERS

### Time of Completion, Extension of Time & Progress Chart

#### *Time of Completion:*

The entire work is to be completed in all respects within the stipulated period of **30** days. The work shall deem to be commenced within seven days from the date of issue of Work order or date of handing over of site, whichever is later. Time is the essence of the contract and shall be strictly observed by the Tenderer.

The work shall not be considered as complete until the Architects have certified in writing that this has been completed and the Defects Liability Period shall commence from the date of such certificate.

The contractor may plan and execute all the works around the clock.

#### *Extension of Time:*

If in the opinion of the Indian Bank/Architects / Project Management Consultants the works be delayed (a) by reason of any exceptionally inclement weather, or (b) by reason of instructions from the Indian Bank in consequence of proceedings taken or threatened by or disputes, with adjoining or neighboring owners or (c) by the works, or delay, of other Tenderers or tradesmen engaged or nominated by the Indian Bank and not referred to in the specification or (d) by reason of authorized extra and additions or I by reason of any combination of strikes or lock-out affecting any of the building trades of (1) from other causes which the Indian Bank may consider being beyond the control of the Tenderer, the Indian Bank at the completion of the time allowed for the contract shall make fair and reasonable extension of time for completion in respect there for. In the event of the Indian Bank failing to give possession of the site upon the day specified above the time of completion shall be extended suitably. In case of such strikes or lockouts, as are referred to above, the Tenderer shall, immediately give the Indian Bank, written notice thereof. Nevertheless the Tenderer shall use his best endeavors all that to prevent delay, and shall do all that may be reasonably required to the satisfaction of the Indian Bank to proceed with the works and on his doing so, it will be ground of consideration by the Indian Bank for a extension of time as above provided. The decision of the Indian Bank as to the period to be allowed for an extension of time for completion hereunder (which decision shall be final and binding on the Tenderer) shall be promulgated at the conclusion of such strike or lock-out and the Indian Bank shall then, in the event of an extension being granted, determine and declare the final completion date. The provision in clause 5 with respect to payment of liquidated damages shall in such case, be read and construed as if the extended dated fixed by the Indian Bank were substituted for and the damage shall be deducted accordingly.





### ***Progress of Work:***

During the period of construction, the Tenderer shall maintain proportionate progress on the basis of a Programme Chart submitted by the Tenderer immediately before commencement of work and agreed to by the Indian Bank / Architects. Tenderer should also include planning for procurement of scarce material well in advance and reflect the same in the Programme Chart so that there is no delay in completion of the project.

### **2. Defects Liability Period (DLP)**

- a) It must be realized that this period is for exposure of “latent defects” such as settlements, shrinkages or expansion cracks, undue weathering and wear due to faulty material and workmanship.
- b) The DLP commences from the certified date of Virtual Completion issued by the Architects/Bank.
- c) Whenever the Indian Bank is of the view that the defects in the workmanship and/or materials used are likely to be apparent only over a long period, the Defect Liability Period may be extended as deemed fit.

### **3. Date of Commencement**

Normally, Date of commencement shall be either 7 Days from the Work order issued to the Tenderer or the day on which Tenderer is instructed to take possession of the site, Whichever is later.

### **4. Date of Completion**

Date of completion shall be arrived at after adding the time allowed for the execution of the work to the date of commencement of work.

### **5. Period of Final Measurement**

The period of final measurement after completion shall be made taken into account the complexity of the work and staff available for carrying out measurements.

All hidden works shall have already been measured as the work progressed in presence of Tenderers, Indian Bank, Architect and respective specialized consultants to check up the quality and method of installation. It should be noted that unless a longer period is stipulated, the condition of contract generally lays down three months (maximum) from the date of completion of the contract as the period of final measurement. Even though the maximum period of three months is mentioned, it shall be endeavored to complete the measurements as expeditiously as possible.



**6. Period of Honoring Interim Certificate**

The period shall be ten days from the date of receipt of the certificate from the Architect along with M Book only signed by the Tenderer consultants & Architect.

**7. Period of Honoring Final Certificate**

The period shall be one month from the date of receipt of the final bill certificate from the Architect along with M book duly signed by Tenderer, Consultant and Architects and statutory Certificates wherever necessary along with as built drawings of the works executed. No due certificate from self as well as from the sub agencies involved by the main contractor should be produced to the bank at the time of submitting final bill by the main contractor.

**8. Retention Money**

The retention percentage (I.e. deduction from interim bill) shall be 5% of the Gross value of each interim bill. The maximum amount of retention money shall be the balance amount of the Total Security Deposit. 50% of the retention amount will be refunded to the Tenderer on completion subject to the following:

- Issue of Virtual Completion Certificate by the Architect/Bank.
- Tenderer's removal of his materials, equipment, labour force, temporary sheds/stores etc. from the site. (excepting for a small presence required if any for the Defect Liability Period and approved by the Indian Bank) The remaining 50% of the amount may be refunded 14 (Fourteen) days after the end of defects liability period provided he has satisfactorily carried out all the works and attended to all defects in accordance with the conditions of the Contract, including site clearance.

**9. Receiving, Opening and Recording of Tenders**

Part-A tender will be opened at **15.30** hours on the same day as the last day



of the receipt (through GeM portal only).

**After technical evaluation, intimation will be given to all qualifying bidders about the date, time of opening of price bid through GeM Portal only with the opening of the lowest value among the quotes shall be treated as Successful Bidder.**

**10.** The work should be carried out with full co-ordination / co-operation of occupants of the House without damaging any permanent structures or furniture belonging to them. If any damage occurs, the cost of same will have to be set right by the Tenderer at his /their own cost.



## GENERAL CONDITIONS OF CONTRACT

Except where provided for in the description of the individual items in the schedule of quantities and in the specifications and conditions laid down hereinafter and in the Drawings, the work shall be carried out as per standard specifications and under the direction of Architects.

### 1. Interpretation

In construing these conditions, the specifications, the schedule of quantities, tender and Agreement, the following words shall have the meaning herein assigned to him except where the subject or context otherwise requires:

- i. Indian Bank: The term Indian Bank shall denote Indian Bank with their Corporate Office at No. 254-260, Avvai Shanmugam Salai, Royapettah, Chennai – 600 014 and any of its employees representative authorized on their behalf.
- ii. Tenderer: The term Tenderer shall mean (to the firm the contract is awarded) and his / their heirs, legal representatives, assigns and successors.
- iii. Site: The site shall mean the site where the works are to be executed as shown within boundary in red border on the site plan including any building and erections thereon allotted by the Indian Bank for the Tenderer's use.
- iv. Drawings: The work is to be carried out in accordance with drawings, specifications, the schedule of quantities and any further drawings which may be supplied or any other instruction, which may be given by the Indian Bank during the execution of the work.

All drawings relating to work given to the Tenderer together with a copy of schedule of quantities are to be kept at site and the Architects shall be given to such drawings or schedule of access whenever necessary.

In case any detailed Drawings are necessary, Tenderer shall prepare such detailed drawings and or dimensional sketches there for and have it confirmed by the Indian Bank/ Architects/PMC as case may be prior totalling up such work.

The Tenderer shall ask in writing for any clarifications.



- v. “The Works” Shall mean the work or works to be executed or done under this contract.
- vi. “Act of Insolvency” shall mean any act as such as defined by the Presidency Towns Insolvency act or in Provincial Insolvency Act or any amending Statutes.
- vii. “The Schedule of Quantities” shall mean the schedule of quantities as specified and forming part of this contract.
- viii. “Priced Schedule of Quantities” shall mean the schedule of quantities duly priced with the accepted quoted rates of the Tenderer.

## 2. Tenders

### a) Technical Bid

The entire set of tender documents downloaded from GeM Portal should be submitted fully signed on every page . Signature will indicate the acceptance of the tender papers by the tenderer. Signed copy of Technical Bid to be uploaded in the GeM Portal.

### b) Price Bid - the price should be quoted in the Price Bid format attached to this bid through GeM portal only.

The Indian Bank reserves the right to reject the lowest or any tender and also to discharge any or all of the tenders for each section or to split up and distribute any item of work to any specialist firm or firms, without assigning any reason.

The tenderers should note that the tender is strictly on the item rate basis and their attention is drawn to the fact that the rates for each and every item should be correct, workable and self-supporting. If called upon by the Indian Bank/ Architects detailed analysis of any or all the rates shall be submitted. The Indian Bank/ Architects shall not be bound to recognize the Tenderer's' analysis.

The works will be paid for as “measured work” in the basis of actual work done and not as “lump sum” contract, unless otherwise specified. All items of work described in the schedule of quantities are to be deemed and paid as complete works in all respects and details including preparatory and finishing works involved, directly, related to and reasonably detectable from the drawings, specifications and schedule of quantities and no further extra charges will be allowed in this connection. In the case of lump-sum charges in the tender in respect of any item of works, the payment of such items of work will be made for the actual work done on the basis of lump-sum charges as will be assessed to be payable by the Indian Bank.

The Indian Bank has power to add to, omit from any work as shown in drawings or described in specifications or included in schedule of quantities and intimate the same in



writing but no addition, omission or variation shall be made by the Tenderer without authorization from the Indian Bank. No variation shall vitiate the contract. Please also refer to para 9 hereinafter.

The tenderer shall note that his tender shall remain open for consideration for a period as specified in General rules and Instructions under Item no 10. from the date of opening of the price of the tender.

### **3. Agreement**

The successful Tenderer is required to sign agreement as may be drawn up to suit local conditions and shall pay for all stamps and legal expenses, incidental thereto.

### **4. Permits and Licenses**

Permits and licenses for release of materials which are under Government control will be arranged by the Tenderer. The Indian Bank will render necessary assistance, sign any forms or applications that may be necessary.

The Indian Bank/ Architect / PMC shall be indemnified against all Government or legal actions for theft or misuse of cement M.S. rods and any controlled materials in the custody of the Tenderer.

It may be clearly understood that no compensation or additional charges can be claimed by the tenderer for non-availability of such materials in due time on this account or according to his own requirements.

### **5. Government and Local Rules**

The Tenderer shall conform to the provisions of all local Bye-laws and Acts relating to the work and to the Regulations etc., of the Government and Local Authorities and of any company with whose system the structure is proposed to be connected. The Tenderer shall give all notices required by said Act, Rules, and Regulations and Bye-laws etc., and pay all fees / fines payable to such authority / authorities for execution of the work involved. The cost, if any, shall be deemed to have been included in his quoted rates, taking into account all liabilities for licenses, fees for footpath encroachment and restorations etc., and shall indemnify the Indian Bank against such liabilities and shall defend all actions arising from such claims or liabilities.

### **6. Taxes and Duties**

The tenderers must include in their tender prices quoted for all duties royalties, cess and Sales tax or any other taxes or local charges if applicable. GST will be payable extra as applicable. No extra claim on this account will in any case be entertained.

The tenderer shall keep necessary books of A/C & other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by duly authorized



representative of the Indian Bank and or the Engineer-in-charge and further shall finish such other information / document as the Indian Bank may required from time to time.

## 7. Quantity of Work to be executed

The quantities shown in the schedule of quantities are intended to cover the entire new structure indicated in the drawings but the Indian Bank reserves the right to execute only apart or the whole or any excess thereof without assigning any reason therefore. Variation in the value is however not expected to be more than 25%.

## 8. Persons Engaged by the Indian Bank

The Indian Bank reserves the right to execute any part of the work included in this contract or any work which is not included in this contract by other Agency or persons and Tenderer shall allow all reasonable facilities and use of his scaffolding for the execution of such work. The main Tenderer shall extend all cooperation in this regard.

## 9. Earnest Money and Security Deposit

The tenderer will have to deposit an amount of **Rs. 30,000/-** (Rupees Thirty Thousand Only) through NEFT / RTGS at the time of submission of tender as an Earnest Money. The Indian Bank is not liable to pay any interest on the Earnest Money. The Earnest Money of the unsuccessful tenderers will be refunded without any interest soon after the acceptance of the selected tenderer after award of work or after the expiry of the validity period of the tender.

Apart from the EMD, retention money shall be deducted from progressive running bills @ 5% of the gross value of each running bill until the Total Security Deposit, i.e., EMD and the retention money equals 7% of the project cost. 50% of the total security deposit shall be released on successful completion of the works and after obtaining Virtual completion certificate from the Architect and No Claim certificate by the tenderer to the Indian Bank.

The balance retention amount 50% will be refunded after the end of defects liability period as mentioned in point no.2 of this special condition of contract provided he has satisfactorily carried out all the work and attended to all defects in accordance with the conditions of the contract. No interest is allowed on retention money. A part of the Security Deposit if and as decided by a constituent Indian bank can also be furnished in the form of a Indian bank guarantee on a Indian bank other than that of the constituent Indian bank

## 10. Tenderer to provide everything necessary

The Tenderer shall provide everything necessary for the proper execution of the work according to the intent and meaning of the drawings, schedule of quantities and



specifications taken together whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred there from and if the Tenderer finds any discrepancies therein he shall immediately and in writing, refer the same of the Indian Bank/ Consultant whose decision shall be final and binding.

The Tenderer shall provide himself for ground and fresh water for carrying out of works at his own cost. The Indian Bank shall on no account be responsible for the expenses incurred by the Tenderer for hired ground or fresh water obtained from elsewhere.

The rates quoted against individual items will be inclusive of everything necessary to complete the said items of work within the contemplation of the contract, and beyond the unit price no extra payment will be allowed for incidental or contingent work, labour and/or materials inclusive of all taxes and duties whatsoever except for specific items, if any, stipulated in the tender documents.

The Tenderer shall supply, fix and maintain at his own cost, for the execution of any work, all tools, tackles, machineries and equipments and all the necessary centering, scaffolding, staging, planking, timbering, strutting, shoring, pumping, fencing, boarding, watching and lighting by night as well as by day required not only for the proper execution and protection of the said work but also for the protection for the public and safety of any adjacent roads, streets, walls, houses, buildings, all other erections, matters and things and the Tenderer shall take down any remove any or all such centering, scaffolding, planking, timbering, strutting, shoring, etc., as occasion shall be required or when ordered so to do, and shall fully reinstate and make good all matters and things disturbed during the execution of the works to the satisfaction of the Indian Bank/ Architects.

The Tenderer shall also provide such temporary road on the site as may be necessary for the proper performance of the contract, and for his own convenience but not otherwise. Upon completion, such roads shall be broken up and leveled where so required by the drawings unless the Indian Bank shall otherwise direct. The Tenderer shall at all times give access to workers employed by the Indian Bank or any men employed on the buildings and to provide such parties with proper sufficient and if required, special scaffolding, hoists and ladders and provide them with water and lighting and leave or make any holes, grooves etc., in any work, where directed by the Indian Bank as may be required to enable such workmen to lay or fix pipes, electrical wiring, special fittings etc. The quoted rates of the tenderers shall accordingly include all these above mentioned contingent works.

## 11. Tools, Storage of Materials, Protective Works and Site Office Requirements

The Tenderer shall maintain a **site engineer/ supervisor** to receive instruction notices or communications etc.

All drawings maintained on the site are to be carefully mounted on boards of appropriate





size and covered with a coat of approved varnish. They are to be protected from ravages of termites, ants, and other insects.

The Tenderer shall provide at his own cost all artificial light required for the work and to enable other Tenderers and sub-Tenderers to complete the work within the specified time.

The Tenderer shall use the toilets identified by the Indian bank for use of their workmen and keep the same in a clean and sanitary condition to the satisfaction of the Indian bank / Public Health Authorities and shall cause such latrines and soil to be cleared away whenever necessary and shall make good all the works disturbed by these conveniences.

Every precaution shall be taken by the Tenderer to prevent the breeding of mosquitoes on the works during the construction, and all receptacles; cisterns, water tanks etc., used for the storage of water must be suitably protected against breeding of mosquitoes.

The Tenderer shall indemnify the Indian Bank against any breach of rules in respect of anti-malarial measures.

The Tenderer shall not fix or place any placards or advertisement of any description or permit the same to be fixed or placed in or upon any boarding, gantry, building structure other than those approved by the Indian Bank.

**Protective Measures:** The Tenderer from the time of being placed in possession of the site must make suitable arrangements for watching, lighting and protecting the work, the site and surrounding property by day, by night, on Sundays and other holidays.

Tenderer shall indemnify the Indian Bank against any possible damage to the building, roads, or members of the public in course of execution of the work.

The Tenderer shall provide necessary temporary enclosures, gates, entrances, etc., for the protection of the work and materials and for altering and adopting the same as may be required and removing on completion of the works and making good all works disturbed.

**Storage of materials:** The Tenderer shall provide and maintain proper sheds for the proper storage and adequate protection of the materials etc. and other work that may be executed on the site including the tools and materials of sub- Tenderers and remove same on completion. Cement should be stored one feet above the ground level and have raised floor.

**Tools:** The theodolite levels, steel and metallic tapes and all other surveying instruments found necessary on the works shall be provided by the Tenderer for the due performance of this contract as instructed by the Site Engineer. All measuring tapes shall be of steel and suitable scaffolding and ladders that may be required for safely taking measurement shall be supplied by the Tenderer.



The masteries and the supervisors on the works shall carry with them always a one meter or two meter steel tape, a measuring tape of 3 meters, a spirit level, a plumb bob and a square and shall check the work to see that the work is being done according to the drawing and specifications. The Site Engineer will use any or all measuring instruments or tools belonging to the Tenderers as he chooses for checking the works executed or being executed on the contract. The Tenderer should cover in his rates for making provisions for all reasonable facilities for the use of his scaffolding, tools and plant etc. by sub-Tenderers for their work.

## **12. Notice and Patents of Appropriate Authority and Owners**

The Tenderer shall confirm and adhere to the provisions of any Acts of the Legislature relating to the work, and to the Regulations and Bye-laws of any authorities, and/or any water, lighting and other companies, and/or authorities with whose systems the structures were proposed to have connection and shall before making any variations from the drawings or specification that may be associated to so conform, give the Indian Bank/ Architects written notices specifying the variations proposed to be made and the reasons for making them and apply for instruction thereon. The Indian Bank/ Architects on receipt of such intimation shall give a decision within a reasonable time.

## **13. Clearing Site and Setting out Works**

The site shown on the plan shall be cleared of all obstructions, loose stone, and materials rubbish of all kinds. All holes or hollows whether originally existing or produced by removal or loose stone or materials shall be carefully filled up with earth well rammed and leveled off as directed at his own cost. The Tenderer shall set out the works and shall be responsible for the true and perfect setting out of the work and for the correctness of the positions, levels, dimensions and alignment of all parts thereof. If at any time, any error shall appear during the progress of any part of the work, the Tenderer shall at his own expenses rectify such error, if called upon to the satisfaction of the Indian Bank. The Tenderer shall further set out the works to the alternative positions at the site until one is finally approved and the rates quoted in his tender should include for this and no extra on this account will be entertained.

## **14. Tenderer Immediately to Remove All Offensive Matters**

The Tenderer shall keep the foundations and works free from water and shall provide and maintain at his own expenses electrically or other power driven pumps and other plant to the satisfaction of the Indian Bank for the purpose, until the building is handed over to the Indian Bank. The Tenderer shall arrange for the disposal of the water so accumulated to the satisfaction of the Indian Bank and local authority and no claims will be entertained afterwards if he does not include in his rates for the purpose.

## **15. Access**

Any authorized representative of the Indian Bank shall at all reasonable times have free



access to the works and/or to the, workshops, factories or other places where materials are being prepared or constructed for the work and also to any place where the materials are lying or from where they are being obtained, and the Tenderer shall give every facility to the Indian bank or their representatives necessary for inspection and examination and test of the materials and workmanship. Except the representatives of the Indian Bank no person shall be allowed at any time without the written permission of the Indian Bank.

## 16. Materials, Workmanship, Samples, Testing of Materials

All the works specified and provided for in the specifications or which may be required to be done in order to perform and complete any part thereof shall be executed in the best and most workmanlike manner with materials of the best and approved quality of the respective kinds in accordance with the particulars contained in and implied by the specifications and as represented by the drawings or according to such other additional particulars, and instructions as may from time to time be given by the Indian Bank/ Architects during the execution of the work, and to his entire satisfaction.

If required by the Indian Bank/ Architects the Tenderer shall have to carry out tests on materials and workmanship in approved materials testing laboratories or as prescribed by the Indian Bank/ Architects at his own cost to prove that the materials etc. Under test conform to the relevant I.S. Standards or as specified in the specifications. The necessary charges for preparation of mould (in case of concrete cube) transporting, testing etc., shall have to be borne by the Tenderer. No extra payment on this account should in any case be entertained.

All works to be carried out generally as per BIS Specifications.

Branded items, i.e., BIS compliant items specified in the tender shall not be tested separately. However the other items if approved by Indian bank are subjected to testing as per tender specifications.

All the materials (except where otherwise described) stores and equipment required for the full performance of the work under the contract must be provided through normal channels and must include charge for import duties, sales tax, octroi and other charges and must be the best of their kind available and the Tenderers must be entirely responsible for the proper and efficient carrying out of the work. The work must be done in the best workmanlike manner. Samples of all materials to be used must be submitted displayed to the Indian Bank/ Architects when so directed by the Engineer/ Architects and written approval from Indian Bank/ Architects must be obtained prior to placement of order.

During the inclement weather the Tenderer shall suspend concreting and plastering for such time as the Indian Bank/ Architects may direct and shall protect from injury all work when in course of execution. Any damage (during constructions) to any part of the work for any reasons due to rain, storm, or neglect of Tenderer shall be rectified. by the



Tenderer in an approved manner at no extra cost.

Should the work be suspended by reason of rain, strike, lock -outs or any other cause, the Tenderer shall take all precautions necessary for the protection of work and at his own expenses shall make good any damage arising from any of these causes.

The Tenderer shall cover up and protect from damage, from any cause, all new work and supply all temporary doors, protection to windows, and any other requisite protection for the execution of the work whether by himself or special tradesmen or sub-Tenderer and any damage caused must be made good by the Tenderer at his own expenses.

The contractor shall prepare for approval of Architect the “Co-ordinated services drawings” for pre-planned openings so that the alterations are reduced to the minimum.

### **17. Removal of Improper Work**

The Indian Bank shall during the progress of the work have power to order in writing from time to time the removal from the work within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Indian Bank / Architects are not in accordance with specification or instructions, the substitution or proper re-execution of any work executed with materials or workmanships not in accordance with the drawings and specifications or instructions. In case the Tenderer refuses to comply with the order the Indian Bank shall have the power to employ and pay other agencies to carry out the work and all expenses consequent thereon or incidental thereto as certified by the Indian Bank/ Architects shall be borne by the Tenderer or may be deducted from any money due to or that may become due to the Tenderer. No certificate which may be given by the Architects shall relieve the Tenderer from his liability in respect of unsound work or bad materials.

### **18. Bank Engineer/Consultant:**

The term "Site Engineer/PMC" shall mean the person/agencies appointed and paid by the Indian Bank to superintend the work. The Tenderer shall afford the Bank Engineer/consultant every facility and assistance for examining the works and materials and for checking and measuring work and materials. The Site Engineer/PMC shall have no power to revoke, alter, enlarge or relax any requirements of the Tenderer or to sanction any day work, additions, alterations, deviations or omissions or any extra work whatever, except in so far as such authority may be specially conferred by a written order of the Indian Bank.

The Bank Engineer/Consultant shall have power to give notice to the Tenderer or to his foreman, of non-approval of any work or materials and such work shall be suspended or the use of such materials shall be discontinued until the decision of the Indian Bank is obtained. The work will from time to time be examined by the consultant, Engineer from the Premises Department of the Indian Bank and the Site Engineer if any. But such examination shall not in any way exonerate the Tenderer from the obligation to remedy



any defects which may be found to exist at any stage of the work or after the same is complete. Subject to the limitations of this clause the Tenderer shall take instructions only from the Consultant/Indian Bank or his representative.

### 19. Tenderer's Employees

The Tenderer shall employ technically qualified and competent supervisors for the work who shall be available (by turn) throughout the working hours to receive and comply with instructions of the Indian Bank/ consultant. The Tenderer shall engage at least one experienced Engineer as site-in-charge for execution of the work. The Tenderer shall employ in connection with the work persons having the appropriate skill or ability to perform their job efficiently. The Tenderer shall employ local labourers on the work as far as possible. No labourer below the age of eighteen years and who is not an Indian National shall be employed on the work.

Any labourer supplied by the Tenderer to be engaged on the work on day-work basis either wholly or partly under the direct order or control of the Indian Bank or his representative shall be deemed to be a person employed by the Tenderer.

The Tenderer shall comply with the provisions of all labour legislation including the requirements of

- a) The Payment of Wages Act 1936
- b) Indian Bank's' Liability Act 1938
- c) Workmen's' Compensation Act Contract Labour (Regulation & Abolition) Act, 1970 and Central Rules 1971 and subsequent amendments.
- d) Apprentices Act 1961
- e) Minimum Wages Act 1948
- f) Any other Act or enactment relating thereto and rules framed there Under from time to time.

The Tenderer shall keep the Indian Bank saved harmless and indemnified against claims if any of the workmen and all costs and expenses as may be incurred by the Indian Bank in connection with any claim that may be made by any workmen.

The Tenderer shall comply at his own cost with the order of requirement of any Health Officer of the State or any local authority or of the Indian Bank regarding the maintenance of proper environmental sanitation of the area where the Tenderer's' laborers are housed or accommodated, for the prevention of small pox, cholera, plague, typhoid, malaria and other contagious diseases. The Tenderer shall provide, maintain and keep in good sanitary condition adequate sanitary accommodation and provide facilities for pure drinking water at all times for the use of men engaged on the works and shall remove and clear away the same on completion of the works. Adequate precautions shall be taken by the Tenderer to prevent nuisance of any kind on the works or the lands adjoining the same.

The Tenderer shall arrange to provide first-aid treatment to the laborers engaged on the works. He shall within 24 hours of the occurrence of any accident at or about the site or in connection with execution of the works, report such accident to the Indian Bank and also



to the Competent Authority where such report is required by law. Compliance of labour regulations:

## 20. Dismissal of Workmen

The Tenderer shall on the request of the Indian Bank immediately Withdrawal / remove from works any person employed thereon by him, who may in the opinion of the Indian Bank be unsuitable or incompetent or who may misconduct himself. Such Withdrawal / Remove shall not be the basis of any

claim for compensation or damages against the Indian Bank or any of their officer or employee.

## 21. Assignment

The whole of the works included in the contract shall be executed by the Tenderer and the Tenderer shall not directly or indirectly transfer, assign or underlet the contract or any part, share or interest therein nor, shall take a new partner, without written consent of the Indian Bank and no subletting shall relieve the Tenderer from the full and entire responsibility of the contract or from active superintendence of the work during their progress.

## 22. Damage to Persons and Property Insurance Etc.

The Tenderer shall be responsible for all injury to the work or workmen to persons, animals or things and for all damages to the structural and/or decorative part of property which may arise from the operations or neglect of himself or of any sub-Tenderer or of any of his or a sub-Tenderer's employees, whether such injury or damage arise from carelessness, accident or any other cause whatsoever in any way connected with the carrying out of this contract. The clause shall be held to include inter-alia, any damage to buildings whether immediately adjacent or otherwise, and any damage to roads, streets, foot paths or ways as well as damages caused to the buildings and the works forming the subject of this contract by rain, wind or other inclemency of the weather. The tenderer is also responsible for the damages/injury/accidents caused to any public in general / vehicles in general and pay necessary compensation or settlement or whatsoever in this regard.

The Tenderer shall indemnify the Indian Bank and hold harmless in respect of all and any expenses arising from any such injury or damages to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of compensation or damage consequent upon such claim.

The Tenderer shall reinstate all damage of every sort mentioned in this clause, so as to deliver the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damages to the property or third parties.





The Indian Bank shall be at liberty and is hereby empowered to deduct the amount of any damages, compensations, costs, charges and expenses arising or accruing from or in respect of any such claim or damages from any sums due or to become due to the Tenderer.

### 23. Insurance

The Tenderer shall arrange to take “Tenderers all risk insurance policy including third party liability”, covering the entire period of contract till virtual completion of the contract (including extended period if any) for the entire scope of works for a risk cover not less than the contract value. The third party insurance shall be for a sum of Rs. 5 Lakh per accident.

The Tenderer shall effect the insurance necessary and indemnify the Indian Bank entirely from all responsibility in this respect. The insurance must be placed with a company approved by the Indian Bank and must be effected jointly in the name of the Tenderer and the Indian Bank and the policy lodged with the latter. The scope of insurance is to include damage or loss to the work and workman due to carelessness accident, including fire, theft, loss of life of workmen earthquake and floods etc., damage or loss to the contract itself till this is made over in a complete state. Insurance is compulsory and must be effected from the very initial stage.

The Tenderer shall also be responsible for anything which may be excluded from damage to any property arising out of incidents, negligence or defective carrying out of this contract.

Unless otherwise instructed the Tenderer shall insure the works and keep them insured until the virtual completion of the contract against loss or damage by fire and /or earthquake, flood. The insurance must be placed with a company approved by the Indian Bank, in the joint names of the Indian Bank and the Tenderer for such amount and for any further sum if called to do so by the Indian Bank, the premium of such further sum being allowed to the Tenderer as an authorized extra.

The Tenderer shall as soon as the claim under the policy is settled or the work reinstated by the Insurance Company should they elect to do so, proceed with due diligence with the completion of the works in the same manner as though the fire has not occurred and in all respects under the conditions of the contract. The Tenderer in case of rebinding or reinstatement after fire shall be entitled to extension of time for completion as the Indian Bank may deem fit.

### 24. Accounts, Receipts & Vouchers

The Tenderer shall, upon the request of the Indian Bank furnish them, with all the invoices, accounts, receipts and other vouchers that they may require in connection with



the works under this contract. If the Tenderer shall use materials less than what he is required under the contract, the value of the difference in the quantity of the materials he was required to use and that he actually used shall be deducted from his dues. The decision of the Indian Bank shall be final and binding on the Tenderer as to the amount of materials the Tenderer is required to use for any work under this contract.

## 25. Measurement

All the Measurements should be taken in the presence of Bank officials/ Architects. And the measurements shall be countersigned by the Bank officials.

## 26. Payments

All bills shall be prepared by the Tenderer in the form prescribed by the Indian Bank / Architects. **Normally one interim bill shall be prepared each month subject to minimum value for interim certificate as stated in these documents.** The bills in proper forms must be duly accompanied by detailed measurements in support of the quantities of work done and must show deductions for all previous payments, retention money, etc.

The Indian Bank/ Architect shall issue a certificate after due scrutiny of the Tenderers' bill stating the amount due to the Tenderer from the Indian Bank and the Tenderer shall be entitled to payment thereof, within the period of honoring certificates named in these documents. In case of delay due to some reasons in the processing of such bills for payment, an advance of 75% of the billed Amount may be paid on the request of the Tenderer for the smooth progress of the work. The amount stated in an interim certificate shall be the total value of work properly executed and 75% of invoiced value of material brought to site for permanent incorporation into the work up to the date of the bill less the amount to be retained by the Indian Bank as retention money vide clause 11 of the general conditions of contract, less TDS, and less installments previously paid under these conditions, provided that such certificate shall only include the value of said material and goods as and from such time as they are reasonably, properly and not prematurely brought to or placed adjacent to the work and then only if adequately protected against weather or other casualties.

The Indian Bank will deduct retention money as per tender conditions.

If the Indian Bank has supplied any materials or goods to the Tenderer, the cost of any such materials or goods will be, progressively deducted from the amount due to the Tenderer in accordance with the quantities consumed in the work.

All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually, done and completed, and shall





not preclude the Requiring of bad, unsound, and- imperfect or unskilled work to be; removed and taken away and reconstructed, or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in any respect or the accruing of any claim, nor shall, it conclude, determine or affect in anyway the power of the Indian Bank under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the Tenderer within one month of the date fixed for completion of the work or of the date of certificate of completion furnished by the Site Engineer and payment shall be made after checking the work completely. Payment will be made 75 % against supply of materials & 25 % against erection and commissioning, less statutory deductions.

## 27. Final Payment

The final bill shall be accompanied by a certificate of completion from the Consultants & Architects. Payments of final bill shall be made after deduction of Retention Money, which sum shall be refunded after the completion of the Defects Liability Period after receiving the Indian Bank's' consultant's' 'certificate that the Tenderer has rectified all defects to the satisfaction of the Indian Bank/ Architects. The acceptance of payment of the final bill by the Tenderer would indicate that he will have no further claim in respect of the work executed.

The contractor has to submit 2 copies of “As built drawings” of A2 or A1 size and CD duly certified by the Architect to the Bank along with final bill documents. Along with Every bill the contractor has to submit the photographs of the work executed

## 28. ENHANCEMENT IN RATES AND QUANTITY VARIATION

The tender rates shall be fixed, firm and applicable for any increase or decrease in the tendered quantities. The Employer / consultant can increase or decrease any quantities to any extent or even delete particular item as per the site requirements and the contractor shall not be paid anything extra on this account. Nothing extra will be paid by the Indian Bank on account of omission /deletion of items or decrease in the quantity of items. The Bank shall not entertain any claim whatsoever from the contractor on this account. The price of all additional items / non-tendered items will be worked out on the basis of rates quoted for similar items in the contract wherever existing. If similar items are not available, the rates for such items will be derived as per standard method of rate analysis based on prevalent fair price of labour, material and other components as required with 15% towards contractor's profit and overheads.



## 29. UNQUOTED ITEMS

The bidders to offer their competitive rates for each and every item listed in the Schedule of rates, the bidders who have not quoted for all the items as required in the SORs shall be liable for rejection. In case a bidder who has left certain items unquoted and if they happen to be overall lowest on evaluation, then their offers shall be considered subject to the unquoted items being taken as NIL cost. The bidder shall also give a clear undertaking to the effect that they shall execute the said items (unquoted) free of cost. In the event the bidder refuses the above conditions and insists on additional cost for the unquoted items, then such an offers shall be rejected as invalid.

For Extra works at the time of work in progress the contractor should submit the reasonable rate with the rate analysis and after approval given by the Architect/ Bank that amount will be given.

## 30. ABNORMAL RATES

The Contractor is expected to quote rate for each items after careful analysis of costs involved for the performance of the complete item consisting all specifications and conditions of the contract. If it is noticed that the rates quoted by the tenderer for any items are unusually high (or) unusually low it will be sufficient cause for rejection of the tender unless the owner is convinced about the reasonableness of the rate on scrutiny of the analysis for such rate to be furnished by the tenderer on demand. Not with standing anything there in stand, the rate once accepted by the owner shall be final and shall not be subject to any claim either on account of un-workability of rates or on any other ground whatsoever.

## 31. Substitution

Should the Tenderer desire to substitute any materials and workmanship, he/they must obtain the approval of the Indian Bank/ Architects in writing for any such substitution well in advance. Materials designated in this specification indefinitely by such term as "Equivalent" or "Other approved" specific approval of the Indian Bank/ Architects has to be obtained in writing.

## 32. Preparation of Building Works for Occupation and Use on Completion

The whole of the work will be thoroughly inspected by the Tenderer and deficiencies and defects put right. On completion of such inspection the Tenderer shall inform the Indian Bank that he has completed the work and it is ready for inspection. On completion the Tenderer shall clean all windows and doors including the cleaning and oiling if necessary, of all hardware, inside and outside, all floors, stair-cases, and every part of the building. He will leave the entire building neat and clean and ready for



immediate occupation and to the satisfaction of the Indian bank.

### 33. Clearing Site on Completion

On completion of the works the Tenderer shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and the works clean and in a workman like condition to the satisfaction of the Indian Bank/ Architects.

The main /Principal contractor is only responsible for the cleanliness of the site/building irrespective of numbers of sub agencies deployed by them to carryout various other works in the tender.

### 34. Defects after Completion

The Tenderer shall make good at his own cost and to the satisfaction of the Indian Bank all defects, shrinkage, settlements or other faults which may appear within 12 months after completion of the work. In default the Indian Bank may employ and pay other persons to amend and make good such damages, losses and expenses consequent thereon or incidental thereto shall be made good and borne by the Tenderer and such damages, loss and expenses shall be recoverable from him by the Indian Bank or may be deducted by the Indian Bank, in lieu of such amending and making good by the Tenderer, deduct from any money due to the Tenderer a sum equivalent to the cost of amending such work and in the event of the amount retained being insufficient, recover that balance from the Tenderer from the amount retained under General Rules and instruction Special Instruction Clause 5 together with any expenses the Indian Bank may have incurred in connection therewith.

### 35. Concealed Work

The Tenderer shall give due notice to the Indian Bank/ consultant whenever any work is to be buried in floor / earth, concrete, ceilings or in the bodies of walls or otherwise becoming inaccessible later on, in order that the work may be inspected and correct dimensions taken before such burial, in default whereof the same shall, at the opinion of the Indian Bank/ Architect be either opened up for measurement at the Tenderer's expense or no payment may be made for such materials. Should any dispute or differences arise after the execution of any work as to measurements etc., or other matters which cannot be conveniently tested or checked, the notes of the Indian Bank/ Architects shall be accepted as correct and binding on the Tenderer.

### 36. Escalation

The rate quoted shall be firm throughout the tenure of the contract (including extension of time, if any, granted) and will not be subject to any fluctuation due to increase in cost of materials, labour, sales tax, octroi, etc. unless specifically provided in these documents.



### 37. Idle Labour

Whatever the reasons may be no claim for idle labour, additional establishment cost of hire and labour charges of tools and plants would be entertained under any circumstances.

### 38. Suspension

If the Tenderer except on account of any legal restraint upon the Indian Bank preventing the continuance of the work or in the opinion of the Indian Bank shall neglect or fail to proceed with due diligence in the performance of his part of the contract or if he shall more than once make default, the Indian Bank shall have the power to give notice in writing to the Tenderer requiring the work to be proceeded within a reasonable manner and with reasonable dispatch, such notice purport to be a notice under this clause.

After such notice shall have been given the Tenderer shall not be at liberty to remove from the site of the works or from any ground contiguous thereto any plant or materials to subsist from the date of such notice being given until the notice shall have been complied with. If the Tenderer fails to start the work within seven days after such notice has been given to proceed with the works as therein prescribed, the Indian Bank may proceed as provided in clause 40 (Termination of Contract by Indian Bank).

### 39. Termination of Contract by Indian Bank

If the Tenderer being a company go into liquidation whether voluntary or compulsory or being a firm shall be dissolved or being an individual shall be adjudicated insolvent or shall make an assignment or a composition for the benefit of the greater Para, in number of amount of his creditors or shall enter into a Deed or arrangement with his creditors, or if the Official Assignee in insolvency, or the Receiver of the Tenderer in insolvency, shall repudiate the contract, or if a Receiver of the Tenderer's firm appointed by the court shall be unable, within fourteen days after notice to him requiring him to do so, to show to the reasonable satisfaction of the Indian Bank that he is able to carry out and fulfill the contract, and if so required by the Indian Bank to give reasonable security therefore. or if the Tenderer shall suffer execution to be issued, or shall suffer any payment under this contract to be attached by or on behalf of and of the creditors of the Tenderer, or shall assign, charge or encumber this contract or any payments due or which may become due to the Tenderer, there under, or shall neglect or fail to observe and perform all or any of the acts matters of things by this contract, to be observed and performed by the Tenderer within three clear days after the notice shall have been given to the Tenderer in manner hereinafter mentioned requiring the Tenderer to observe or perform the same or shall use improper materials or workmanship in carrying on the works, or shall in the opinion of the Indian Bank not exercise such due diligence and



make such due progress as would enable the work to be completed within due time agreed upon, and shall fail to proceed to the satisfaction of the Indian Bank after three clear days notice requiring the Tenderer so to do shall have been given to the Tenderer as hereinafter mentioned, or shall abandon the contract, then and in any of the said cases, the Indian bank may notwithstanding previous waiver determine the contract by a notice in writing to the effect as hereinafter mentioned, but without thereby effecting the powers of the Indian Bank of the obligations and liabilities of the Tenderer the whole on which shall continue in force as fully as if the Contract, had not been so determined and as if the works subsequently executed had been executed by or on behalf of the Tenderer (without thereby creating any trust in favour of the Tenderer) further the Indian Bank or his agent, or servants, may enter upon and take possession of the work and all plants, tools, scaffolding, sheds, machinery, steam and other power, utensils and materials lying upon premises or the adjoining lands or roads and sell the same as his own property or may employ the same by means of his own servants and workmen in carrying on and completing the works or by employing any other Tenderers or other persons or person to complete the works, and the Tenderer shall not in any way interrupt or do any act, matter of thing to prevent or hinder such other Tenderers or other persons or person employed from completing and finishing or using the materials and plants for the works when the works shall be completed, or as soon thereafter as conveniently may be, the Indian Bank shall give notice in writing to the Tenderer to remove his surplus materials and plants and should the Tenderer fail to do so within a period of 14 days after receipt by him the Indian Bank may sell the same by Public Auction and shall give credit to the Tenderer for the amount so realized. Any expenses or losses incurred by the Indian Bank in get the works carried out by other Tenderers shall be adjusted against the amount payable to the Tenderer by way of selling his tools and plants or due on account of work carried out by the Tenderer prior to engaging other Tenderers or against the Security Deposit.

#### **40. Arbitration**

All disputes or differences of any kind whatsoever which shall at any time arise between the parties hereto touching or concerning the works or the execution or maintenance thereof of this contract or the rights touching or concerning the works or the execution of maintenance thereof of this contract or the construction remaining operation or effect thereof or to the rights or liabilities of the parties or arising out of or in relation thereto whether during or after determination foreclosure or branch of the contract (other than those in respect of which the decision of any person is by the contract expressed to be final and binding) shall after written notice by either party to the contract to the other of them and to the Indian Bank hereinafter mentioned be referred for adjudication to a sole Arbitrator to be appointed as hereinafter provided.

For the purpose of appointing the sole Arbitrator referred to above, the Indian Bank will send within thirty days of receipt of the notice, to the Tenderer a panel of three names of



persons who shall be presently unconnected with the organization for which the work is executed.

The Tenderer shall on receipt of the names as aforesaid, select anyone of the persons name to be appointed as a sole Arbitrator and communicate his name to the Indian Bank within thirty days of receipt of the names. The Indian Bank shall there upon without any delay appoint the said person as the Sole Arbitrator. If the Tenderer fails to communicate such selection as provided above within the period specified, the competent Authority shall make the selection and appoint the selected person as the Sole Arbitrator.

If the Arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another Sole Arbitrator shall be appointed as aforesaid.

The work under the Contract shall, however, continue during the, arbitration proceedings and no payment due or payable to the Tenderer shall be withheld on account of such proceedings.

The Arbitrator shall be deemed to have entered on the reference on the date he issued notice to both the parties fixing the date of the first hearing.

The Arbitrator may from time to time, with the consent of the parties, enlarge the time for making and publishing the award.

The Arbitrator shall give a separate award in respect of each dispute or difference referred to him. The Arbitrator shall decide each dispute, in accordance with the terms of the contract and give a reasoned award. The venue of arbitration shall be in chennai only as may be fixed by the Arbitrator in his sole discretion.

The fees, if any, of the Arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award including the fees, if any, of the Arbitrator who may direct to and by whom and in what manner, such costs or any part thereof shall be paid and may fix or settle and amount of costs to be so paid. The award of the Arbitrator shall be final and binding on both the parties.

Subject to aforesaid the provisions of the “Arbitration and Reconciliation Act 1996” or any statutory modification or re-enactment thereof and the rules made there under, and for the time being in force, shall apply to the arbitration proceeding under this clause.

The Indian Bank and the Tenderer hereby also agree that arbitration under clause shall be a condition precedent to any right to action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration.

The arbitration proceedings will not preclude the right of approaching legal forum by the parties.





## 41. TESTING, MANUFACTURER'S TESTS, PRE-COMMISSIONING TESTS AND COMPLETE COMMISSIONING

The General intent of this specification is to mention the relevant tests to be done and finished to the employer by the Tenderer. These are guide lines. However, the Tenderer shall carry out such tests and complete all formalities as per relevant **Indian standard specifications** (Latest), Tariff Advisory Committee's rules and Fire insurance requirements and/or Electricity rules and Regulations as per Government Gazette and publications.

### 40.1 Testing of equipment:

The DG sets shall be subjected to the tests as per BS or IS requirements at the factory before dispatching the same. **These tests shall be witnessed by representative of the client and contractor.** The book let published by BS or IS (as the case may be) on these tests shall be made available in advance before the tests are carried out to the owner.

All equipment before installing at the site shall be tested and all such results produced to the employer. Nothing shall absolve the Tenderer from re-performing any tests that Tenderer may be called upon specifically by employer/supply Company or Electrical inspector. **All equipments test certificates as required by various sections of specifications and test data shall be furnished along with supply of DG.**

**The necessary charges for Factory Testing, Site Testing, Diesel charges, Transportation, accommodation (boarding & lodging during inspection) and any other expenses shall be borne by the Contractor only. Factory inspection shall be intimated (minimum 2 weeks prior to inspection) to the employer in advance after readiness of the DG set.**

### 40.2 Pre- commissioning tests:

All rules, regulations and requirements of Electrical inspector/ government or local authorities and of Indian standard specifications and/ or rules and regulations stated in the Indian Electricity acts shall be strictly complied.

On completion of erection, the Tenderer shall clean all the equipments thoroughly and inspect the entire installation for correctness and shall furnish a report of completion to the Employer. Pre commissioning tests shall commence only on approval of this report by the Employer.

All tests and certification there of shall only be carried out by those authorized, skilled, experienced and certified permit holders of the supervisor category of State/ central electrical licensing authority.

**The following tests shall be conducted on alternator and Engine (DG set) and report shall be submitted to the purchaser/enduser:**

**At the Factory test bed:**

1) The Generator offered by the Tenderer should be tested for 8 hours at the factory at different load conditions which includes 100% load and 110% load for one hour in every 4 hours of test run as per BS 5514 standard.



### **At the Employers Site:**

Testing the adequacy, suitability and the efficiency of the newly erected DG set has to be ascertained only by during operation of this set. Hence, it shall be essential on part of the Tenderer who has supplied and erected the DG set to operate the DG set in conjunction with the existing the load system before presentation of the final bill for the entire satisfaction of the Indian Bank. **The operation shall be done for 8 hours per day at varying loads.**

**Fuel charges for Factory test and at the employer's site shall be deemed to have been included in the rates quoted by the Tenderer in the BOQ.**

### **Mechanical Operational Test:**

Mechanical Operational Tests for all movable parts of switchgears, breakers, tripping devices etc.

### **Phase Sequence Test:**

Phase Sequence Tests at all the relevant points for connecting correct R, Y and B as per the supply utility sequence, interlocks and tripping.

- All panels should be tested for interlocks, control tripping and all breakers to be tested for sequential tripping.

### **Continuity Test**

- Continuity tests shall be done for noting any short circuits and / or earthing of phases.

### **Earthing Test**

Earthing tests for continuity of Earth by earth Megger, on L.V. side. The earth resistance values shall not exceed 5 ohm.

### **41.3 Commissioning:**

The tenderer shall prepare necessary drawings/tests and test reports for approval by CEIG / CEA, and obtain approval from them. On receipt of approval from CEA / CEIG, the tenderer shall submit necessary completion report to CEA, arrange for their inspection at site and obtain Safety Certificate for commissioning DG set and connected installations. Any expenditure payable to CEA / CEIG in obtaining approval / Safety Certificate etc. shall be borne by the tenderer.

**Prior to commencement of installation work, the Tenderer shall obtain the approval of layout of new equipments from CEA.**





## **SAFETY CODE**

### **Scaffolds**

- i) Suitable scaffolds shall be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except in the case of short duration work which can be done safely from ladders. When a ladder is used, it shall be of rigid construction made either of good quality wood or steel. The steps shall have a minimum width of 450 mm and maximum rise of 300 mm. Suitable hand holds of good quality wood or steel shall be provided and the ladder shall be given an inclination not steeper than  $\frac{1}{4}$  to 1 ( $\frac{1}{4}$  horizontal and 1 vertical).
- ii) Scaffolding or staging more than 4 m above the ground floor, swung or suspended from an overhead support or erected with stationery support shall have a guard rail properly bolted, braced or otherwise secured, at least 1 m above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- iii) Working platforms, gangways and stairways shall be so constructed that they do not sag unduly or unequally and if the height of the platform, gangway or stairway is more than 4 m above ground level or floor level, they shall be closely boarded and shall have adequate width and be suitably fenced as described in (ii) above.
- iv) Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 1 m.

Wherever there are open excavations in ground, they shall be fenced off by suitable railing and danger signals installed at night so as to prevent persons slipping into the excavations.

- v) Safe means of access shall be provided to all working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 m in length while the width between side rails in rung ladder shall in no case, be less than 260 mm for ladder up to and including 3 m in length. For longer ladders this width shall be increased at least 20 mm for each additional meter of length.
- vi) A sketch of the ladders and scaffolds proposed to be used shall be prepared and approval of the Engineer obtained prior to construction.



### **Other Safety Measures**

- vii) All personnel of the Tenderer working within the plant site shall be provided with safety helmets, belts etc. All welders shall wear welding goggles while doing welding work and all metal workers shall be provided with safety gloves. Persons employed on metal cutting and grinding shall wear safety glasses.
- viii) Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public.

### **Excavation & Trenching**

- ix) All trenches, 1.25 m or more in depth shall at all times be supplied with at least one ladder for each 30 m in length or fraction thereof. The ladder shall be extended from bottoms of the trench to at least 1 m above the surface of the ground. Sides of trenches which are 1.5 m or more in depth shall be stepped back to give suitable slope or securely held by timber bracing so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.
- x) The Tenderer shall take all measures on the site of the work to protect the public from accidents and shall be bound to bear the expenses of defense of every suit, action or other proceedings at law that may be brought by any persons for injury sustained owing to neglect of the above precautions and to pay any such persons or which may with the consent of the Tenderer, be paid to compromise any claim by any such person.

### **Demolition**

- xi) Before any demolition work is commenced and also during the process of the work:
  - a. All roads and open areas adjacent to the work site shall either be closed or suitably protected.
  - b. No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
  - c. All practical steps shall be taken to prevent danger to persons employed from the risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.



## **Personal Safety Equipments**

xii) All necessary personal safety equipment as considered adequate by the Engineer should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the Tenderer should take adequate steps to ensure proper use of equipment by those concerned.

- a. Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
- b. Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes shall be provided with protective goggles.
- c. Those engaged in welding works shall be provided with welder's protective eyesight lids.
- d. Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- e. When workers are employed in sewers and manholes, which are in use, the Tenderer shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers are allowed to get into manholes and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accidents to the public.
- f. The Tenderer shall not employ men below the age of 18 years and women on the work of painting with products containing lead or any toxic material in any form. Wherever men above the age of 18 are employed on the work of such painting the following precautions should be taken:
  - i. No paint containing lead or lead products shall be used except in the form of paste or ready made paint. Paints like vinyl and epoxies having toxic fumes should be applied after following all precautions laid down by manufactures.
  - ii. Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
  - iii. Overalls shall be supplied by the Tenderer to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.

xiii) When the work is done near any public place where there is risk of drownings all necessary equipments should be provided and kept ready for use and all necessary



steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

### **Hoisting Machines**

xiv) Use of hoisting machines and tackle including their attachments anchorage and supports shall conform to the following standards or conditions:

- a. These shall be of good mechanical constructions sound material and adequate strength and free from patent defect and shall be kept in good repair and the good working order.

Every rope used in hoisting or lowering materials or as means of suspension shall be of durable quality and adequate strength and free from patent defects.

- b. Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years shall be in charge of any hoisting machine including any scaffolding winch or give signals to operator.
- c. In case of every hoisting machine and of every chain ring hook, shackle shovel and pulley block used in hoisting or as means of suspension the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
- d. In case of departmental machines, the safe working load shall be notified by the Engineer. As regards Tenderer's machines, the Tenderer shall notify the safe working load of the machine to the Engineer whenever he brings any machinery to site of work and get it verified by the Engineer concerned.

xv) Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum of the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulting mats, wearing apparel, such as gloves, sleeves and boots as may be necessary, should be provided. The workers should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

xvi) All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be



altered or removed while it is in use.

Adequate washing facilities should be provided at or near places of work.

- xvii) These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the Tenderer.
- xviii) To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the Tenderer shall be open to inspection by the Labour Officer, Engineers of the Department or their representatives.
- xix) Notwithstanding the above clause from (i) to (xviii), there is nothing in these to exempt the Tenderer from the operations of any other Act or Rule in force in the Republic of India.

## **SAFETY CODE AND MODEL RULES FOR PROTECTION OF HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS**

### Safety Measures

All people working shall be provided with safety helmets, safety shoes, goggles, gloves, Safety belts etc., which shall be worn by the workmen while performing work and people working at elevation more than 10 feet shall be always provided with safety belts at contractor's cost. The safety belts shall be properly fixed to a lifeline always while at work. The Contractor shall provide safe means of access to any working place including provisions of suitable and sufficient scaffolding at various stages during all operations of the work for the safety of his workmen. Contractor shall ensure deployment of appropriate equipment and appliances for adequate safety and health of the workmen and protection of surrounding areas. The Contractor shall ensure that all their staff and workers including their sub-contractor (s) shall wear Safety Helmet and Safety Shoes. Contractor shall also ensure use of safety belt, Protective goggles, gloves etc. by the personnel as per job requirements.

Contractor shall ensure that a proper Safety Net System and shall be used at appropriate locations. The safety net shall be located not more than feet (9.0 meters) below the working surface at site to arrest or to reduce the consequences of a possible fall of persons working at different heights.

Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger



or inconvenience to any person or the public.

### Personal Safety Equipments:

All necessary personal safety equipment as considered adequate by the Engineer should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the Tenderer should take adequate steps to ensure proper use of equipment by those concerned.

- a) workers employed on mixing asphalt materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
- b) Those engaged in white washing and mixing or stacking of cement bags or any material that is injurious to the eyes shall be provided with protective goggles.
- c) Those engaged in welding works shall be provided with welder's protective eyesight lids.
- d) The Tenderer shall not employ men below the age of 18 years and women on the work of painting with products containing lead or any toxic material in any form. Wherever men above the age of 18 are employed on the work of precautions should be taken:
  - iii. Overalls shall be supplied by the Tenderer to the workers and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.
  - iv. When the work is done near any public where there is risk of necessary equipments should be provided and kept ready for use and all necessary steps take for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

### First Aid

At every work place, there shall be maintained in readily accessible place, first aid appliance including an adequate supply of sterilized dressings and sterilized cotton wool. The appliance shall be kept in good order and in large work place, they shall be placed under the charge of a responsible person who shall be readily available during working hours.

### Electricity & Water

Construction water shall be provided by Bank at one point at the cost of Rs.10000/- per month. The tenderer has to make his own arrangements for electrical power to carry out the work, in view of the Power restrictions imposed by State Electricity Board. If the contractor need power, the same will be provided at one / two points on chargeable basis by



having separate energy meters at Rs.10/- per Unit.

Before starting the work the contractor has to submit the Scaffolding drawings and it is to be approved by the Architect/Client. The Contractor is directly responsible for any accident, injury, disability and other such things that may happen to his workmen during working hours or outside working hours if they happen to be in the work site and that he will pay adequate compensation to such people. And the contractor has to take the full responsibility for these disabilities. The Contractor will be responsible for any accident or untoward incident that may happen to any person in the work site or near about due to inadequate safety measures, carelessness, negligence, incorrect procedures, inadequate supervision, improper methods, and that he will attend to all related police enquiry, court attendance and will bear the cost for all such expenses including compensation, if any, to be paid.





## ARTICLES OF AGREEMENT

**THIS AGREEMENT** is made on this ..... day of .....month of ..... between Indian Bank and having its Corporate Office at No. 254-260, Avvai Shanmugam Salai, Royapettah, Chennai – 600 014 (hereinafter referred to as the “Employer”) which expression shall include its successor, legal heirs and assignees of the one part.

**AND** M/s. .... having its office at .....  
..... (hereinafter referred to as the “Contractor”) which expression shall include its successor, legal heirs and assignees of the second part.

**WHEREAS** THE Employer intends to Purchase one number New Diesel Generator set (50 kVA (or higher)) for their office at INDIAN BANK, Executive flat, No 2, Ist Cross street, Sait Colony, Egmore, Chennai 600 008.

**AND** whereas the Employer has called for tenders through GeM portal for the Diesel Generator Set as per Employer’s NIT dated -----and whereas the tender dt. ----- submitted by the Tenderer has been accepted for such sum as may be ascertained to be payable in terms of the Bill of Quantities and which sum is estimated to be Rs. ... .. (Rupees ..... ) hereinafter referred to as the said "Contract Sum".

**AND** whereas the Tenderer has agreed to execute the work as per drawings, specifications, conditions of contract of the tender and Work Order for the Employer’s project of “Supply, Installation, Testing & Commissioning of one No. DG Set (50 kVA (or higher)) at Indian Bank Executive flat, No 2, 1<sup>st</sup> Cross street, Sait Colony, Egmore, Chennai 600 008.

**AND** whereas parties herein desirous of reducing the agreed terms into writing as under:

### **NOW THIS AGREEMENT WITNESSETH AS FOLLOWS: -**

- 1) consideration of the said Contract Sum to be paid at the times and in the manner set forth in the said Conditions the Contractor shall carry out and complete the Repair & Painting Works in terms and conditions herein contained and according to the general conditions of the contract, notice inviting tender, special conditions of contract, general scope of work, technical specifications, schedule of rates and instructions to be given by and the supervision of and to the entire satisfaction of the Employer.





**Contract Price, Taxes and Payment Terms:**

Total contract price is Rs. .... which is inclusive of cost of materials, equipment, installation charges and tools and tackles required for execution of the job. Above price is exclusive of all taxes (GST) in respect of this contract.

Interim payment will be made as per the site measurements on Item Rate basis.

2) **Completion Period:**

**Time is the essence of the Contract.** The work is to be completed in all respects within **30 days reckoned from 7<sup>th</sup> day from the date of issue of the Work Order or handing over of site whichever is later.** If the Contractor fails to complete the job within the agreed time period, the Contractor will have to bear liquidated damages as per the relevant clause mentioned in the Tender Documents.

3) **Earnest Money:**

The Contractor has deposited an amount of Rs. 30,000/- (Rs. Thirty Thousand only) as earnest money.

4) **Inspection of Site:**

The Contractor has inspected the site before submitting his tender and has satisfied himself as to the nature of the work to be executed on the site. Any difficulties which the Contractor may come across in the course of the work shall in no way relieve the contractor to claim or receive extra payment unless the Employer is of the opinion that such difficulties could not have been foreseen and the Employer consents in writing.

5) **Supply of Material and Labour:**

The Contractor shall arrange all labour, materials, equipments, tools, tackles and everything necessary for the completion of the work. The Contractor will assume all responsibility for the safety, protection and accounting of all material and equipment and the work during construction. All materials used by the Contractor shall be of the best quality conforming to the required specification mentioned in the tender document and will be subject to the approval of the Employer. All such materials not approved by the Employer shall be removed at once by the Contractor at his own expense. The Contractor shall also at his own expense arrange for carrying out any test of materials which the Employer may from time to time require or if so desired by the employer.



6) **Defective Work / Materials:**

If any part of the work done by the Contractor is found defective in workmanship or if bad or inferior materials have been used the Contractor shall at his own risk and cost demolish all such defective work and rebuild the same and / or replace the bad or inferior materials used within a time frame mentioned to the satisfaction of the Employer. The decision of the Employer in this regard shall be final and binding on the Contractor. In case of default of the contractor to remove the defective work and rebuild the same or replace bad or inferior materials as directed by the Employer, the Employer shall be entitled to employ anyone else to carry out the same at risk and cost of the Contractor and recover all expenses incurred in this regard from the contractor.

7) **Inspection of Work:**

During progress of the work the Employer shall be entitled at all times to have access to and inspect the work.

8) **Supervision:**

The Contractor shall provide one or more competent and technical qualified engineers duly and fully authorized to act on his behalf in all matters relating to the works to be carried out under or any other matter concerning this agreement and who shall at all times be present at the works while any work is in progress as per directions, explanations & instructions of Employer.

9) **Compliance with Statutory Regulations & Work Rules:**

The Contractor shall be responsible for complying with the applicable laws / bye laws / Regulations in force from time to time and shall have to bear all statutory liabilities to the workers / personnel engaged for the job. Nothing will be paid extra in this regard. If any amount is paid by the Employer with this regard the same amount shall be deducted from the Contractor's dues. The Contractor shall have to arrange insurance cover for the workers / personnel engaged by him for the job.

10) **Determination of Contract:**

In the event of Contractor failing to keep / adhere to agreed schedule of work, or in the event of the Contractor failing to comply with the provisions of this contract by default and / or negligence and / or suspension of work or in the event of Contractor failing to complete the work within the stipulated period, the Employer may terminate this Agreement forthwith and employ, at the Contractor's risk and cost, another contractor or sufficient number of workmen to complete the work.

11) **Force Majeure:**

This clause will be operative only if the work is delayed by



- a) Acts of God
- b) Earthquake or floods or similar natural calamities.
- c) Serious loss or damage by fire or lightning.

In case any Force Majeure condition herein mentioned occurs and continues for a period exceeding 15 days the parties here to undertake to sit together and devise ways for expeditious and proper performance of the obligations of the parties under this order.

**12) Arbitration:**

“ In the event of any dispute or difference relating to interpretation and application of provisions of the contract and all disputes/claims whatsoever which shall either during the continuance of the contract or afterwards either between the parties to the contract or the respective representatives touching the construction/application of any provision/clause mentioned in the contract or any account or liability between the parties to the contract or as to any act or deed or omission of any party to the contract, in any way relating to these presents, shall be first at the discretion of the Bank attempted to be resolved in good faith by mutual discussion within 30 days of the dispute or question being raised failing which the same shall be settled by arbitration in accordance with provisions of Indian arbitration and Conciliation act 1996.

The Parties concerned shall designate an arbitrator on mutual consent/consensus. In the event of no consensus being arrived, an Arbitral Tribunal shall be constituted comprising three Arbitrators, each party appointed one arbitrator and a third arbitrator to be appointed by the two arbitrators so appointed by the parties. The venue of the arbitration shall be exclusively at Chennai and any award passed by arbitrator or the arbitral Tribunal shall be final, conclusive and binding upon the parties and shall be deemed to have been made between parties themselves. The parties to the dispute shall share equally the cost of arbitration as intimated by the arbitrator”.

The arbitration proceedings will not preclude the right of approaching legal forum by the parties.

**IN WITNESS** whereof the said contracting parties have set their hands and seals on the day and year first hereinabove witness.

Witness Address

Employer

Witness Address

Contractor



## GENERAL SPECIFICATIONS

### To be read in along with particular specifications and bill of quantities

These specifications are for work to be done, item to be supplied and materials to be used in the works as shown and defined on the drawings and described herein, to the satisfaction of the Employer / Architect.

- 1). The workmanship is to be the best possible and of a high standard. The contractor shall take all steps immediately to make up deficiency if any noticed by the Employer/ Architect. Use must be made of special tradesman in all aspects of the work and allowance must be made in the rates for the same.
- (ii). The materials to be provided by the contractor shall be in accordance with the samples already got approved from the Employer/ Architect by the contractor and in conformity with specification and approved list of manufactures and brand. The contractor shall produce all invoices, vouchers or receipts for any materials if called upon to do so by the Employer/ Architect.
- (iii). Samples of materials are to be submitted to the Employer/ Architects for their approval before the contractor orders or delivers the materials to the site. Samples together with their packing are to be provided free of charge by the contractor and should any materials be rejected they will be removed from the site at the contractors expense. All samples will be retained by the Employer/ Architects for comparison with materials which will be delivered at site. Also the contractor will be required to submit specimen finishes of colors, fabrics, etc. for the approval of the Employer/ Architects before proceeding with the works.
- (iv). The contractor shall be responsible for providing and maintaining temporary coverage required for the protection of finished work. He is also to clean out all wood shavings, cuts ends and other waste from all parts of the works before covering or in fillings is constructed.
- (v). The contractor shall maintain uniform quality and consistency in workmanship throughout the execution of the work.



ANNEXURE 'I'

**MANUFACTURER'S AUTHORIZATION FORM (MAF)**

(ON MANUFACTURER LETTER HEAD ONLY)

Date:

To:

M/s Indian Bank,  
Corporate Office  
Chennai

WHEREAS

We, ..... who are official manufacturers of..... having factory at....., do hereby authorize ..... to submit a Bid in relation to the Invitation for Bids indicated above, the purpose of which is to provide the following Goods, manufactured by us and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with the General Conditions of Contract, with respect to the Goods offered by the above firm in reply to this Invitation for Bids.

Name In the capacity of:

Signed

Duly authorized to sign the Authorization for and on behalf of



## **BRIEF SCOPE OF WORK**

- 1) The contractor shall carry out the work of supply, installation, testing & commissioning of 50 kVA (or higher) Diesel Generator set at Indian Bank House, Executive flat, No 2, 1<sup>st</sup> Cross street, Sait Colony, Egmore, Chennai 600 008.
- 2) The contractor shall also obtain necessary clearances/approvals for installation of 50 kVA (or higher) Diesel Generator from the competent authorities. The copy of the approvals, certificates has to be submitted to the Employer. The contractor is responsible to obtain the necessary clearances/approvals for installation/operation of 50 kVA (or higher) Diesel Generator set and also for purchase/sale from the competent authorities, if required.
- 4) Single line diagram/ General Arrangement / technical documents / civil drawings / Support structures / Cable race way layout including installation details shall be approved by the Bank / Engineer-in-charge before installation of 50 kVA (or higher) DG set.
- 5) The contractor shall visit the site; understand the site logistics and access for loading and unloading etc and the *actual requirement before submitting tender and not additional should be claimed in this regard.*
- 6) The complete electrical system arrangement, installation, including laying of cables / wiring, installation of support structures, civil works shall be done in consultation with Bank's Engineer in charge.
- 7) A copy of SLD, GA, Circuit diagrams, drawings of civil works shall be submitted to the Bank at the time of installation.
- 8) Output of the Diesel generator shall be connected to the Automatic Changeover panel (NOT UNDER THE PRESENT SCOPE OF WORK). In this regard **all the power cable, control cable from the standard control panel of the DG set to this Automatic Changeover Panel will be under this scope of this contract.**
- 9) Contractor will comply with all the IE Rules. 1956, Indian Electricity Act. 2003 upto date and regarding the work of repairs and maintenance



## **TECHNICAL SPECIFICATIONS FOR DG SET WITH STANDARD CONTROL PANEL**

The capacity of DG Set shall be of 1 No. 50 kVA (or higher), with engine and alternator with suitable coupling. It shall be mounted on a common base frame as per the recommendations of engine manufacturer. The base frame shall be mounted with antivibration mounts / friction pads. Suitable foundation for installation of these DG sets have to be ascertained by the tenderer before quoting the tender itself and executed according to the instruction to the employer / consultants at their cost.

The DG set shall comprise of the following systems to make it complete in all respects.

1. Fuel oil system
2. Cooling water system
3. Starting system
4. Lub oil system
5. Exhaust system
6. Acoustic enclosure

The equipment shall be capable of delivering continuously at the generator terminals a net output not less than 50 kVA (or higher) when operating under the site and ambient parameters and conditions.

The design parameters of the generator and excitation system shall be so chosen, that the set is stable while running at any load between no load and full load and also during starting of motors / load.

### **Fuel Oil System**

#### **a. Sub base diesel Tank**

The fuel oil system shall comprise of fuel tank of capacity (of minimum 150 Litres), filters, pipes, valves, etc. The fuel oil tank shall be manufactured from MS sheet of standard thickness (14 SWG) with adequate stiffeners.

The service tank shall be provided with inlet, outlet, excess fuel return, overflow, air vent and drain connections, oil level gauge, etc.



### **Cooling Water System**

The cooling water system shall be of radiator cooling type as per bill of quantities. The radiator shall be mounted along with DG set over the common base frame. This system shall be provided with temperature switch so that when the temperature of jacket water goes above the permissible limit, the engine shall stop and give an audio visual alarm.

### **Starting System**

The starting system shall consist of DC motor energized by 12V batteries. The capacity of batteries shall be of 100 AH / as per manufacturer's recommendation, to cater for minimum 4-5 consecutive starts.

The battery charger for charging the starting batteries shall be in-built with the engine and panel with suitable electrical interlocks. While running it has to charge from engine & during idling the battery to be charged from the panel / EB mains.

### **Lub Oil System**

Lub oil system shall consist of an in-built sump provided in the engine, the engine driven gear pump, duplex filters and lub oil cooler etc.

A pressure regulator shall be mounted in the lub oil pump to control lub oil pressure. Filters and screens shall be provided in the L.O. system to remove foreign particles from circulation and prevent damage to bearing or mating surfaces. The L.O. system shall include L.O. pressure sensing device which shall cut off fuel supply to the engine as soon as the pressure falls below a preset value and shall give audio visual alarm. L.O. system shall be provided with pressure gauges and temperature gauges at inlet and outlet of L.O. Cooler.

### **Exhaust System**

The exhaust gas from the engine manifold shall be connected to the turbo charger through a flexible joint. Outlet from the turbo charger shall be connected to a residential silencer through another set of expansion joints. The exhaust pipe (with suitable supporting structure) inside the DG plant shall be thermally insulated by means of lagging with 50 mm thick glass wool, covered with chicken mesh and cladding with 24 gauge aluminium sheet.





The intake air shall always be routed through a dry air filter by an air intake fan mounted suitably and the filter shall be mounted on engine. The turbo charger shall consist of a turbine wheel and a centrifugal compressor, separately encased but mounted on and rotating with a common shaft. The power to drive the turbine wheel shall be obtained from energy of engine exhaust gases. The charger shall be lubricated and cooled by engine lubricating oil.

The constituents of exhaust gas should be well within permissible limit as per the local authorities like corporation, traffic police, state pollution board etc

### **Governing System**

The governing shall be Mechanical type with adjustable droop mechanism.

An over speed trip mechanism shall be provided to automatically shut off the fuel and to stop the engine in case the set speed reaches about 110% of the rated speed with audio alarm indication.

### **Diesel Engine**

The diesel engine shall be 4 strokes, suitable HP (continuous moving) single action with multi cylinders. The engine shall be coupled to 50 kVA (or higher) alternator and delivering the rated output.

The engine shall be turbo charged after cooled with radiator for cooling and electrical starting arrangement with battery to start the engine.

The direction of rotation of engine shall be clearly marked on the set.

The engine shall confirm as specification BS:5514

### **Alternator**

The generator shall be capable of delivering 50 kVA (or higher) output (continuous) output with the terminal voltage differing from the rated value of not more than  $\pm 1\%$  and the frequency not more than  $\pm 1\%$ .



The generator stator and rotor windings shall have class H insulation meeting the temperature limitations set forth in IS: 4722.

The excitation system shall be provided with high speed, solid state automatic voltage regulator.

### **Generator Standard Control Panel**

The generator panel shall be of CRCA sheet steel of not less than 14 & 16 SWG thick, floor mounting, free standing, dust and water proof, sheet metal enclosed cubicle type. The panel shall be powder coated with bank approved colour.

The panels shall be complete with fuse switch / circuit breaker, protective relays, instruments, switches, fuses, indicating lamps, annunciation windows etc. as specified. **Panel shall be provided with auto on off logic / control for auto on and stop.** The panel shall also be provided with battery charger for charging the batteries. A gland plate shall be provided at the bottom / top of the panel for termination of incoming and outgoing cables.

All Equipments shall be so connected that the removal and replacement may be accomplished individually without disturbing other Equipments.

Control and meter selection switches shall have integral name plates. Name plate for all other devices shall be located below the respective devices and shall be in English language only.

Instruments and devices mounted on the face of the control panel shall also be identified on the rear with instrument or device number.

Fuse links shall be provided for isolation of individual circuit from the bus distributing other circuits.

The terminal blocks shall be grouped as per circuit functions.

A continuous 25 x 3 mm copper earthing bus shall be provided throughout the length of the panel and shall have terminal lugs at each side for connecting to the station grounding bus.

The panel shall be provided with door-operated incandescent lamp. It shall also be provided with switched socket of 5A rating.



The indicating meters shall be of Digital flush mounted type.

Standard Battery charger (12V, 10A, SMPS type) will be provided in the control panel

Generator incoming panel shall be provided with meters and relays and 250 amps incoming MCCB (near Genset output) and at Standard Control Panel, with necessary 3 Nos. twin core resin cast CTs ratio 100/5-5A, 15VA Clause 1 for metering as applicable.

### **Acoustic Enclosure**

Acoustic hood for housing the DG set to be mounted on a concrete/ platform. The acoustic enclosure shall be of suitable size as per norms prescribed by Central Pollution Control Board (CPCB). The guaranteed noise level shall be of 75 decibels at 1 mtr. distance or lesser value stipulated by CPCB.

The enclosure shall be of totally weather, vermin and dust proof to enable the generator to operate at an ambient temperature of 45°C. The outer casing of the container shall be of sheet steel of suitable thickness. The total container shall be of powder coated.

The overall dimensions of the acoustic enclosure (l x b x h) may please be indicated.

### **Earthing System**

The complete D.G set has to be earthed with **25 x 3 mm tin coated copper flat** as per BOQ with duplicate earth connection separately for alternator and control panel.

2 Nos. of earth electrodes for body earth and 2 Nos. earth electrode for neutral earth shall be provided as per IS-3043 with GI pipe ('B' Class) earth electrode. Interconnection of earth electrode, earthing of fuel oil tank, base frame etc. shall also be carried out as per relevant standards.

### **Approvals**

It is the responsibility of the Tenderer to get the approval from relevant authorities like CEIG, other statutory authorities TNEB / CEA.

The Tenderer shall prepare necessary drawings for approval by Chief Electrical Inspector to Government, obtain approval for the same, arrange for the inspection by the Electrical



Inspectorate Officials and obtain safety certificate from them for commissioning the installation (This building is fed by LT power supply).

The fees payable to CEA/ CEIG shall be borne by the Tenderer.

### **Cabling & Terminations**

Power cable from alternator to control panel viz **1R x 3.5 core 95 Sq.mm.** XLPE Aluminum Armoured cable shall be provided as per BOQ. **All control cables / Sensing cable between DG set and control panel and electricity main distribution board are also in the scope of the DG set supplier.** All end terminations to be carried out by crimping type aluminium / copper sockets.

### **Quantities**

Payment will be made for the actual quantity of work executed viz cabling, earthing, fuel line, annunciation line, etc. Tenderers are instructed to quote rates for all measurable items like various size of cables, end terminations, piping valves, etc. which will be measured as per the finished installations as per pricing sheet enclosed.

### **Drawings and Manuals**

The successful Tenderer shall submit the following GA drawings in three copies for approval by client.

- a. General arrangement of each equipment showing fixing dimensions, static weight
- b. Foundation drawing for DG set, if required
- c. Schematic control diagram for DG control panel
- d. TB wiring diagram
- e. After approval of above drawings and after completing of erection, the Tenderer shall submit 'As-Built' drawings in two copies with one set of reproducible to Employer
- f. One sets of operation and maintenance manuals for the each of the DG sets and auxiliaries shall be submitted to Employer.
- g. One set of operating tool kits shall be submitted to the Employer for each of the DG sets.



**GUARANTEED TECHNICAL SPECIFICATION FOR 50 kVA (or higher) GENERATOR SET**  
**(Details to be furnished by the tenderer)**

Sl. No.	Description	Specification
1.	Generator kVA Rating / Model No.	<b>50 kVA (or higher)</b>
<u>Engine</u>		
2.	Make	
3.	Model No.	
4.	BHP Output	
5.	Cooling	
6.	Aspiration	
7.	No. of Cylinders	
8.	RPM	
9.	Compression ratio	
10.	Displacement (ltrs.)	
11.	Fuel oil	
12.	Fuel consumption at no load	
13.	Fuel consumption at 25% load	
14.	Fuel consumption at 50% load	
15.	Fuel consumption at 75% load	
16.	Fuel consumption at full load	
17.	Fuel consumption at 110% load	
18.	Capacity of fuel tank (litres)	
19.	Governor	
20.	Starting system	
21.	Lub oil specification	



22.	Lub oil sump capacity	
23.	Lub oil consumption (ltrs. per hour)	
24.	Coolant capacity (Engine + Radiator)	
25.	Lub oil change period (hrs.)	
26.	Emission compliance	
27.	Battery rating	
<u>Alternator</u>		
28.	Make and Model No.	
29.	Type	
30.	Voltage	
31.	Frequency	
32.	Phase	
33.	Rated current	
34.	Power factor	
35.	Enclosure	
36.	Voltage regulation	
37.	Class of Insulation	
Control Panel		
38.	Make	
39.	Type	
40.	Overall dimensions (L x B x H)	
41.	Finish	
42.	Sheet metal size	
43.	Make and type of contactors / circuit breakers	
44.	Make and type of instruments	



45.	Make and type of switch fuse units	
46.	Other facilities incorporated	
Generator set		
47.	Noise level	
48.	Overall dimensions of the DG set	
49.	Overall canopy dimension	
50.	Approx. Total weight (Dry)	
51.	Type of coupling/bearing details	

1.	<b>TEST ON ENGINE:</b> <ol style="list-style-type: none"> <li>Engine starting time</li> <li>8 hour running at different loads which includes 100% load and 110 %load for one hour in every 4 hours of test run as per BS 5514 standard.</li> <li>Fuel consumption test</li> <li>1 hour running at full load</li> <li>1 hour running at <math>\frac{3}{4}</math> load</li> </ol>	
2.	<b>Over Speed Test</b>	
3.	<b>TEST ON CONTROL PANEL</b> <ol style="list-style-type: none"> <li>Insulation resistance test</li> <li>High voltage withstand test</li> <li>Functional and operation test</li> <li>Secondary injection test on meters &amp; relays</li> <li>Mechanical test on components</li> </ol>	
4.	<b>TEST ON ALTERNATOR</b>  <b>TCs to be furnished</b> <ol style="list-style-type: none"> <li>Insulation measurement</li> <li>High voltage test on rotor and stator windings</li> <li>Temperature rise test (test cert. review)</li> </ol>	



	d. Mechanical Balance e. Stator Voltage balance f. Over speed g. Stator phase sequence check h. Vibration & noise level i. Stator & rotor winding resistance measurement j. Overload Capability test	
5.	<b>TEST ON EXCITATION SYSTEM</b>  TCs to be furnished:  a. High voltage test on windings b. Measurement of stator & rotor resistance c. Response test d. Open Circuit magnetisation test	
6.	<b>TEST ON VOLTAGE REGULATOR:</b>  a. Sensitivity test b. Response time test	
7.	<b>GENERAL</b>  a. Dimensional Check b. Bill of Material c. Checking of Assembly as per GA	
8.	<b>TEST ON ASSEMBLED SET:</b>  a. No load Test b. Load Tests at different loads for Specific Fuel Consumption c. Sound and Vibration Measurement Test at different loads d. AVT / Governor response Test e. Over speed Test f. Load Throw-off Test	



### LIST OF APPROVED MAKE OF MATERIALS

1.	Alternator	:	Kirloskar / Stamford / Leroy Somer
2.	Engine	:	Cummins/ Kirloskar - Greens/ Caterpillar
3.	ACB	:	Siemens / Merlin Gerin / L & T
4.	Contactors & Relays	:	Siemens / Merlin Gerin/L & T
5.	Control Wires, etc.	:	ATLAS / Finolex / Powerflux / Polycab RR Cables / KEI / Havells
6.	Meters	:	L&T/HPL socomec/Cadal/Rishiba/AE
7.	Push Button / Selector Switches	:	Essen/Salzer-L&T/Vaishnav /Kaycee/AE
8.	Armoured Cables	:	CCI / Finolex / Universal / Polycab / KEI
9.	Batteries	:	Exide / Amaron
10.	Alternator	:	Kirloskar / Stamford / Leroy Somer
11.	MCCB	:	L&T/Siemens/Schneider/HPL/Havells / Legrand
12.	Switch Fuse Unit	:	Kirloskar / Stamford / Leroy Somer
13.	Glands	:	Dowells / Comet / Gripwell/Stepwell
14.	Lugs	:	Dowells / Jainco / Ismal / Johnson
15.	Current Transformer	:	Automatic Electric / Kappa / L&T / Rishab/Hager
16.	Indication Lamp	:	L&T / Siemens / Technique
17.	Terminals	:	Elmex / Technoplast



**BANK GUARANTEE FORMAT TOWARDS EMD**

The Indian Bank,  
Corporate Office, Estate Department,  
254-260, Avvai Shanmugam Salai,  
Royapettah,

**CHENNAI – 600 014**

Dear Sirs,

**WHEREAS, THE INDIAN BANK, having its Corporate Office at 254-260, Avvai Shanmugam Salai, Royapettah, Chennai 600014(hereinafter called “the Employer”) have issued bid documents for Supply, Installation, Testing and Commissioning of one no 50 kVA (or higher) DG set at Indian Bank House, Executive flat, No 2 , Ist Cross street, Sait Colony, Egmore, Chennai 600 008, and whereas ----- is the contractor for the aforesaid work (hereafter called “the Contractor”).**

**AND WHEREAS** under the terms and conditions of the said bid documents, the Contractor is required and has undertaken to furnish a Bank Guarantee of **Rs. (Rupees )** as Earnest Money Deposit as contained in the said tender document.

We, -----, having registered office at ----- and branch office at ----- (hereinafter called “the Bank”) hereby unconditionally and irrevocably undertake to the Employer immediately upon receipt of the first written demand such amount or amounts as may be demanded by the Employer from us under this Guarantee not exceeding a sum of **Rs..... (Rupees )** in aggregate without demur or reference to the Contractor and agree that the Employer’s demand shall be final and binding on the Bank under all circumstances.

We hereby affirm that we are the Guarantor and responsible to you on behalf of the Contractor up to an aggregate sum of **Rs..... (Rupees )** such sum or sums being payable in Indian currency and we undertake to pay on your first written demand and without any demur and/or condition, and sum or sums with the aggregate limit of **Rs. .... (Rupees )**



We agree that no change or addition to or modification of the terms of the tender or of the works is to be performed there under or of any of the tender documents which may be made between you and the Contractor shall in any way release the Bank from any liability under this Guarantee, and we hereby waive notice of any such change, addition or modification.

We further agree that the Employer shall have the right to invoke a claim up to the last date of the validity of this Bank Guarantee and that the Employer shall remain the sole judge of the validity of the claim and the Bank agrees not to contest any claim.

We further agree that any change in the Contractor's constitution or their liquidation or dissolution shall not discharge the Bank's liability under this Guarantee.

We further agree that the right of the Employer to make a claim shall not be vitiated by any dispute raised or pending with any Statutory Authority, arbitrator, tribunal or any other body or person.

It is agreed that the Employer's claim shall remain valid even if the Employer has not issued a prior notice or has not proceeded against a Contractor before making such claim.

This Guarantee is confirmed and irrevocable and shall remain valid upto and including -----  
----- and shall remain valid upto such extended period which may be mutually agreed to.

Unless a demand or claim under this Guarantee is made on the Bank in writing on or before --  
-----, the Bank shall be discharged from all liability under this Guarantee.

**\*\* BG should be Valid for 90 days from the date of submission of tender.**

