

## INDIAN BANK, CORPORATE OFFICE, ESTATE DEPARTMENT No.254 - 260, Avvai Shanmugam Salai,

Royapettah, Chennai - 600 014.

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### PART - 1

### **TECHNICAL BID**

Tender document for Supply Installation, Testing and Commissioning of 1no. 15kVA Diesel Generator Set under buyback of old Diesel Genset (1no.7.5kVA) at Indian Bank's Premises at No.70, Oliver Road, Mylapore, Chennai - 600 004

## **ISSUED TO**

M/s.\_\_\_\_\_

This document contains 68 pages







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## **CORPORATE OFFFICE, CHENNAI-14**

### TENDER DOCUMENT

Name of work:

Tender document for Supply Installation, Testing and Commissioning of 1no. 15kVA Diesel Generator Sets under buyback of old Diesel Genset (1no.7.5kVA) at Indian Bank's Premises at No.70, Oliver Road, Mylapore, Chennai - 600 004

### INDEX

S NO	DETAILS	PAGE NO
1	COVER PAGE	1
2	BLANK PAGE	2
3	INDEX	3
4	NOTICE INVITING TENDER	4-6
5	TENDER DECLARATION	7-8
6	SPECIAL CONDITIONS OF CONTRACT	9-12
7	ARTICLES OF AGREEMENT	13-15
8	GENERAL CONDITIONS OF CONTRACT	16-43
09	APPENDIX - I (Appendix to General Conditions of Contract)	44
10	APPENDIX - II (Measurement Sheet / Interim Bill)	45
11	APPENDIX – III (Successful Bidder or Tenderer s' Liability & Insurance Summary)	46
12	APPENDIX – IV (Report of Virtual Completion)	47
13	APPENDIX - V (Performance Bank guarantee)	48-49
14	APPENDIX-VI (Proforma of Application for Extension of Time Period)	50-51
15	APPENDIX-VII (BIDDER DETAILS)	52-53
16	BRIEF SCOPE OF WORK	54
17	GENERAL INSTRUCTIONS	55-57
18	TECHNICAL SPECIFICATIONS	58-63
19	GURANTEED TECHNICAL PARTICULARS (GTP)	64-66
20	PREFERRED MAKES	67
21	FINAL CHECK LIST FOR SUBMISSION OF TENDER BY THE BIDDERS	68
22	PRICE BID (SEPARATE BOOKLET) – PART-II (05 Pages)	-



#### **NOTICE INVITING TENDER (NIT)**

Invitation of Supply Installation, Testing and Commissioning of 1no. 15kVA Diesel Generator Sets under buyback of old Diesel Genset (1no.7.5kVA) at Indian Bank's Premises at No.70, Oliver Road, Mylapore, Chennai - 600 004

- Indian Bank invites sealed tenders in 2- bid system [Technical Bid (Part-1) and Financial bid (Part-2)] from the Successful Bidder or Tenderer's for their proposed work of Design, Engineering, Supply Installation, Testing and Commissioning of 1no. 15kVA Diesel Generator Sets under buyback of old Diesel Genset (1no.7.5kVA) at Indian Bank's Premises at No.70, Oliver Road, Mylapore, Chennai - 600 004
- 2) Tenders should be accompanied by an Earnest Money Deposit for an amount of Rs. 11,000/- (Rupees Eleven Thousand Only) in the form of D.D favouring "Indian Bank Chennai-14"/ Bank guarantee from any scheduled Bank in favor of Indian Bank, Chennai-14 shall be enclosed along with Technical Bid Documents. Tenders submitted without EMD will be rejected.
- 3) The tenders in **DUPLICATE along with enclosures** should be submitted in two separate Sealed covers each with the superscription giving the Name of the work. The EMD in the above form and the technical & price bid shall be enclosed in a cover superscripted with the name of the work and wording 'EMD + Technical bid '(cover 1). The Price bid consisting of the Bill of Quantity shall be enclosed in another cover super scribed with the name of the work and the working 'Price Bid' (Cover 2). Both the covers 1 & 2 may be inserted in a third cover super scribed with the name of the work (cover 3).
- 4) Sealed tenders in the prescribed format shall be deposited in the tender box kept at the Corporate Office, Indian Bank, 254-260, Avvai Shanmugham Salai, Royapettah, Chennai- 600 014 on or before the stipulated date and time of submission of the tender, after noting down in the register meant for this in the Expenditure department.
- 5) At the time fixed for opening of the tender, the cover 3 shall be opened and then cover Containing the EMD and Technical bid will be opened. If the EMD submitted is in the Acceptable form, then the Technical bid will be evaluated, if not the tender will be rejected. And the same shall also be enclosed in cover-1.

6) Salient Features of Contract:

Estimated Cost of total Work	Rs.5.42 Lakhs – excluding GST				
Tender Fee	NIL				
Earnest Money Deposit (EMD)	Rs. 11,000/- (Rupees Eleven Thousand Only)-				
Earnest Money Deposit (EMD)	Refundable				
Initial Security Deposit (S.D)	2% of the total contract value (shall be submitted				
minal Security Deposit (S.D)	within 7 days of receiving Work Order)				
Retention Amount (RMD)	5% of the each Bill Amount				
Total Security Deposit (SD)	7% of the total contract price [Initial S.D (2%) + RMD				
Total Security Deposit (SD)	(5%)]				
Defects Liability Period (DLP)	12 Months from the date of virtual completion				
Date of Commencement	14 days from the date of issue of Work Order/letter of				
(Clause 33 of the General	intent or Date of which the site is handed over				
Conditions of Contract)	whichever is later				
	45 days from the Date of issue of Work Order/letter of				
Date of Completion	intent or Date of which the site is handed over				
	whichever is later.				
	1 % per week of the Contract Value for intermediate				
Liquidated Damages for Delay	and final deadlines subject to maximum total of 10%				
	of final Contract value				
Frequency of Interim Certificate	Payment after completion of works				
Period of honoring certificate for					
interim payment against each	NA NA				
running bill by Bank/Owner					
Period of honoring Final Certificate	Four weeks from the date of receipt of Bill payment				
	recommendations from Engineer in Charge / .				
Period of Performance	3 years from the date of completion of virtual				
Guarantee for DG Set Works	completion.				





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	The tenderer shall be required to deposit 5% of the tendered value of work as performance guarantee	
	(format given in	
	Appendix V) for a period of 3 years in the form of	
	irrevocable bank guarantee of any scheduled bank in	
	accordance with the form prescribed or fixed deposit	
	receipt, within 15 days of the Virtual Completion,	
	before settlement of final bill	
Start of Issue of Tender, download from	29.06.2022	
the website		
Last date and Time of	3.00PM on 08-07-2022	
Submission of tenders	3.001 W 00-0/-2022	
Opening of Technical Bid	4.00PM on 08-07-2022	
Opening of Price Bid	Will be informed later to the Qualified Bidders	
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#### **ELIGIBILITY CRITERIA**

- 1) The Tenderers shall be themselves manufactures / authorized dealers of manufacturers / OEM / Electrical contractors who have executed the work of supply, installation, testing and commissioning of generator work at Government,/Public Sector Undertakings / PSBs / IT / reputed business organizations. The tenderer should have after sales service unit at Chennai for the period of last three years ending 31.03.2021. The contact details should be given.
- 2) The tenderer should be in business of similar nature (supply, installation, testing and commissioning of generator work) for the past 7 years and their annual turnover should be minimum of Rs 10 Lakhs (Rupees Ten Lakhs Only) each for the last 3 years (Year ending 31.03.2021). They should be profit making for the last 3 years. The tenderer should completely fill the format given below and submit along with the technical bid and the tenderer should enclose copies of their audited balance sheets with Profit and Loss statement for the last 3 years. If the balance sheet of 2020-2021 is not available, then balance sheet of 2017-2018 may be submitted. All the balance sheet should include P&L statements also.

Year	Turnover (Rs)	Total Sales (Rs)	Net Profit (Rs) (as per P&L Statement)
2017-18			
2018-19			
2019-20			
2020-21			

- 3) The Tenderer should have executed i.e supply, installation, testing and commissioning of DG sets of capacity not less than 70 kVA (proof to be submitted) and work order of below applicable category to be submitted.
  - (a) Three works each costing not less than the amount equal to 40% of the estimated cost i.e Rs 2.17 lakhs (or)
  - **(b)** Two works each costing not less than the amount equal to 50% of the estimated cost i.e Rs 2.71 lakhs (or)
  - (c) One work costing not less than the amount equal to 80% of the estimated cost i.e Rs 4.34 lakhs under single agreement during the last 5 years ending with 31.03.2021.

The tenderer shall produce copies of Work orders and Completion Certificates for the work claimed under eligibility criteria as a proof of having completed the job in the following format.





S1.No	Name of the Work Executed	Bank/Owner / Client / Customer	Work Order Reference	Year of Execution	Date of Completion / (enclose completion certificate)	Work order amount (Rs)	Final Bill value of the work (Rs)
01							
02							
03							

- 7) Validity of offer shall be 120 days from the date of opening of tender.
- 8) The Bank/Owner is not bound to accept the lowest tender and reserves the right to accept or reject any or all tenders, either in whole or in part, without assigning any reason for doing so.
- 9) The Tenderer shall ensure that the proposed DG Sets shall be installed at the existing site conditions. Hence, the tenderers are advised to inspect the site before quoting for the job, with prior appoint ment with the department from 01.07.2022 to 02.07.2022.
- 10) The Bank/Owner is not liable for the cost incurred in the inspection and preparation of tender and submission / participation and also not liable for any other cost what so ever may be.
- 11) The tenderer shall take care to price his tender rationally. Extreme under pricing or overpricing in item-rates total amount will be considered adversely in the assessment of tenders. The tenderer shall on demand submit analysis of rates of some items of work if so required by the Bank/Owner.
- 12) Tenderer shall take care in submitting the tender in time as specified. Late tenders will not be accepted on account of postal services etc or any other reasons what so ever may be. No communication will be entertained in this regard.

Note: Successful Bidder or Tenderer should have good contacts with TANGEDCO / CEA and other connected Government agencies / State Nodal Agencies for liaisoning.

Yours faithfully, For Indian Bank

Asst. General Manager (P&E)







#### TENDER DECLARATION

(To be submitted in the bidders Letter pad)

I/We have read and examined the notice inviting tender, Schedules, applicable specifications, drawings, Conditions of contract and other documents and rules referred to in the conditions of contract and all other contents in the tender documents for the work.

I/We hereby submit tender for the execution of the work specified for Indian Bank, Corporate Office, Chennai-14 within the time frame specified in the tender and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in General conditions of contract.

I/We agree to keep the tender open for 120 days from the due date of opening thereof and not to make any modifications in its terms and conditions.

A sum of Rs. 11,000/- (Rupees Eleven Thousand Only) is enclosed in the form of demand draft / Bank Guarantee towards EMD.

I/We hereby declare that I/we shall treat the tender documents, drawings and other records connected with the work as secret/confidential documents and shall not communicate the information derived there from to any person other than a person to whom I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the state.

Dated:

Authorized Signatory of the tenderer **Designation:** 

Witness Signature

Name

**Postal Address** Occupation



#### **DECLARATION**

(To be submitted in the bidders Letter pad)

# (TO BE GIVEN BY THE APPLICANT WHO HAVE DOWNLOADED THE TENDER DOCUMENT FROM THE WEB)

It is to certify that

- I / We have submitted the Tender document in the proforma as down-loaded directly from the web site & there is no change in formatting, number of pages etc.
- 2) I / We have submitted Tender document which are same / identical as available in the website.
- 3.) I / We have **not made any modification / corrections / additions etc** in the Tender documents downloaded from web by me / us.
- 4) I / We have checked that **no page is missing** and all pages as per the index are available & that all pages of Tender document submitted by us are **clear & legible**.
- 5) I / We have **signed (with stamp) all the pages** of the Tender document before submitting the same.
- 6) I / We have **sealed** the Tender documents properly before submitting the same.
- 7) I / We have submitted the cost of Tender document.
- 8) I /We have read carefully & understood the instructions to all the applicants & to the applicants who have down-loaded the Tender document from the web.
- 9) In case at any stage later, it is found that there is difference in our downloaded Tender documents from the original, BANK shall have the absolute right to take any action as deemed fit without any prior intimation to me / us.

Dated:

Signature(s) of applicant(s)





### SPECIAL CONDITIONS OF CONTRACT

#### 1. Scope of Work:

The scope of work for the purpose of this tender constitutes Supply Installation, Testing and Commissioning of 1no. 15kVA Diesel Generator Sets under buyback of old Diesel Genset (1no.7.5kVA) at Indian Bank's Premises at No.70, Oliver Road, Mylapore, Chennai - 600 004

#### 2. Price Basis:

- a. The unit rates mentioned in schedule of rates shall remain firm and shall not be subjected to any escalation throughout the currency of the contract.
- b. The quoted rates shall be inclusive of supply of all materials required for completing the item works.
- c. Payment shall be made on the actual quantum of work executed, duly certified by Engineer-in-Charge.
- d. The rates quoted shall be based on laws, levies, taxes and duties applicable on the date of LOI. Any statutory variations thereto and / or new levies due to an act or enactment, after the date, shall be to the Owner's account against documentary evidence within the contractual completion date. Any such variation/imposition of new taxes and levies beyond the contractual completion date shall be to the Successful Bidder or Tenderer 's account.
- e. Successful Bidder or Tenderer shall satisfy himself on the applicability of various taxes, duties, levies, octroi, including sales tax, works contract tax, turnover tax, VAT, excise duty etc. as applicable for such work and quoted prices shall be inclusive of all such liabilities. Owner / Engineer in Charge / shall not be liable to any liability of the Successful Bidder or Tenderer on this account. Successful Bidder or Tenderer shall periodically produce documentary proof for having fulfilled the above obligations in time, including proof of payment, proof of filing of returns, etc. failing which Owner / Engineer in Charge / reserve the right to take appropriate action at the cost and consequence of the Successful Bidder or Tenderer. Service Tax, Education Cess and Secondary & Higher Education Cess, as applicable at the prevailing rates, shall be shown separately in Successful Bidder or Tenderer's Bills.
- f. Income Tax, at applicable rates, shall be deducted from the Successful Bidder or Tenderer's Bills, as per Income Tax Act and TDS Certificate issued thereof.
- g. The comparison for the least bidder shall be made with the basic price of items of work excluding "Goods and Service Tax" part and including Buyback

#### 3. Terms of Payment:

### **Progress Payment:**

Payment after completion of works subject to deduction of 5% towards retention money,

50% of both retention money deducted, as stated above and EMD shall be released on successful commissioning of the DIESEL GENERATOR SET and on receipt of all final technical documents and all relevant statutory approvals against submission of the following:

- a) Invoice duly certified by Indian Bank/
- b) "NO CLAIM" certificate

Owner may withhold payment on account of any defect/deficiency in the work already executed and payment released, based on subsequently discovered evidence, failure to make payments to Sub-Successful Bidder or

**DG Sets** 

Tenderer s, damage caused by the Successful Bidder or Tenderer to Owner's property, properties of other agencies within the premises, unfulfilled statutory obligations, etc.

All the bills will be scrutinized by for release of payment and bank reserves right to engage third party agency for bill checking and certification of the payment if required.

#### 4. Effective date, Time schedule and Liquidated damages for delay:

- The date of Letter of Intent issued by Indian Bank shall be deemed as the "Effective Date" of contract.
- b. The entire work covered under the contract shall be completed in all respects within 45 days from the Effective Date.
- c. Time is the essence of this project and hence completion schedule of **45 days** should be strictly adhered to.
- d. However, at the option of the OWNER, such delayed completion may be accepted subject to levy of liquidated damages @ 1.00% of the final contract value per week of delay or part thereof, subject to a maximum of 10.00% of the final contract value.

The effective date shall be reckoned from 14 days from the date of issue of Work Order/letter of intent or date of which the site is handed over whichever is later.

#### 5. Measurement:

The Quantities set out in the schedule of items and rates are estimated quantities of work. The final quantities of work executed by the Successful Bidder or Tenderer in fulfillment of his obligations under the contract shall be jointly measured by the Successful Bidder or Tenderer and the Owner / Engineer in Charge / s. The Owner / Engineer in Charge / s will be final authority for the measurement relating to bills.

## 6. Responsibility:

Owner / Engineer in Charge / reserve the right to inspect the DG Set Works equipments at the Successful Bidder or Tenderer's Works as per the technical specifications and the equipment shall be dispatched only after receipt of a Release Order issued by the Engineer-in-Charge / Engineer in Charge / .

Unless otherwise specified in the contract / Work order / Purchase Order, the completion of work shall not be deemed to have been achieved until all the works required to be carried out under the contract have been completed to the entire satisfaction of the Engineer-in-Charge / Engineer in Charge / , in all respects and virtual Completion Certificate is issued.

It is the responsibility of the Successful Bidder or Tenderer to obtain all statutory approval from the Electrical Inspector/ government departments etc. and hand them over to the owner through the Engineer in Charge /

However, such inspection/Release order shall not absolve the Tenderer of his responsibility to supply the materials in the required quantities and carry out the work as per technical specifications.

#### 7. Progress Report:

The Successful Bidder or Tenderer shall submit to the Owner / Engineer in Charge / once in two weeks progress report for the previous period showing up-to-date cumulative progress and progress during the preceding period alone on all progress items of each section or portion of the works in the proforma prescribed by the Owner / Engineer in Charge / .

#### Successful Bidder or Tenderer 's Engineer:

Successful Bidder or Tenderer shall keep qualified and experienced Engineer(s) for full time during execution of work for entire Contract period.



#### 9. Equipment:

The Successful Bidder or Tenderer shall make his own arrangement to procure all constructional plant and equipment for his work. He shall also submit with the tender, the type and number of different equipments with their capacities in good working conditions, which he will use on the site to ensure smooth completion of the work in specified time. All materials, construction plant and equipment etc., once brought by the SUCCESSFUL BIDDER OR TENDERER on the site are not to be removed from there without the written approval from the Owner / Engineer in Charge / .

#### 10. Extra Items:

Extra items, if any, shall be paid on the basis of analysis of rate of cost of materials and labour produced by SUCCESSFUL BIDDER OR TENDERER, and the item-rates agreed upon with the Owner / Engineer in Charge / .

The execution of extra item is compulsory in order to complete the project work. In case the Successful Bidder or Tenderer fails to execute extra item, Owner / Engineer in Charge / will have the right to execute these items through other agency / agencies at the risk and cost of the Successful Bidder or Tenderer.

While arriving at the agreed rate of extra items, the Plant & Machinery / Overheads / profit shall be considered to the tune of 15% of cost of materials and labour.

Owner / Engineer in Charge / reserves the right to verify the price of material through market survey.

#### 11. Guarantees / Liabilities:

The Installation (Engine & Alternator) including all components and accessories shall be guaranteed for a period of 24 months from the date of Virtual Completion of the same against defective material (including Manufacturer's guarantee for equipments etc.), shortfall in performance and faulty workmanship. The Successful Bidder or Tenderer shall immediately make free replacement of any of the parts or components that might go out of order within this period and Indian Bank / Engineer in Charge / 's decision in this regard will be final and binding on the Successful Bidder or Tenderer.

The work shall be carried out in a workmanlike manner.

#### 12. Shut down work:

The work has also to be carried out on bank holidays since there is need to take shut down of 415V electrical system for working inside the panels. At least one week before notice in writing to be given for arranging such electrical shut downs which will not affect the power supply to continuously energized equipments like UPS units, air conditioning units in server room, UPS room etc.

#### 13. INSURANCE

Successful Bidder or Tenderer shall obtain and maintain any and all necessary insurance cover for the entire work, that may be required under any law or regulations applicable, including but not limited to the following:

- Successful Bidder or Tenderer 's All Risk Policy, for Successful Bidder or Tenderer 's Scope of Work.
- All materials and Successful Bidder or Tenderer 's own machinery, equipment, tools & tackles, vehicles, etc.
- Third Party liability.
- Workmen Compensation
- ESIC
- Bank/Owner's Liability





**DG** Sets

The quoted price shall be inclusive of all costs for such insurance coverage including transit insurance and till it is handed over to the Bank/Owner after its full completion. In all such policies, Owner shall be made 'Coinsured'. Also other Successful Bidder or Tenderer s, working at the Site, are covered under the policy.

### 14. GENERAL

These Special Conditions of Contract (SCC) shall be read in conjunction with the terms and conditions stipulated in the General Conditions of Contract (GCC). However, if there is any contradiction between the terms and conditions mentioned in this SCC and those in the GCC, stipulations of SCC shall prevail to that extent.

#### 15. Work Front:

Work front for the Tenderer may / may not be guaranteed throughout the pendency of the contract, especially during monsoon / on account any kind of lockdown / Curfew declared by the Govt / Local Bodies. No compensation will be paid for idle labour hours and other incidental charges / plant & machineries / scaffolding etc. Tenderer may suitably arrange requisite labour / manpower / equipments / scaffoldings to meet the requirement of lean period, if any.

The Tenderer have to execute the work in such place and condition where other agencies will also be engaged for other works, such as mechanical, electrical, instrumentation work, etc. No claim shall be entertained due to work being executed in the above circumstances. The Tenderer should ensure that there is no interference with the work of other agencies at Site.

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#### ARTICLES OF AGREEMENT

THIS AGREEMENT is made on this	ugam Salai, Ro	yapettah,Cl	nennai- 600 014 .	(hereinafter
AND M/s				
at	• • • • • • • • • • • • • • • • • • • •			
(hereinafter referred to as the "Successful Bidder or Telegal representatives and assigns of the second part.	enderer ") whicl	n expression	shall include its	successors,
WHEREAS Bank/Owner intends to Purchase, Insta Diesel Generator Set under buyback of old Diesel No.70, Oliver Road, Mylapore, Chennai - 600 004				
WHEREAS the Bank/Owner has caused drawings and R Kannan, Chennai (hereinafter referred to as "")	tender docume	nts to be pre	epared by his	Mı
AND whereas the Bank/Owner has called for tenders	omitted by the sable in terms of	Successful If the Bill of	Bidder or Tendere Quantities and w	r has been hich sum is (Rupees
Sum".	) nere	maner refer	red to as the said	i "Contract
AND whereas the Successful Bidder or Tenderer				drawings,

specifications, conditions of contract of the tender and work Order for the Bank/Owner's project of'.

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

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

1) In consideration of the said Contract Sum to be paid at the times and in the manner set forth in the said Conditions the Successful Bidder or Tenderer shall carry out and complete all the Civil, electrical Works as per 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 Engineer in Charge / and to the entire satisfaction of the Bank/Owner.

## 2) 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 inclusive of all taxes & duties including excise duty, sales tax, works contract tax, income tax, octroi etc. in respect of this contract. No claim in this respect will be entertained. Sales tax on works contract & Income tax on payments shall be levied as per prevailing rules and will be deducted and deposited by Bank/Owner in accordance with the sales tax law of the state and the provisions of tax deductions at source under Income Tax Act 1961.

However, interim payment will be made as per the site measurements on Item Rate basis and certification of the Engineer in Charge.



#### 3) Completion Period:

Time is the essence of the Contract. The work is to be completed in all respects within 45days from the date of receipt of the Work Order /letter of intent by the Successful Bidder or Tenderer or handing over of site whichever is later. If the Successful Bidder or Tenderer fails to complete the job within the agreed time period the Successful Bidder or Tenderer will have to bear liquidated damages as per the relevant clause mentioned in the Tender Documents.

### 4) Earnest Money:

The Successful Bidder or Tenderer has deposited Demand Draft / Bank Guarantee for an amount of Rs. 11,000/- (Rupees Eleven Thousand Only) as Earnest Money.

#### 5) Inspection of Site:

The Successful Bidder or Tenderer 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 Successful Bidder or Tenderer may come across in the course of the work shall in no way entitle the Successful Bidder or Tenderer to claim or receive extra payment unless the Bank/Owner is of the opinion that such difficulties could not have been foreseen and the Bank/Owner consents in writing. The site will be handed over to the Successful Bidder or Tenderer as per the terms of tender and in no case the Successful Bidder or Tenderer can claim for non suitability of site condition for extension of time unless Bank/Owner opinions the other way.

## 6) Supply of Material and Labour:

The Successful Bidder or Tenderer shall arrange all labour, materials, equipments, tools, tackles and everything necessary for the completion of the work. The Successful Bidder or Tenderer 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 Successful Bidder or Tenderer 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 Engineer in Charge / Bank/Owner. All such materials not approved by Engineer in Charge / Bank/Owner shall be removed at once by the Successful Bidder or Tenderer at his own expense. The Successful Bidder or Tenderer shall also at his own expense arrange for carrying out any test of materials which the Engineer in Charge / Bank/Owner may from time to time require or if so desired by the Bank/Owner.

#### 7) Defective Work / Materials:

If any part of the work done by the Successful Bidder or Tenderer is found defective in workmanship or if bad or inferior materials have been used the Successful Bidder or Tenderer 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 'Engineer in Charge / Bank/Owner'. The decision of the Bank/Owner / Engineer in Charge / in this regard shall be final and binding on the Successful Bidder or Tenderer . In case of default of the Successful Bidder or Tenderer to remove the defective work and rebuild the same or replace bad or inferior materials as directed by the Bank/Owner, the Bank/Owner shall be entitled to employ anyone else to carry out the same at risk and cost of the Successful Bidder or Tenderer and recover all expenses incurred in this regard from the Successful Bidder or Tenderer .

#### 8) Inspection of Work:

During progress of the work the site engineer of the Bank/Owner and Engineer in Charge / Bank/Owner shall be entitled at all times to have access to and inspect the work. If the work is inspected by the any Government/ Bank's authorized persons, the Successful Bidder or Tenderer will fully co- operate and extend all help to meet the observations.

## Supervision:

The Successful Bidder or Tenderer shall provide one or more competent and technically 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

**DG Sets** 

at the works while any work is in progress as per directions, explanations & instructions of Bank/Owner / Engineer in Charge /

### 10) Compliance with Statutory Regulations & Work Rules:

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

#### 11) Determination of Contract:

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

### 12) Force Majeure:

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

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

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

#### 13) 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 appointing 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".

Submitting to arbitration may be considered as an additional remedy and it does not preclude the Parties to seek redressal/other legal recourse.

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



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Witness Address Bank/Owner

Witness Address Tenderer Successful Bidder or

#### GENERAL CONDITIONS OF CONTRACT

#### 1. **INTERPRETATIONS**:

In construing these Conditions and the Specifications, Schedule of Quantities and Contract Agreement, the following words, shall have the meanings herein assigned to them except where the subject or context otherwise requires:

- a) Bank/Owner / Client / owner shall mean Indian Bank with their office at Indian Bank, corporate office, Estate department, 254-260, Avvai Shanmugam Salai, Royapettah, Chennai-600 014 and shall include their heirs, legal representatives, assignees and successors.
- b) Successful Bidder or Tenderer shall mean the person or the persons, firm or company whose tender has been accepted by the Bank/Owner and shall include their heirs, and legal representatives, and permitted assigns.
- c) Engineer in Charge shall mean the persons nominated by the Bank/Owner shall include those who are expressly authorized by him to act for and on his behalf for operation of the contract and coordination of different works.
- d) Works shall mean the works to be executed and recorded in accordance with the Contract and shall include all extra or additional altered or substituted works as required and recorded for the performance of the Contract, and Site shall mean the land and other places as shown bounded red on the site plan, on or under which the works are to be executed or carried out and other lands or places provided by the Bank/Owner for the purposes of the Contract.
- e) Contract Documents shall include the Notice Inviting Tenders, the Articles of Agreement, the General Conditions of Contract, the Special Conditions of Contract, the Appendices, the Priced Schedule of Quantities, Specifications, and drawings pertaining to the work. All sections of this Contract Document are to be read together. Further such correspondence between the Bank/Owner and Successful Bidder or Tenderer as admitted by the Bank/Owner before award of work and thereafter shall also form part of contract documents. All contract documents intended to be part of this bid process
- f) **Drawings** shall mean the drawings referred to in the Specifications, description of items etc. and any modifications of such drawings approved in writing by the Engineer in Charge / and such other drawings as may from time to time be furnished or approved in writing by the Engineer in Charge / .
- g) Notice in Writing or written notice shall mean a notice in writing, typed or printed characters, sent by the Bank/Owner or Engineer in Charge / (unless delivered personally or otherwise) proved to have been received by registered post to the last known private or business address or registered office of the Successful Bidder or Tenderer s and shall be deemed to have been received by them when in the ordinary course of post it would have been delivered.
- h) **Act of Insolvency** shall mean any Act of Insolvency as defined by the Presidency Towns Insolvency Act, or the Provincial Insolvency Act or any Act amending such original act/s.
- i) Virtual Completion shall mean that the works are in the opinion of the Engineer in Charge/Bank/Owner complete or fit for operation.
- Words importing persons include firms and Corporations, words importing the singular only also include the plural and vice versa where the context requires.
  - Headings and marginal notes to these Conditions shall not be deemed to form a part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract.



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- Defect Liability Period"(DLP) shall mean a period of TWELVE (12) months. The DLP shall commence from the date of handing over of the DG set with safety certificate from CEIG/CEA and certified by the / Engineer-in-charge and accepted by the Bank/Owner.
- m) Schedule of quantities" shall mean the schedule of quantities as specified and forming part of this contract.
- "Priced Schedule of Quantities" shall mean the schedule of quantities duly priced with the accepted quoted rates of the tenderer.

#### 2. SCOPE OF CONTRACT:

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The Successful Bidder or Tenderer shall carry out and complete the works in every respect in accordance with this Contract and with the directions of and to the satisfaction of the Engineer in Charge / Bank/Owner. The Engineer in Charge / may in absolute discretion and from time to time issue further drawings and/or written instructions, details, directions and explanations which are hereafter collectively referred to as Instructions reflected either in the Minutes of Meetings or in any other form in regard to :-

- a. The variation or modification of the design, quality or quantity of works or the addition or omission or substitution of any work.
- Any discrepancy in or divergence between the Drawings or between the Schedule of quantities **b**. and / or Drawings and /or Specifications.
- The removal from the site of any material brought thereon by the Successful Bidder or Tenderer c. and the substitution of any other materials thereof.
- d. The removal and/or re-execution of any works executed by the Successful Bidder or Tenderer.
- The postponement of any work to be executed under the provisions of this Contract. e
- f. The dismissal from the works of any person employed thereupon.
- The opening up for inspection of any work covered up. g.
- The amending and making good of any defects. h.
- i. Co-ordination of work with other agencies appointed by the Bank/Owner for due fulfillment of the total work.
- j. Deletion of any item of work from the scope of contract.

The Successful Bidder or Tenderer shall forthwith comply with and duly execute any work comprised in such Engineer in Charge / Bank/Owner's Instructions provided always that verbal instructions, directions and explanations given to the Successful Bidder or Tenderer or his representative upon the works by the Engineer in Charge / Bank/Owner shall, if involving a variation, be confirmed in writing by the Successful Bidder or Tenderer within 7 days, and if not dissented from in writing within a further 7 days by the Engineer in Charge / Bank/Owner such shall be deemed to be the Engineer in Charge / Bank/Owner's Instructions within the scope of the Contract.

If Compliance with the Engineer in Charge / Bank/Owner's Instructions involves any variation, such variation shall be dealt with under Clause No. 22.

If the Successful Bidder or Tenderer fails to comply with the Engineer in Charge / Bank/Owner Instructions within a fortnight after the receipt of written notice from the Engineer in Charge / Bank/Owner requiring compliance with such instructions, the Bank/Owner through the Engineer in Charge / may employ some other agency to execute any work whatsoever which may be necessary to give effect to such instructions.

For the purpose of entering day to day instructions by the Engineer in Charge / Bank/Owner, the Successful Bidder or Tenderer shall maintain at his own cost, a "Site Instruction Book" in triplicate in which the instructions shall be entered by Engineer in Charge / Bank/Owner.

Also the Tenderer shall visit the site and make himself thoroughly acquainted with the local site conditions, nature and requirements of the works, facilities of transport condition, effective labor and materials, access and storage for materials and removal of rubbish. Tenderer shall provide in their tender for cost of carriage, freight and other charges as for any special difficulties and including the police restriction for transport etc. For proper execution of works as indicated in the drawings. The successful tenderer will not be entitled to any claim of compensation for difficulties faced or losses incurred on account of any site condition which existed before the commencement of the work or which in the opinion of the Bank/Owner or his agent/engineer might be deemed to have reasonably been inferred to be so existing before commencement of work.

#### 3. DRAWINGS AND SPECIFICATIONS:

The Work shall be carried out to the entire satisfaction of the Bank/Owner and the Engineer in Charge / and in accordance with the signed drawings, specifications and other Contract documents and such further drawings and details as may be provided by the Engineer in Charge / and in accordance with such written instructions, directions and explanations as may from time to time be given by the Bank/Owner / Engineer in Charge / .

No drawing shall be taken as in itself an order for execution unless, in addition to the Engineer in Charge / 's signature, it is marked "VALID FOR CONSTRUCTION". No claim for payment for extra work shall be allowed unless the said work shall have been executed under the provisions of Clause 10 (Authorities, Notices, Patent Rights and Royalties), or by the authority, directions in writing of the Engineer in Charge / as herein mentioned.

One complete set of the signed Drawings and Specifications and Schedule of Quantities shall be furnished by the Engineer in Charge to the Successful Bidder or Tenderer. The Engineer in Charge / shall furnish, within such time as he may consider reasonable, one copy of additional drawings which in his opinion may be necessary for the execution of any work. Such copies shall be kept on the works, and the Engineer in Charge or his representatives shall at all reasonable times have access to the same. All drawings and specifications shall be returned to the Engineer in Charge by the Successful Bidder or Tenderer before the issue of the Final Certificate. A copy of the Contract shall remain in the custody of the Engineer in Charge and shall be produced by him at his office as and when required by the Bank/Owner or by the Successful Bidder or Tenderer.

Additional prints of drawings, if any, required by the Successful Bidder or Tenderer may be supplied by the Engineer in Charge but on the payment of charges.

# On receipt of work order, the Tenderer shall submit the following Drawings within 10 days for approval of Bank/.

- a) Layout of DG set and accessories
- b) Exhaust Piping arrangement
- c) Fuel oil tank and piping
- d) Electrical single line diagram, control wiring single line diagram, cable layout, panel GA drawing etc.even if part may have been provided by the owner. Location of earth pits and details of earthing even though these may have been provided by owners.
- e) Civil Foundation drawings.
- f) Power & Control Cable Schedule.

## 4. SCHEDULE OF QUANTITIES:

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The Schedule of the Quantities unless otherwise stated shall be deemed to have been prepared in accordance with the standard procedure of quantity measurement, and shall be considered to be approximate and no liability shall attach Bank/Owner for any error that may be discovered therein.

#### SUFFICIENCY OF SCHEDULE OF QUANTITIES:

The Successful Bidder or Tenderer shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the prices stated in the Schedule of Quantities. The Successful Bidder or Tenderer 's Rates and Prices shall cover all his obligations under the Contract, and all matters and things necessary for the proper completion of the works.

## 6. ERRORS IN SCHEDULE OF QUANTITIES:

Should any error appear in the Schedule of Quantities, other than in the Successful Bidder or Tenderer's prices and calculations, it shall be rectified, and such rectification shall not vitiate the Contract but shall constitute a variation of the Contract and shall be dealt with as an authorized extra or deduction.

### 7. NOTICES

The Successful Bidder or Tenderer shall give all notices in writing and pay all fees and royalties in connection with his constructional activities and shall comply with all Acts and Regulations for the successful completion of the Contract Works.

#### 8. COMMENCEMENT OF WORK AT SITE

The Successful Bidder or Tenderer shall commence his work at site within a maximum period of 14 days from the date of receipt of Letter of Intent / Work Order issued by the Bank/Owner or handing over the site, whichever is later. The Successful Bidder or Tenderer shall commence the work and shall regularly proceed with and complete the same on or before the date of completion, stated in the Appendix, subject nevertheless to provision of extension of time.

### 9. SUCCESSFUL BIDDER OR TENDERER TO PROVIDE EVERYTHING NECESSARY:

The Successful Bidder or Tenderer shall provide everything necessary for the proper execution of the works according to the true intent and meaning of the Drawings, Specifications and Schedule of Quantities taken together whether the same may or may not be particularly shown or described therein, provided that the same can be inferred there from and if the Successful Bidder or Tenderer finds any discrepancy in the Drawings or between the Drawings, Specifications and Schedule of Quantities he shall immediately refer the same in writing to the Engineer in Charge , who will decide which shall be followed, and his decision shall be final and binding. The Successful Bidder or Tenderer shall provide ground for himself and fresh water and power for carrying out of the works at his own cost. The Bank/Owner shall on no account be responsible for the expenses incurred by the Successful Bidder or Tenderer for hired ground or fresh water obtained from elsewhere. If water from any source other than Municipal main is to be used for construction, the same shall be tested at the Successful Bidder or Tenderer 's cost and a report submitted to the Engineer in Charge for his approval, before such water is used for the works.

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 Successful Bidder or Tenderer shall provide and maintain all measuring and surveying instruments, including steel tapes, theodolites and dumpy levels at all times for properly carrying out the work and for the use of the Engineer in Charge / Bank/Owner, including providing skilled attendants as required.

The Successful Bidder or Tenderer shall supply, fix and maintain at his cost during the execution of any works, all the necessary centering, scaffolding, staging, timbering, strutting, shoring, pumping, fencing, hoarding, watching and lighting by night as well as by day required for the proper execution and protection of the public and safety of any adjacent roads, streets, cellars, vaults, pavements, walls, houses, buildings and all other erections, matters or things. The Successful Bidder or Tenderer shall take down and remove any or all such centering, scaffolding, staging, planking, strutting, shoring etc. as occasion shall require or when ordered to do so, and shall fully reinstate and make good all matters and things described during the execution of the work, to the satisfaction of the Engineer in Charge / .

The Successful Bidder or Tenderer shall at all times give access to workers employed by the Bank/Owner 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 holes, grooves etc. in any work, where directed by the Bank/Owner as may be required to enable such workmen to lay or fix pipes, electrical wiring, special fittings etc. The quoted rates of the tenderes shall include all these abovementioned contingent works.





The Successful Bidder or Tenderer shall conform to the provisions of all the statutes relating to the works, and to the Regulations and Byelaws of any local Authority, and of any Public Utility Companies or Authorities with whose systems the structure is proposed to be connected, and shall before making any variation from the drawings or specifications that may be necessitated by so conforming, give to the Engineer in Charge written notice, specifying the variations proposed to be made and the reason for making them, and apply for instruction thereon. In case the Successful Bidder or Tenderer shall not within 10 days receive such instructions, he shall proceed with the work conforming with the provision or Regulations or Bye-laws in question.

The Successful Bidder or Tenderer shall bring to the attention of the Engineer in Charge all notices required by the said Acts, Regulations or Bye-laws to be given to any Authority by the Bank/Owner or the Engineer in Charge and pay to such Authority, or to any public Officer, all fees that may be properly chargeable in respect of the works, and lodge the receipts with the Engineer in Charge. All statutory fees, deposits etc. paid by the Successful Bidder or Tenderer for permanent works to be handed over to Bank/Owner shall be reimbursed to him by the Bank/Owner against documentary proof.

The Successful Bidder or Tenderer shall indemnify the Bank/Owner against all claims in respect of patent rights, royalties, design, trade marks of name or other protected rights in respect of any constructional plant, machinery or material used for or in connection with the works or temporary works and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. The Successful Bidder or Tenderer shall defend all actions arising from such claims, and shall himself pay all royalties, license fees, damages, costs and charges of all and every sort that may be legally incurred in respect thereof and shall keep the Bank/Owner saved harmless and indemnified in all respects from such actions, costs and expenses.

#### 11. MATERIALS AND WORKMANSHIP TO CONFORM TO DESCRIPTION:

All materials and workmanship shall, be of the respective kinds specified in the Schedule of Quantities and /or specifications and in accordance with the Engineer in Charge 's instructions and the Successful Bidder or Tenderer shall upon the request of the Engineer in Charge furnish him all invoices, accounts, receipts and other vouchers to prove that the materials comply therewith. The Successful Bidder or Tenderer shall at his own cost arrange for and/or carry out any test of all materials which the contract provides for and Engineer in Charge may require. The laboratories, either established by the Successful Bidder or Tenderer on site or independent, shall be approved by the Engineer in Charge for approval well in advance of placing orders.

If the Successful Bidder or Tenderer contends that any of the materials, goods or workmanship specified as aforesaid is unobtainable, he shall submit to the Bank/Owner his grounds for his contention, and thereupon the Engineer in Charge shall decide whether the same is unobtainable in fact. If the Engineer in Charge shall decide that any of the materials, goods or workmanship is in fact unobtainable, they shall issue an order in writing as to be substituted thereof and such order shall be deemed to be an order of variation.

#### 12. SETTING OUT:

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The Successful Bidder or Tenderer shall at his own expense set out the works accurately in accordance with the plans. The Successful Bidder or Tenderer shall be solely responsible for the true and perfect setting out of the works, and for the correctness of the position, levels, dimensions and alignment of all parts thereof. If at any time any errors shall appear during the progress or on completion of any part of the work or within a period of one year from the virtual completion of work, the Successful Bidder or Tenderer shall at his own cost rectify such error if called upon to the satisfaction of the Engineer in Charge / Bank/Owner. The Successful Bidder or Tenderer if required shall further set out the works to the alternative positions at the site until one is finally approved and no extra costs to this effect shall be entertained.

#### REMOVAL OF ALL OFFENSIVE MATTERS:

All soil, filth or other matter of an offensive nature taken out of any trench, sewer, drain, cess-pool, terrace or other place shall not be deposited on the surface, but shall be at once carried away by the

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Successful Bidder or Tenderer and disposed off as per the rules and regulations of the Local Authorities concerned.

#### 14. OPENING UP WORKS

The Successful Bidder or Tenderer shall give due notice to the Bank/Owner / Engineer in Charge / whenever any work is to be buried in the earth, concrete 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 Bank/Owner / Engineer in Charge / be either opened up for measurement at the Successful Bidder or 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 Bank/Owner / Engineer in Charge shall be accepted as correct and binding on the Successful Bidder or Tenderer.

# 15. SUCCESSFUL BIDDER OR TENDERER 'S SUPERINTENDENCE & REPRESENTATIVE ON WORKS:

The Successful Bidder or Tenderer shall give all necessary personal superintendence during the execution of the works and as long thereafter as the Engineer in Charge / may consider it necessary until the expiration of the "Defects Liability Period" stated in Clause 28. The Successful Bidder or Tenderer shall meet the Bank/Owner / Engineer in Charge / or his representative whenever required if so informed by the Bank/Owner / Engineer in Charge / .

The Successful Bidder or Tenderer shall maintain and be represented on site, at all times while the work is in progress, by a responsible and efficient Engineer-In-charge approved by the Engineer in Charge / and who must thoroughly understand all the trades entailed and be constantly in attendance, while the men are at work. Any directions, explanations, instructions or notices given by the Engineer in Charge / to such Engineer – In- charge shall be deemed to be given to the Successful Bidder or Tenderer and shall be binding as such on the Successful Bidder or Tenderer . The Engineer-in-charge shall be thoroughly conversant with the English Language and should be able to read, write and speak English.

### 16. DISMISSAL OF SUCCESSFUL BIDDER OR TENDERER 'S EMPLOYEES:

The Successful Bidder or Tenderer shall on the request of the Engineer in Charge / Bank/Owner immediately dismiss from the works any person employed thereon who may, in the opinion of the Engineer in Charge / Bank/Owner, be unsuitable or incompetent or un- co-operative or who may misconduct himself and such person shall not again be employed or allowed on the works without the permission of the Engineer in Charge / Bank/Owner. Such discharges/dismissal shall not be the basis of any claim or compensation or damages against the Bank/Owner / Engineer in Charge / or any of their officers or employees. The decision of Engineer in Charge / Bank/Owner shall be final and binding on the Successful Bidder or Tenderer. The dismissed person shall be replaced by a person acceptable to Engineer in Charge / Bank/Owner.

## 17. ACCESS TO WORKS:

The Engineer in Charge / Bank/Owner and any person authorized by them shall at all reasonable times have free access to the works, and to the workshops, factories or other places where materials are being prepared or constructed for the Contract and also to any place where the materials are lying or from which they are being obtained. The Successful Bidder or Tenderer shall give every facility to the Engineer in Charge / Bank/Owner and their representative for inspection and examination and test of the materials and workmanship. No person unless authorized by the Engineer in Charge / or the Bank/Owner, except the Representatives of Statutory Public Authorities, shall be allowed on the works at any time. If any work is to be done at a place other than the site of the works, the Successful Bidder or Tenderer shall obtain the written permission of the Engineer in Charge / for doing so.



#### SITE SUPERVISION

The Successful Bidder or Tenderer shall afford the Engineer in Charge / / Bank/Owner every facility and assistance for examining the works and materials and checking and measuring time and materials.

The Engineer in Charge shall jointly record the measurements with Successful Bidder or Tenderer's representative for all items of works.

The Engineer in Charge / Bank/Owner shall have the power to give notice to the Successful Bidder or Tenderer or his Engineer in Charge / about the non-approval of any work or materials and such works shall be suspended or the use of such materials should be discontinued until the decision of the Engineer in Charge / in consultation with Bank/Owner if required is obtained. The work will from time to time be visited by the Engineer in Charge / Bank/Owner but such examination shall not in any way exonerate the Successful Bidder or 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 completed. Subject to the limitations of this clause, the Successful Bidder or Tenderer shall take instructions only from the Bank/Owner or the Engineer in Charge / as the case may be. The Successful Bidder or Tenderer's shall take total responsibility for the execution of work / items of work by using quality materials and providing best of workmanship to fulfill the true intent of the Contract documents.

#### 19. ASSIGNMENT OR SUB-LETTING:

The work included in the Contract shall be executed by the Successful Bidder or Tenderer and the Successful Bidder or Tenderer shall not directly or indirectly transfer, assign or underlet the Contract or any part share thereof or interest therein, nor shall he take a new partner, without the written consent of the Engineer in Charge / Bank/Owner and no undertaking shall relieve the Successful Bidder or Tenderer from the full and entire responsibility of the Contract or from active superintendence of the works during their progress.

#### **20.** APPROVAL OF SUPPLIERS:

For all supplies, the names of manufacturers/brands have to be got approved by the Engineer in Charge / and from the Bank/Owner after getting the respective samples first approved by the Engineer in Charge / as the case may be. All materials will be of tested quality and as per relevant Indian Standards. In addition to the Test Certificates, mandatory tests will also be done on them by the Successful Bidder or Tenderer at an approved laboratory at his cost immediately as well as at regular frequency laid down in the relevant Indian Standards.

### 21. VARIATIONS NOT TO VITIATE CONTRACT:

The Successful Bidder or Tenderer shall when directed in writing by the Engineer in Charge / to omit from or vary any works shown upon the drawings or described in the Specifications or included in the Priced Schedule of Quantities, carry out such directions but the Successful Bidder or Tenderer shall not make any alterations in the provisions of the Contract without such authorization or direction in writing from the Engineer in Charge .

No claim for an extra shall be allowed unless it shall have been executed by the authority of the Engineer in Charge as herein mentioned. Any such extra is hereinafter referred to as an authorized extra. No variation, i.e. additions, omissions or substitutions shall vitiate the Contract.

The rates of items not included in the Priced Schedule of Quantities shall be promptly submitted by the Successful Bidder or Tenderer for the Engineer in Charge 's approval and shall be settled by the Engineer in Charge in accordance with the provisions of Clause 22 hereof.

#### 22. VARIATIONS TO BE APPROVED BY BANK/OWNER

The Successful Bidder or Tenderer shall submit through the Engineer in Charge / a statement of variations giving quantities and rates duly supported by Contract rates of comparable items, analysis of rates, vouchers etc. The rates on final acceptance by the Bank/Owner shall form a part of the contract.



In the event such extra / variation items totally differ in specification / character, rates for such items will be worked out based on prevailing market rates for the ingredients that go into making of such items and finalized by the Engineer in Charge / in consultation with the Bank/Owner. Such rates shall however be not eligible for consideration of Price Adjustment Clause, if any.

#### **MEASUREMENT OF WORKS:**



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The Engineer in Charge / shall from time to time intimate the Successful Bidder or Tenderer that he requires the works to be measured and the Successful Bidder or Tenderer shall forthwith attend or send a qualified agent to assist the Engineer in Charge / 's representative in taking such measurements and calculations and to furnish all particulars or give all assistance required by him.

Should the Successful Bidder or Tenderer omit to attend or neglect or omit to send such agent, then the measurements taken by the Engineer in Charge / or approved by him shall be taken to be the correct measurements. The works shall be measured according to the Mode of Measurements stated in the **Preamble to Schedule of Quantities (Clause No. 63)** / **specifications.** The measurement shall wherever not mentioned in the tender be taken in accordance with the Indian Standard and its latest revisions, if any. Measurements in part or full may be checked by the Bank/Owner / Engineer in Charge / , as the case may be, for each trade, and for this the Successful Bidder or Tenderer has to render all necessary assistance and cooperation.

The Successful Bidder or Tenderer or his Agent may at the time of measurement take such notes and measurements as he may require.

All authorized extra works; omissions and all variations made without the Engineer in Charge / 's knowledge, but if subsequently sanctioned by the Bank/Owner in writing, shall be included in such measurements.

#### 24. MEASUREMENT TO BE RECORDED BEFORE WORK IS COVERED UP:

The Successful Bidder or Tenderer shall take joint measurements with the Engineer in Charge / / Bank/Owner before covering up or otherwise placing beyond the reach of measurement any items of work. Should the Successful Bidder or Tenderer neglect to do so, the same shall be uncovered at the Successful Bidder or Tenderer's expense or in default thereof, no payment or allowance shall be made for such work or the materials with which the same was executed.

#### 25. PRICES FOR EXTRAS ETC. - ASCERTAINMENT THEREOF:

The Successful Bidder or Tenderer may, when authorized, and shall, when directed in writing by the Engineer in Charge / with the approval of the Bank/Owner, add to, omit from, or vary the works shown upon the Drawings, or included in the Schedule of Quantities, but Successful Bidder or Tenderer shall make no addition, omission or variation without such authorization or direction. A verbal authority or direction by the Engineer in Charge / shall, if confirmed by them in writing within seven days, be deemed to have been given in writing.

No claim for an extra shall be allowed unless it shall have been executed under provisions of Clause hereof or by the authority of the Engineer in Charge / with the concurrence of the Bank/Owner as herein mentioned. Any such extra is herein referred to as authorized extra and shall be made in accordance with the following provisions:

- (a) i. The net rates or prices in the original tender shall determine the valuation of the extra work where extra work is of similar character and executed under similar conditions as the work priced therein.
  - ii. Rates for all items, wherever possible, should be derived out of the rates given in the Priced Schedule of Quantities.
- (b) The net rates or prices of the original tender as accepted by the Bank/Owner shall determine the value of the items omitted, provided if omissions vary the conditions under which only remaining items of works are carried out, the prices for the same shall be valued under sub-clause (c) hereof.
- (c) For extra items/substitute items where the description of items is different from that of any tendered item, the following method shall hold good.

Where the extra item works are not of similar character and/or executed under conditions as aforesaid or where the omissions vary the conditions under which any remaining items of works are carried out or if the amount of any omission or addition relative to the amount or the whole of the Contract works or to any part thereof shall be such that in the opinion of the Engineer in Charge / the net rate or price contained in the Priced Schedule of Quantities or for any item of the works involves loss or expenses beyond that reasonably contemplated by the Successful Bidder or Tenderer or is by reason of such omission or addition rendered unreasonable or inapplicable, the Engineer in





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Charge / with the approval of the Bank/Owner shall fix such other rate or price as in the circumstances he shall think reasonable and proper on the basis of actual rate analysis cost of work involved plus 15% (Fifteen Percent) towards Successful Bidder or Tenderer 's overheads and profits, which shall be final and binding on the Successful Bidder or Tenderer . No escalation shall be entertained on the extra items.

(d) The Successful Bidder or Tenderer shall submit claims for Deviated items and Extra items in approved formats

### **26. UNFIXED MATERIALS:**

When any materials intended for the works shall have been placed at site by the Successful Bidder or Tenderer, such materials shall not be removed there from (except for the purpose of being used in the works) without the written authority of the Engineer in Charge and when the Successful Bidder or Tenderer shall have received payment in respect of any Certificate in which the Engineer in Charge / shall have stated that he has taken into account the value of such unfixed materials on the works, such materials shall become the property of the Bank/Owner, and the Successful Bidder or Tenderer shall be liable for any loss or damage to any such materials.

#### 27. REMOVAL OF IMPROPER WORK AND MATERIALS:

The Engineer in Charge / Bank/Owner shall, during the progress of the works, 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 respect of any materials which in the opinion of the Engineer in Charge / Bank/Owner are not in accordance with the specifications or instructions, substitution of proper materials, removal and proper re-execution of any work executed with materials or workmanship not in accordance with the drawings and specifications or instructions and the Successful Bidder or Tenderer shall forthwith carry out such order at his own cost. In case of default on the part of the Successful Bidder or Tenderer to carry out such order, the Bank/Owner shall have the power to employ and pay other agencies to carry out the same; and all expenses consequent thereon, or incidental thereto, shall be deducted by the Bank/Owner from any money due or that may become due to the Successful Bidder or Tenderer. No certificate which may be given by the Engineer in Charge shall relieve the Successful Bidder or Tenderer from his liability in respect of unsound work or bad materials.

#### 28. DEFECTS AFTER COMPLETION & PERFORMANCE GUARANTEE:

Any defect, shrinkage, settlement unsound construction, Technical snag in the machinery or other faults which may appear either in the work executed or in materials used within the "Defects Liability Period" stated in the Appendix hereto arising in the opinion of the Engineer in Charge from materials or workmanship not in accordance with the Contract shall upon the directions in writing of the Engineer in Charge, and within such reasonable time as shall be specified therein, be amended and made good by the Successful Bidder or Tenderer, at his cost unless, the Engineer in Charge in consultation with the Bank/Owner shall decide that he ought to be paid for such amending and making good and in case of default the Bank/Owner may employ and pay another agency to amend and make good such defects, shrinkage, settlements or other faults and all damages, loss and expenses consequent thereon or incidental thereto shall be made good and borne by the Successful Bidder or Tenderer and such damage, loss and expenses shall be recoverable from him by the Bank/Owner or may be deducted by the Bank/Owner upon the Engineer in Charge certificate in writing from the amount retained with the Bank/Owner vide Clause 39(Certificate and Payment) or any money due or that may become due to the Successful Bidder or Tenderer or the Bank/Owner may in lieu of such amending and making good by the Successful Bidder or Tenderer, deduct from such money a sum, to be determined by the Engineer in Charge / equivalent to the cost of amending such works, and in the event the said amount retained under Clause 39 (Certificate and Payment) and/or the other sums payable to the Successful Bidder or Tenderer being insufficient, recover the balance from the Successful Bidder or Tenderer.



Whenever the works pertain to or include the construction of any building or in the installed electrical machinery, the Successful Bidder or Tenderer shall be held responsible for the safety of the electrical installation for a period of 12 months till the expiry of the Defects Liability Period, provided herein, and shall be wholly and exclusively liable for any latent or patent defect or deficiency manifesting itself in the building during such period of ten years and affecting or likely to affect the safety of the building. An undertaking / performance guarantee to this effect on non judicial stamp paper of appropriate value (draft



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of which shall be furnished by the Bank/Owner / Engineer in Charge / .) shall be given by the Successful Bidder or Tenderer.

#### 29. CERTIFICATE OF VIRTUAL COMPLETION OF WORKS:

The Successful Bidder or Tenderer shall report in writing to the Engineer in Charge, in the form of a Certificate as per Proforma 'D' annexed hereto as and when the works are completed in all respects. The Engineer in Charge / Bank/Owner shall after the verification of the works and in consultation with Engineer in Charge issue to the Successful Bidder or Tenderer a certificate to be called "Virtual Completion Certificate", a copy whereof shall be submitted to the Bank/Owner to enable him to take possession of the completed works. The Defects Liability period shall commence only from the date of issue of such certificate.

#### 30. OTHER PERSONS ENGAGED BY THE BANK/OWNER:

The Bank/Owner reserves the right to execute any part of the work included in this Contract by other agency or persons and the Successful Bidder or Tenderer shall allow all reasonable facilities for the execution of such work. The Successful Bidder or Tenderer shall extend all co-operation in this regard.

#### 31. INSURANCE CONTRACT CONDITIONS - SUCCESSFUL BIDDER OR TENDERER 'S LIABILITY AND INSURANCE

From commencement to completion of works, the Successful Bidder or Tenderer shall take full (a) responsibility for the care of the work and for taking precautions to prevent loss or damage to the work to the maximum extent possible and shall be liable for any damage or loss that may arise to the works or any part thereof from any cause whatsoever including causes of fire, lightning, explosion, earthquake, storm, hurricane, floods, inundation, subsidence, landslides, rock slides, riots (excluding civil war, rebellion, revolution and insurrection) or any latent defect or damage and shall at his own cost repair and make good the same so that at all times the work shall be in good order and condition and in conformity in every respect with the requirements of the Contract.

For the purpose of this condition this expression "from commencement to completion of works" shall mean the period starting with the date of issue of Work Order or date of handing over of site whichever is later and ending with issue of Virtual Completion Certificate.

(b) Without limiting the obligations and responsibilities under this condition, the Successful Bidder or Tenderer shall insure and keep insured the works from commencement to completion, as aforesaid, for the full contract value including Price Variation Adjustment if any against the risk of loss or damage from any cause whatsoever including the causes enumerated in the foregoing Clause (a). In the event of there being a variation in the nature and extent of the works, the Successful Bidder or Tenderer shall from time to time increase or decrease the value of the insurance correspondingly. All the premia for the insurance shall be borne and paid by the Successful Bidder or Tenderer.

The said insurance shall also provide cover for the removal of debris of the lost or damaged works. The said insurance shall be in the joint names of the Bank/Owner and the Successful Bidder or Tenderer, Bank/Owner's name being mentioned first in the policies and the Successful Bidder or Tenderer shall deposit with the Bank/Owner the said policy or Policies within 15 days from issue of Work Order. All money payable by the insurer under such Policy/Policies shall be recovered by the Bank/Owner only and may be paid to the Successful Bidder or Tenderer or any other agency of Bank/Owner's choice in installments for the purpose of rebuilding or replacing or repairing the works and/or goods destroyed or damaged as the case may be.



The Successful Bidder or Tenderer shall at all times indemnify and keep indemnified the Bank/Owner against all losses, claims, damages or compensation including under the provisions of the payment of the Wages Act 1936, Minimum Wages Act 1948, Bank/Owner's Liability Act 1938, Workman's Compensation Act 1923, the Maternity Benefit Act 1961, the Bombay Shops and Establishments Act 1947,



Industrial Disputes Act 1947, and Contract Labour (Regulation and Abolition)Act 1970 and Employees State Insurance Act 1948, Motor Vehicles Act 1988 or any modifications thereof or under any other law relating thereto and rules made thereunder from time to time or as a consequence of any accident or injury to any workman or other person in or about the work whether in the employment of the Bank/Owner or Successful Bidder or Tenderer or not, and also against all costs, charges and expenses of any suit, action or proceedings whatsoever out of such accident or injury or combination of any such claims.

- (d) Before commencing the work, the Successful Bidder or Tenderer shall without limiting his obligations and responsibilities under this condition, insure against any loss of life or injury to any personnel in the employment of Successful Bidder or Tenderer. For this purpose, insurance shall be taken by the Successful Bidder or Tenderer. Such insurance shall be taken to include both employees/workmen covered by the Workman's Compensation Act 1923, as well those employees/workmen not covered by Workman's Compensation Act 1923, and employees / workmen not covered by Workman's Compensation Act 1923, and employees / workmen not covered by the said Act. All the premia shall be paid by the Successful Bidder or Tenderer. Policy/Policies taken under this para for the personnel in employment with the Successful Bidder or Tenderer may be in their Bank/Owner's names of the Successful Bidder or Tenderer. In the event of any loss or injury to personnel in employment with the Successful Bidder or Tenderer, the Bank/Owner and Successful Bidder or Tenderer shall recover directly from the Insurance Company and ensure that payment of the same is made to the affected parties including the Bank/Owner. The policy in original shall be deposited with the Bank/Owner.
- (e) The Successful Bidder or Tenderer shall at all times indemnify and keep indemnified the Bank/Owner against all losses and claims for injuries or damage to any person or any property whatsoever which may arise out of or in consequence of the construction and maintenance of the work and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto. Before commencing the execution of the works, the Successful Bidder or Tenderer shall without in any way limiting his obligations and liabilities under this condition, insure at his cost and expense against any damage or loss or injury which may be caused to any person or property including the employees and directors of the Bank/Owner / Engineer in Charge / and their property by or in the course of the execution of the works. Such insurance to be known as the Third Party Insurance shall be in a sum of min Rs.5.0 Lakhs (Rupees Five Lakhs Only). The Insurance policy to be so obtained by the Successful Bidder or Tenderer shall be deposited by the Successful Bidder or Tenderer with the Bank/Owner within fifteen days of its issue by the Insurer.
- (f) The Successful Bidder or Tenderer shall provide the Bank/Owner with documentary evidence from time to time, that he has taken all the insurance policies mentioned in the foregoing paragraphs and renewed them if required and that he has paid the necessary premia for keeping the policies valid till the works are completed and handed over to Bank/Owner.
- (g) The Successful Bidder or Tenderer shall ensure that similar insurance policies are taken out by his sub Successful Bidder or Tenderer s or nominated Successful Bidder or Tenderer s, if any. The Successful Bidder or Tenderer shall be responsible to the Bank/Owner or to any other person for any claim or loss resulting from the failure of the Sub-Successful Bidder or Tenderer s or nominated Sub-Successful Bidder or Tenderer s to obtain such insurance policy. While taking the insurance policies, Successful Bidder or Tenderer should indicate clearly to the insurance companies that policies issued shall cover their Sub-Successful Bidder or Tenderer s and nominated Sub-Successful Bidder or Tenderer s also.
- (h) If the Successful Bidder or Tenderer and/or his sub-Successful Bidder or Tenderer or nominated Sub Successful Bidder or Tenderer, if any, shall fail to effect and keep in force the insurance referred to above or any other insurance which he / they may be required to effect under the terms of the Contract, then in any such case, the Bank/Owner may, without being bound to effect and keep in force any such insurance policy pay such premium or premia, as may be necessary for that purpose from time to time and deduct the amount so paid by the Bank/Owner from any money due or becoming due to the Successful Bidder or Tenderer or recover the same as a debt due from the Successful Bidder or Tenderer.
  - All insurance to be effected by the Successful Bidder or Tenderer, and/or his sub-Successful Bidder or Tenderer s, or nominated sub-Successful Bidder or Tenderer s, if any, shall be taken only with an Insurance Company approved by the Bank/Owner.



- (j) Without prejudice to any of its obligations and responsibilities under this condition, the Successful Bidder or Tenderer shall, within **07 days** from the date of the Work Order and thereafter at the end of each quarter submit a report to the Bank/Owner in Proforma 'C' annexed hereto the detailed information on the Insurance Policies as prescribed in the said proforma together with relevant documentary evidence.
- (k) No work shall be commenced by the Successful Bidder or Tenderer unless and until he has obtained the insurance or insurances required to be obtained by him under or by the foregoing clauses and no work shall be carried out or continued by the Successful Bidder or Tenderer unless and until such insurance is current and valid at that time. All the receipts in original along with two photo copies thereof, for the payment of the premia shall be furnished by the Successful Bidder or Tenderer to the Bank/Owner. The original receipts will be returned to the Successful Bidder or Tenderer after verification. The Bank/Owner reserves the right for payment for works done subject to fulfillment of this condition and shall instruct the Engineer in Charge / accordingly.
- (1) In the event of any claim for insurance becoming due on account of any eventuality covered by the respective insurance policy/policies, the Successful Bidder or Tenderer shall reinstate the installation, replace the materials or equipments or pay compensations to the affected personnel/Employees without waiting for settlement of the claim from insurance company.
- (m) If the Successful Bidder or Tenderer shall not perform and observe any of the duties and obligations devolving upon him hereunder, and such omission or breach by the Successful Bidder or Tenderer shall involve the Bank/Owner in any liability tortuous or otherwise and/or loss or damage, the Bank/Owner shall be entitled to the restitution of such loss or damage and shall be entitled to recover the amount of restitution from any moneys due to the Successful Bidder or Tenderer from the Bank/Owner under this Contract or any other Contract.
- (n) "The successful bidder shall be the principal employer of the employees, agents, contractors, etc., engaged by them and shall be vicariously liable for all the acts, deeds, matters or things, of such persons whether the same is within the scope of power or outside the scope of power, vested under the contract. The successful bidder shall agree to hold the bank, its successors, assigns and administrators fully indemnified and harmless against loss or liability, claims, actions or proceedings, if any, whatsoever nature that may arise or caused to the bank through the action of supplier's employees, agents, contractors, etc."
- (o) Successful Bidder or Tenderer shall take transit insurance cover for DG sets including all the materials under the scope of contract from its ex-works to site till its installation at Site.

#### **32.** TO DEFINE TERMS AND EXPLAIN PLANS:

The various parts of the Contract are intended to be complementary to one another; but should any discrepancy appear, or any misunderstanding arise as to the import of anything contained therein, the explanations of the Engineer in Charge / shall be final and binding. The correction of any errors or omissions of the Drawings and Specifications may be made by the Engineer in Charge / , when such correction is necessary to bring out clearly the intention which is indicated by a reasonable interpretation of the drawings & Specifications as a whole.

#### 33. TIME OF COMPLETION:

#### TIME IS THE ESSENCE OF THIS CONTRACT

The Successful Bidder or Tenderer shall make all efforts to complete the work in time. Any delays, actual or expected, shall be made up by increasing manpower inputs and working in more than one shift, without any extra cost.



The entire work is to be completed in all respects within the stipulated period given in APPENDIX TO GENERAL CONDITIONS OF CONTRACT. The work shall be deemed to be commenced 14 days from the date of WORK ORDER or date of handing over of site, whichever is later.





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

#### PROGRESS OF WORK

During the period of construction the Successful Bidder or Tenderer shall maintain proportionate progress on the basis of a Programme Chart submitted by the Successful Bidder or Tenderer immediately before commencement of work and agreed to by the Bank/Owner / Engineer in Charge / . The Successful Bidder or Tenderer shall 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 period project.

#### 34. DELAY AND EXTENSION OF TIME (AS PER FORMAT IN APPENDIX VI):

If in the opinion of the Engineer in Charge / the works be delayed (a) by Force Majeure or (b)by reason of any exceptionally inclement weather or (c) by reason of proceedings taken or threatened by or dispute with adjoining or neighboring Bank/Owner's or Public Authorities arising otherwise than through the Successful Bidder or Tenderer 's own default or (d) by the works or delays of other Successful Bidder or Tenderer s or tradesmen engaged or nominated by the Bank/Owner or the Engineer in Charge / and not referred to in the Schedule of Quantities and/or Specifications or (e) by reason of the Engineer in Charge / 's instructions or (f) by reason of civil commotion, local combinations of workmen or strike or lock-out affecting any of the building trades or (g) in consequence of the Successful Bidder or Tenderer not having received in due time necessary instructions from the Engineer in Charge / for which he shall have specifically applied in writing or (h) from causes which the Bank/Owner may consider as beyond the control of the Successful Bidder or Tenderer or (i) in the event the overall scope of work is increased due to changes in drawings and specifications leading to an increase in cost of more than 30% of the original Contract Amount. Extension of time will be granted for a reasonable period on receipt of a written request from the Successful Bidder or Tenderer with all supporting documents.

## 35. LIQUIDATED DAMAGES FOR DELAYED COMPLETION:

- (a) If the Successful Bidder or Tenderer fails to complete any or all the works by the date/s named in Clause 33 (Date of Completion) or within any extended time under Clause 34 (Extension of Time) then the Successful Bidder or Tenderer shall pay or allow the Bank/Owner the sum to be worked out at 1% of contract value per week to be recovered as Liquidated Damages (and not by way of penalty) for the delay, beyond the said date or extended time, as the case may be, during which the works shall remain unfinished and such damages may be deducted from any moneys due or which may become due to the Successful Bidder or Tenderer. The maximum amount of Liquidated damages shall be 10% of contract value. The Successful Bidder or Tenderer shall be bound to extend validity of Insurance Cover till such period of completion as may be considered necessary at their cost.
- (b) Liquidated damages shall also be similarly levied for failure to attain intermediate milestones if applicable as follows:-

The absolute maximum amount of liquidated damages shall be 10% of final Contract Value.

# 36. FAILURE OF SUCCESSFUL BIDDER OR TENDERER TO COMPLY WITH ENGINEER IN CHARGE INSTRUCTIONS:



If the Successful Bidder or Tenderer after receipt of written notice from the Engineer in Charge / with prior Consultation of Bank/Owner requiring compliance with such further drawings and/or instructions to remove, fails within seven days to comply with the same, the Engineer in Charge / with prior consent of the Bank/Owner may employ other persons to execute any such work whatsoever as may be necessary to give effect thereto and all costs incurred in connection therewith shall be recoverable from the Successful Bidder or Tenderer by the Bank/Owner on a certificate by the Engineer in Charge / as a debt to be deducted by him from any moneys due or to become due to the Successful Bidder or Tenderer .

### 37. SUSPENSION OF WORKS:

The Engineer in Charge / may in an extreme case and in prior consultation with the Bank/Owner suspend works if the quality or safety of the works is likely to be compromised due to heavy rains, natural calamities, etc. The Engineer in Charge / may grant such extension of time with the approval of the Bank/Owner as may be justified by such a delay in works. The Successful Bidder or Tenderer shall not

### 38. DETERMINATION OF CONTRACT:

be entitled to any compensation on account of such delay.

If the Successful Bidder or Tenderer except on account of any legal restraint upon the Bank/Owner preventing the continuance of the works, or on account of any of the causes mentioned in Clause 34(Extension of time) or in the case of a certificate being withheld or not paid when due, shall suspend the works, or, in the opinion of the Engineer in Charge, 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 in the respects mentioned in Clause 27 (Removal of improper work and materials), the Bank/Owner through the Engineer in Charge shall have power to give notice in writing to the Successful Bidder or Tenderer requiring that the works be proceeded with in a reasonable manner and with reasonable dispatch.

Such notice shall not be unreasonably given and must signify that it purports to be a notice under the provisions of this clause and must signify the act or defaults on the part of the Successful Bidder or Tenderer upon which it is based. After such notice shall have been given, the Successful Bidder or Tenderer shall not be at liberty to remove from the site of work, or from any ground contiguous thereto, any plant or materials belonging to him which shall have been placed thereon for the purpose of the works, and the Bank/Owner shall have lien upon such plant and materials to subsist from the date of such notice being given until the notice shall have been complied with. If the Successful Bidder or Tenderer shall fail, for 7(seven) days after such notice has been given to proceed with the works as therein prescribed, the Bank/Owner may enter upon & take possession of the works and of all such plant and materials thereon intended to be used for the work, and the Bank/Owner shall retain and hold a lien upon all such plant and materials until the works shall have been completed under powers hereinafter conferred upon him. If the Bank/Owner shall exercise the above power, he may engage any other person to complete the works and exclude the Successful Bidder or Tenderer, his agents and servants, from entry upon or access to the same, except that the Successful Bidder or Tenderer or any person appointed in writing may have access at all reasonable times during the progress of the works to inspect, survey and measure the works. Such written appointment or a copy thereof shall be delivered to the Engineer in Charge before the person so appointed comes on to the works, and the Bank/Owner shall take such steps as in the opinion of the Engineer in Charge may be reasonably necessary for completion of the works, without undue delay or expenses, using for that purpose the plant and materials above mentioned in so far as they are suitable and adaptable to such use. Upon the completion of the work the Engineer in Charge / shall certify the amount of the expenses properly incurred consequent on and incidental to the default of the Successful Bidder or Tenderer as aforesaid and in completing the works by other persons. Should the amount so certified as the expenses properly incurred be less than the amount which would have been due to the Successful Bidder or Tenderer upon the completion of the works by him, the difference shall be paid to the Successful Bidder or Tenderer by the Bank/Owner, Should the amount of the former exceed the latter, the difference shall be paid by the Successful Bidder or Tenderer to the Bank/Owner. The Bank/Owner shall not be liable to make any further payment or compensation to the Successful Bidder or Tenderer for or on account of the proper use of the plant for the completion of the works under the provision hereinbefore mentioned other than such payment as included in the Contract. After the works shall have been so completed by persons other than Successful Bidder or Tenderer, under provision hereinbefore contained, the Engineer in Charge / shall give notice to the Successful Bidder or Tenderer to remove his plant and all surplus materials as may not have been used in the completion of the works from the site. If such plant and materials are not removed within a period of 14 days, after the notice shall have been given, the Bank/Owner may remove and sell the same, holding the proceeds, less the cost of the removal and sale, to the credit of the Successful Bidder or Tenderer . The Bank/Owner shall not be so responsible for any loss sustained by the Successful Bidder or Tenderer from the sale of the plant in the event of the Successful Bidder or Tenderer not removing it after notice.



#### **CERTIFICATE & PAYMENT:**

All bills shall be prepared by the Successful Bidder or Tenderer in the form prescribed in **APPENDIX** - **II**.

Payment will be upon completion of works.



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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 Bank/Owner, based on a certificate by the Engineer in Charge / and after a cursory study of the bill shall release after completion of works.

The Engineer in Charge after detailed scrutiny of the interim bill shall certify full payment within 10 days of the date of receipt of interim bill from the Successful Bidder or Tenderer subject to submission of documentation, as required. The Bank/Owner shall make payment within 15 days of receipt of the Engineer in Charge certificate.

The amount stated in an interim certificate shall be the total value of work properly executed and % of invoiced value of Successful Bidder or Tenderer 's materials (as per payment terms) brought to site for permanent incorporation into the work up to the date of the bill less installments previously paid under these conditions, provided that such certificate shall only include the value of said material and goods 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 causalities.

The cost of materials supplied by the Bank/Owner shall be recovered from Successful Bidder or Tenderer bills.

The Engineer in Charge shall have the powers to withhold any Certificate if the works or any parts thereof are not carried out to his satisfaction.

The Engineer in Charge may by any Certificate make any correction in any previous certificates which shall have been issued by him.

The Successful Bidder or Tenderer shall submit interim bills only after working out the appropriate measurements jointly recorded with Engineer in Charge at site in a register and showing the register to Engineer in Charge. This is not only to regulate the correctness of the quantity but also to facilitate expeditious clearing of the bills.

If any part/reduced rate is proposed by the Successful Bidder or Tenderer (recommended by Engineer in Charge) the same should be brought out in an annexure to the Bill.

The Bank/Owner may carry out test checking of measurement as and when required.

The Successful Bidder or Tenderer shall be paid % of the value of the materials (as per payment terms) brought and stacked at site on a Certificate, issued by the Engineer in Charge / , in regard to quantity and in conformity with the Contract Specifications. No advance shall however be paid for perishable materials. On payment, the property in goods shall vest in the Bank/Owner and the Successful Bidder or Tenderer will keep it in his custody indemnifying the Bank/Owner against any damage, loss, theft or mishap attributable to their storage.

The Final Bill shall be certified for payment by Engineer in Charge / within 6 weeks of submission of the bill supported by proper documentation and after full compliance of the Contract requirements for all technical submittals.

Payments upon the Engineer in Charge Interim and final certificates shall be made as far as practicable within a period named in the **Appendix-I** as "Period of Honoring of Interim and final Certificates" after such Certificates have been delivered to the Bank/Owner. The acceptance of payment of the final bill by the Successful Bidder or Tenderer would indicate that he will have no further claim in respect of the executed work.

The items in the Bill shall be listed separately in 3 categories:

- (a) Tender items
- (b) Deviated items
- (c) Extra items

Successful Bidder or Tenderer shall, without fail, submit along with his Interim Bills /Final Bill the test certificates to the Engineer in Charge / for all electrical appliances, equipments, concrete, steel and cement as also chemical analysis for basic materials like fine and coarse aggregates, cement, construction





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water, reinforcement steel, etc. all in conformity with latest relevant I.S. Codes, as also concrete cube test results for the concrete poured at site.

Such test certificates and results shall be presented to and certified for acceptance by the Engineer in Charge / in consultation with the Engineer in Charge / before submission along with Interim Bills/Final Bill

Together with As-Built drawings the Successful Bidder or Tenderer shall also submit all operating and maintenance manuals and full details of all materials used in the works with suppliers' / manufacturer's names before the final payment is certified.

Interim Bills/Final Bill received without the test certificates/results duly approved by Engineer in Charge / shall be returned to the Successful Bidder or Tenderer for the reason of the same being not submitted duly.

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 Bank/Owner 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.

#### 40. NOTICES:

Notices of the Bank/Owner to the Engineer in Charge / or the Successful Bidder or Tenderer may be served personally or by being left out or sent by registered post to the last known place of abode or business of the party to whom the same is given or in the case of the Successful Bidder or Tenderer by being left on the works. In the case of company or Corporation, Notices may be served at or sent by registered post to the Registered office of the Company or Corporation.

Any notice sent by registered post shall be deemed to be served at the time when, in the ordinary course of post, it would be delivered.

#### 41. TERMINATION OF CONTRACT BY THE BANK/OWNER

If the Successful Bidder or Tenderer being an individual or a firm, commits any "Act of insolvency" or shall be adjudged as Insolvent or being an incorporated Company shall have an order for compulsory winding up or applies for voluntary winding up or subject to the supervision of the Court and of the Official Assignee or the Liquidator in such acts of Insolvency or winding up shall be unable within seven days after notice to him requiring him to do so, to show to the reasonable satisfaction of the Bank/Owner/Engineer in Charge / that he is able to carry out and fulfill the Contract, and to give security therefore, if so required by the Bank/Owner/Engineer in Charge / .

or if the Successful Bidder or Tenderer (whether an individual; firm or incorporated Company) shall suffer execution to be issued, or shall suffer any payment under this Contract, to be attached by or on behalf of any of the creditors of the Successful Bidder or Tenderer,

or shall charge or encumber this Contract or any payments due or which might become due to the Successful Bidder or Tenderer there under,

or shall assign or sub-let the Contract without obtaining the prior consent in writing of the Bank/Owner or shall suffer any payment under this contract to be attached by or on behalf of any of the creditors of the Successful Bidder or Tenderer,

or if in the opinion of the Bank/Owner the Successful Bidder or Tenderer,

- (i) has abandoned the Contract, or
- (ii) has failed to commence the works, or has without any lawful excuse under these conditions suspended the progress of the works for seven days after receiving from the Engineer in Charge / written notice to proceed, or





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- (iii) has failed to proceed with the works with such due diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or
- (iv) has failed to remove materials from the site or to pull down and replace work for seven days after receiving from the Engineer in Charge / written notice that the said materials or work were condemned and rejected by the Engineer in Charge / under these conditions, or
- (v) has neglected or failed persistently to observe and perform all or any of the acts, matters or things by this Contract to be observed and performed by the Successful Bidder or Tenderer, or
- (vi) has to the detriment of good workmanship or in defiance of the Engineer in Charge / 's instructions to the contrary sublet any part of the Contract.

then in any of the said cases the Bank/Owner may notwithstanding any previous waiver, after giving seven days notice in writing to the Successful Bidder or Tenderer, determine the Contract but without thereby affecting the powers of the Bank/Owner or the obligations and liabilities of the Successful Bidder or Tenderer, the whole of which shall continue in force as fully as if Contract had not been so determined and as if the works subsequently executed had been executed by or on behalf of the Successful Bidder or Tenderer (without thereby creating any trust in favour of Successful Bidder or Tenderer). Further, the Bank/Owner, may enter upon and take possession of the work and all plant, tools, scaffoldings, sheds, machinery, steam and other power, utensils and materials lying upon the premises or the adjoining lands or roads and seal the same as his own property or may employ the same by means of his own servants and workmen carrying on and completing the works or by employing any other Successful Bidder or Tenderer s or other persons to complete the works, and the Successful Bidder or Tenderer shall not in any way interrupt or do any act, matter or things to prevent or hinder such other Successful Bidder or Tenderer or other person or persons employed for completing and finishing or using the materials and plant for the works. When the works shall be completed or as soon thereafter as convenient, the Bank/Owner / Engineer in Charge / shall give a notice in writing to the Successful Bidder or Tenderer to remove his surplus materials and plant, and should the Successful Bidder or Tenderer fail to do so within a period of 14 days after receipt thereof by him the Bank/Owner shall sell the same by public auction, and shall give credit to the Successful Bidder or Tenderer for the amount realized after deducting there from the costs of removal and sales by the Bank/Owner for the values of the said plant and material so taken possession of by the Bank/Owner and the expense or loss which the Bank/Owner shall have been put to in procuring the works to be completed and the amount, if any, owing to the Successful Bidder or Tenderer and the amount which shall be so payable shall thereupon be paid by the Bank/Owner to the Successful Bidder or Tenderer, or, by the Successful Bidder or Tenderer to the Bank/Owner, as the case may be, On termination of the Contract, the Successful Bidder or Tenderer shall forthwith remove himself and his workmen from the works site.

#### 42. PHOTOGRAPHS OF WORKS CARRIED OUT:

The Successful Bidder or Tenderer shall every month supply at his own cost two copies of minimum 8 nos. 8" x 5 1/2" colored photographs of the works carried out from time to time as per the instructions of the Engineer in Charge / . In the event of any dispute or termination of Contract either by the Bank/Owner or the Successful Bidder or Tenderer as provided for in the aforesaid Clause 41, the Successful Bidder or Tenderer shall arrange to obtain photographs of the works completed upto the date of such termination of Contract.

## 43. FORECLOSURE OF CONTRACT IN FULL OR IN PART:



If at any time after acceptance of the tender the Bank/Owner shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out he shall inform the Successful Bidder or Tenderer in writing to that effect and the Successful Bidder or Tenderer shall have no claim to any payment or compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

#### 44. INSPECTION OF SITE AND SUFFICIENCY OF TENDER:

(a) The Successful Bidder or Tenderer shall inspect and examine the site and its surrounding and shall satisfy himself before submitting his tender as to the nature of the ground, and sub-soil, the form and nature of the site, the quantities and nature of the work and materials necessary for the completion of the works and means of access to the site, the accommodation he may require and





in general, shall himself obtain all necessary information as to risk, contingencies and other circumstances which may influence or affect his tender.

- (b) The Successful Bidder or Tenderer shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for proper completion and maintenance of the works.
- (c) No extra charges consequent on any misunderstanding or otherwise shall be allowed.
- (d) The Successful Bidder or Tenderer shall, on the basis of his findings emerging from the study of the subsoil conditions, examine the foundation drawing furnished in the tender and shall be at liberty to submit his objections or suggestions of the proposed foundation as may be relevant to subsoil conditions found by him directly to Engineer in Charge / . The Successful Bidder or Tenderer shall not be entitled to recover the cost of ascertaining the ground and subsoil conditions at the site and such cost shall be deemed to be included in the rates tendered by the Successful Bidder or Tenderer.

#### 45. NOTICE TO LOCAL BODIES:

The Successful Bidder or Tenderer shall be registered with & comply with and give all notices required under any law, rules, regulations, or bye-law of Parliament, State Legislature or Local Authority relating to works. The Successful Bidder or Tenderer shall before commencing the execution of work issue a certificate to the Bank/Owner / Engineer in Charge / that he has obtained all the permissions Registrations for carrying out the work & engaging various kinds of labour and give all the notices as are required to be obtained or given under law particularly blasting permission, Police permission etc.

## **46.** TOTAL SECURITY DEPOSIT (S.D):

The Successful Bidder or Tenderer shall within 7 days of receiving the WORK ORDER submit a initial security deposit of 2% of the contract value in the form of Demand Draft draw in favour of Indian Bank, Chennai or a Bank Guarantee in an approved format at which stage the Demand draft (DD) or Bank Guarantee submitted in lieu of E.M.D shall be returned. On acceptance of the DD or Bank Guarantee by the Bank/Owner, the Earnest Money Deposit shall be refunded to the Successful Bidder or Tenderer.

In addition an amount equal to 5% of the value of each bill will be recovered as retention amount. This, together with the initial S.D. of the 2% referred to above, will constitute the total Security Deposit and on virtual completion of work the Bank/Owner shall refund 50% of the total Security Deposit. The remaining 50% will be refunded after completion of the **Defect Liability Period of 12 months**.

#### 47. WATER AND ELECTRICITY:

(a) The Successful Bidder or Tenderer should make his own arrangements for required water, supply, drainage (including temporary drainage of subsoil dewatering as required by Authorities) etc. at the work site during the currency of contract at their *own expenses*.



(b)

In the event of unavailability of power from Utility Companies, the Successful Bidder or Tenderer shall make arrangements for installing D.G. Set(s) of adequate capacity at his own cost. Responsibility for getting temporary power for construction shall remain with the Successful Bidder or Tenderer . Consumption charges will be payable by the Successful Bidder or Tenderer . Temporary power connection shall be in the Bank/Owner's name. Deposits to the Electric Supply Company shall be paid by the Successful Bidder or Tenderer and shall be reimbursed to him based on actuals on production of supporting vouchers/receipts for the same.

The Successful Bidder or Tenderer will take into account approximate power required and will be given *metered power at one point* from Bank and who would pay for their consumption charges. In case of disagreement between the Successful Bidder or Tenderer and other agencies, the Engineer in Charge / / Bank/Owner's decision shall be final.



**DG** Sets

## 48. SCHEDULE OF QUANTITIES-NO CLAIM BECAUSE ACTUAL QUANTITIES DIFFER FROM PRELIMINARY STATEMENT.

A Schedule of probable quantities in respect of work and Specifications accompany these Conditions. The schedule of probable quantities is liable to alterations by omissions, deductions or additions at the discretion of the Engineer in Charge / .

The quantities of the various kinds of work to be done and materials to be furnished under this Contract which have been estimated and are set forth in the proposal or the Agreement or the lists of Contract Prices, are the best available, but may not be accurate in any or all particulars and are only for the purpose of comparing on a uniform basis the bids offered for the works under this Contract.

The Successful Bidder or Tenderer agrees that neither the Bank/Owner nor the Engineer in Charge / nor any of the employees or agents hereof shall be held responsible if any of the said estimated quantities shall be found to be not even approximately correct in the construction of the works and that he will not at any time dispute or complain of such statement nor assert that there was any misunderstanding in regard to the character, size and type of work to be done or the kind or amount of the materials to be furnished or work to be done.

Further the Successful Bidder or Tenderer shall make no claim for anticipated profits, for loss of profits or for damages because no work is ordered under certain items or because of differences between the quantities of the various kinds of work to be done or materials actually delivered and the estimated quantities set forth by the Bank/Owner or the Engineer in Charge / .

## 49 ACCESS FOR INSPECTION:

The Successful Bidder or Tenderer shall provide at all times during the progress of the works and the maintenance period proper means of access, ladders, gangways etc. and the necessary attendants to move and adapt the same as directed for the inspection or measurement of the works by the Engineer in Charge / or his representatives.

#### 50. DIMENSIONS:

Figured dimensions are in all cases to be followed and in no case should they be scaled. Large scale details take precedence over small scale drawings. In case of discrepancy, the Successful Bidder or Tenderer is to ask for an explanation before proceeding with the work.

#### 51. PROGRAM OF WORK:

The Successful Bidder or Tenderer shall, along with his bid, submit a schedule for completion of work, either in the form of a CPM Net-Work or in the form of a Bar Chart, showing how he proposes to complete the works. This program shall be prepared in sufficient detail and shall indicate, among other things, the following details on a month-to-month basis (for each month).

- (a) Quantum of work under each major item of work that would be carried out.
- (b) Amount of resources that would be deployed (e. g. materials, skilled / unskilled labour, equipment etc.)
- (c) Schedule of delivery of materials to site.
- (d) Cash Flow with approximate value of work contemplated to be completed each month.
- (d) Schedule and manner in which details or materials (to be issued by the Bank/Owner, if any) are required from the Engineer in Charge / /Bank/Owner.
- (f) Time periods allowed for other agencies' works.
- (g) Various milestones to be achieved.





**DG** Sets

The program, suitably amended after discussions with the Engineer in Charge / , shall become binding on the Successful Bidder or Tenderer . However, during the execution of the project, should it become necessary, in the opinion of the Engineer in Charge / to reschedule some of the activities, the Successful Bidder or Tenderer shall do so at no extra cost and/or without any other claim.

Acceptance of a bidder's tender does not necessarily imply acceptance of the schedule submitted and the Engineer in Charge / Bank/Owner reserves to himself the right to modify / amend this schedule to suit the overall project schedule and the Successful Bidder or Tenderer shall adhere to these revisions/modifications at no extra cost to the Bank/Owner.

### 52. CLEARING THE SITE OF WORKS ON COMPLETION:

The Successful Bidder or Tenderer shall clear site of works as per the instructions of the Engineer in Charge / . The site of works shall be cleared of all men, materials, sheds, etc. belonging to the Successful Bidder or Tenderer . The site shall be delivered in a clean and neat condition as required by the Engineer in Charge / within a period of one week after the job is completed. In case of failure by the Successful Bidder or Tenderer , the Bank/Owner under advice of the Engineer in Charge / will have the right to get the site cleared at the risk and cost of the Successful Bidder or Tenderer to the satisfaction of the Engineer in Charge / .

### 53. COMPLETION DRAWINGS / TECHNICAL LITERATURE:

The Successful Bidder or Tenderer shall submit one set of reproducible and CD's and four sets of As-Built drawings to Engineer in Charge / at his own cost. The Successful Bidder or Tenderer shall also submit 2 copies of detailed catalogues and technical literature and maintenance manuals of all materials / equipment used in the works together with the names and addresses of suppliers / manufacturers.

### 54. OBTAINING INFORMATION:

No claim by the Successful Bidder or Tenderer for additional payment will be entertained which is consequent upon failure on his part to obtain correct information as to any matter affecting the execution of the works, nor will any misunderstanding or the obtaining of incorrect information or the failure to obtain correct information relieve him from any risks or from the entire responsibility for the fulfillment of the contract.

#### 55. SAFETY RULES

55.1 The Successful Bidder or Tenderer shall follow the latest editions of Safety Codes hereunder:

The Successful Bidder or Tenderer shall follow the latest safety rules according to the Indian Electricity Rules of 1956, Electrical Inspectorate Requirements & BIS (Bureau of Indian Standards).

The following are General Safety Rules.

IS: 3696 – Part I - Safety Codes for scaffolds and ladders Scaffolds.

IS: 3696 – Part II - Do - Ladders.

IS-5216-1982 - Code of safety procedures and practices in Electrical works

The following safety regulations shall also be followed. In case of discrepancy between the codes and the following regulations, the more stringent of the two shall apply.

#### 55.2. Personal Safety Equipments:

i) All necessary personnel safety equipment as considered adequate by the Engineer in Charge / should be kept available for the use of the persons employed on the site and maintained in a condition suitable for immediate use, and the Successful Bidder or Tenderer should take adequate steps to ensure proper use of equipment by those concerned.





**DG** Sets

- ii) All personnel of the Successful Bidder or Tenderer working within the plant site shall be provided with safety helmets. 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.
- iii) Adequate precautions shall be taken to prevent danger from electrical equipment.
- iv) The Successful Bidder or Tenderer shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Whenever men above the age of 18 are employed on the work of lead painting, the following precautions should be taken:
  - a) No paint containing lead or lead products shall be used except in the form of paste or ready-made paint.
  - b) 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 scraped.
  - c) Overalls shall be supplied by the Successful Bidder or Tenderer to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of the work.
- v) 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.
- vi) When the work is done near any public place where there is risk of drowning all necessary equipment should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger.
- vii) i Adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

#### 55.3. General

- i) Adequate washing facilities should be provided at or near places of work.
- ii) 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 Successful Bidder or Tenderer.
- iii) To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the Successful Bidder or Tenderer shall be open to inspection by the Labour Officer, Engineer in Charge / and Bank/Owner.
- iv) Notwithstanding the above clauses there shall be nothing in these to exempt the Successful Bidder or Tenderer from the operations of any other Act or Rule in Force in the Republic of India.
- **56. CO -ORDINATION OF WORKS:** The Tenderer shall execute the works in co-ordination with the other agencies like air-conditioning, electrical etc., involved in the works. The work site shall be neatly cleaned as and when necessary so that the works of other agencies can be carried out. Failure on part of the Tenderer to clean the work site will empower the Bank/Owner to engage other agencies and recover the cost from the Tenderer.
- **57.TENDERED VALUE**: The lowest tendered value shall be the total of all the items including the buyback items.
- 58. The work should be carried out with full co-ordination / co-operation of occupants in the Office 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.



59. The tenderer shall quote under Part B – Price Bid towards Annual Maintenance Contract for a period of 2 years for the Diesel Generator Set including the DLP, Oil Service etc.

### 60. 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 Bank/Owner 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, Tariff Advisory Committee's rules and Fire insurance requirements and/or Electricity rules and Regulations as per Government Gazette and publications.

### 60.1 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 . 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 Bank/Owner. Nothing shall absolve the Tenderer from re-performing any tests that Tenderer may be called upon specifically by Bank/Owner/supply company or Electrical inspector. All equipments shall be tested jointly with the Bank/Owner as required by various sections of specifications and test data shall be furnished as required.

The necessary charges for Engineer Incharge / Owner towards witnessing the Factory Acceptance Testing, Site Testing, Transportation, boarding / lodging / accommodation and any other expenses shall be borne by the Successful Bidder or Tenderer only.

### 60.2 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 / Bank/Owner. Pre commissioning tests shall commence only on approval of this report by the /Bank/Owner.

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).

### At the Factory test bed:

The Generator offered by the Tenderer should be tested for 24 hours at the factory at different load conditions which includes 100% load and 110% load for one hour in every 12 hours of test run as per BS 5514 standard. And report should be submitted to the Bank.

### At the Bank/Owners 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 for 2 days.





**DG Sets** 

Fuel charges for Factory test and at the Bank/Owner'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 decises 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.

### **60.3 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 and after installation of works.

### 60.4 Operation of the DG set after Installation:

The Tenderer shall arrange to depute a senior operator to the site of works to operate the DG sets for a minimum period of 2 days after successful installation and approval of the installation by the local authorities. The operator shall impart training to the owners operators/Technicians in proper up –keep of the DG sets. The cost of these activities shall be deemed to have been included in the rates quoted by the Tenderer in the BOQ. No boarding lodging/ conveyance will be provided to the above technician and cost for the same to be include in the Quoted BOQ under the item Site Trial Run/Misc Item Sl.No.23

**61. DEFECT AFTER COMPLETION** (defect liability period): The DG Sets should be guaranteed against faulty design, materials manufacture and workmanship at least for a period of 12 months from the date of handing over of the system to the organization in perfect working condition. The guarantee should cover free replacement of defective parts, accessories, etc., and of whatever necessitated during the guarantee period. Items found defective during the guarantee period will be replaced by new one or repaired free of cost to the full satisfaction of the client. All parts supplied / replaced / fitted during the guarantee period shall not attract transport charges etc. If at any time during the guarantee period the DG is out of order for more than Seven days at a time, then the guarantee period will be extended by the period of break down.



The Tenderer shall make good at his own cost and to the satisfaction of the Bank/Owner all defects, or other faults which may appear within 12 months after completion of the work (defect liability period). In default, the Bank/Owner may employ and pay other agency or persons to amend and make good such damages, losses and expenses consequent thereon or incidental thereto such expenses shall be made good and borne by the Tenderer and such damages, loss and expenses shall be recoverable from the payment due to the Tenderer and in the event of amount retained being insufficient, recover the balance from the Tenderer from the amount retained under clause No 16. together with any expenses the Bank/Owner may have incurred in connection therewith.



**DG Sets** 

During the defect Liability period (DLP), the Tenderer has to supply the required materials to carry out AMC at periodical intervals as prescribed by the manufacturer. MC includes greasing, oiling, replacement of filters i.e Air filters, Oil filters, fuel filters etc and supply of lubricating oil required to carry out periodical "B" checks 2 times in a year. This is in addition to regular and preventive maintenance works during DL period. The AMC charges during Defect Liability Period shall be deemed to have been included in the rates quoted by the Tenderer in the BOQ.

**62. CONCEALED WORKS:** The Tenderer shall give due notice to the Bank/Owner wherever any work is to be buried or concealed in the building in the earth, flooring, walls or otherwise becoming inaccessible later on, in order that the work may be inspected and correct dimensions or measurements taken before such burial. In default whereof the same shall, in the opinion of the

### 63. PREAMBLE TO SCHEDULE OF QUANTITIES

- 1. Tender shall be on the basis of items rates which shall include the cost of materials, labour, all taxes, duties, and all other appurtenant services required for the complete installation, testing and commissioning in accordance with relevant drawings and meeting the requirements of the specifications and relevant I.S. specification including the fees for inspection together with the liabilities and obligations as detailed in the general conditions of contract.
- Prices shall remain firm and free from variation due to rise and fall in the cost of materials and labour or any other price variation whatsoever whether during the stipulated period of execution or during extended period of completion if any, expect direct statutory, increases by the Act of Govt. or Local bodies.
- 3. Item rates shall remain valid for any variations in the estimated quantities given in the schedule of quantities.
- 4. In order to facilitate the technical scrutiny of various quotations, the tenderer must supply with their quotations, the tenderer must supply with their quotations detailed technical particulars, make catalogues and erection drawings for various items under different parts specified in the schedule of quantities.
- 5. The drawings and specifications lay down minimum standards for equipment and workmanship. Deviations, if any, shall be clearly set down. In the absence of any deviations, it will be deemed that the tenderer is fully satisfied with the intents or the specifications and drawings and their compliance with the statutory and fire insurance provision including local codes. Where the drawings and specifications conflict the more stringent shall apply.
- 6. All installations shall be tested as specified and a test certificate in the prescribed form required by the authorities shall be furnished.
- 7. The entire installation shall be guaranteed against any defective materials of workmanship for a period of 12 months from the date of installation as certified by the s and taken over by the employer. During the guarantee period, all defects shall be rectified by the contractor, free of cost.
- 8. Water and power required for works may be made available at site. Use of electrical power will be on chargeable basis. If the water available at site is unsuitable for construction purpose, the contractors will make their own arrangements for water.
- The tenderers must acquaint themselves of the site conditions and take note of all factors while quoting the rates, as no extra will be allowed on any ground.
- 10. The employer shall pay the contractor such sums as shall become payable hereunder at the times and in the manner specified in the said conditions.
- 11. The term "Consulting s / Consultant / " in the conditions shall mean the said 'SRISHTI', The Creative People or in the event of their death or ceasing to be the consulting s for that purpose of this contract, such other person as shall be nominated for that purpose by the employer, not being a person to whom the contractor shall object for reasons considered to be in sufficient by the Employer. Provided always that no persons subsequently appointed to be consulting s under this





contract shall be entitled to disregard or over rule any decision or approval or direction or expressed in writing by the consulting s for the time being.

- 12. The plan, agreement and documents mentioned shall form the basis of this contract and the decision of the said Consulting Engineers/s for the time being as mentioned in the conditions of contract in reference to all matters of dispute as to the materials, workmanship or account and as to the intended interpretation of the clauses of the agreement of any other document attached hereto shall be final and binding on both parties and may be made a Rule of Court.
- 13. The said contract comprises the works mentioned in the BOQ (Bill of Quantities) and all subsidiary works (if any) connected therewith within the same site as may be ordered to be done from time to time by the said Employer through the consulting s for the time being, even though such works may not be shown on the drawings or described in the said specifications or the priced schedule of quantities.
- 14. The employer reserves to himself the right of altering the drawings and nature of the work and of adding to or omitting any items of work or of having portions of the same carried out without prejudice to this contract.
- 15. The said conditions shall be read construed as forming part of this agreement, and the parties hereto will respectively, abide by and submit themselves to the conditions and stipulations and perform the agreements on their parts respectively in such conditions contained.
- 16. Further, letters exchanged between the employer and the contractor after the receipt of this contract as cited shall form an integral part of this contract.
- 17. The successful tenderer shall supply completion drawings of the entire installations as executed at site drawn to scale approved by the employer / s after the completion of the work. But before completion certificate is given by the employer / s upon receipt of the completion drawings, as built drawings of the work only, the final bill will be released.
- 18. The materials of the first preference shall be used by the contractor may exclude himself of not doing so only if the required range as per tender specifications is not manufactured, by the particular manufacture. The evidence of such case shall be supported by a letter from the respective manufacturer. Samples of all fittings and accessories shall be approved by the employer/s prior to their installations.

### **64 SAFETY CODE:**

### **FIRST AID**

- 1. At every work place, there shall be maintained in readily accessible place first aid appliance including supply of sterilized dressings and sterilized cotton wool. The appliance shall be kept in good condition, and in large work place, they shall be placed in charge of a reasonable person who shall be readily available during working hours.
- 2. At large work places, where hospital facilities are not available within easy distance of the works, first aid posts shall be established and be run by a trained compounder.
- 3. In every work place, there shall be provided and maintained at suitable places, easily accessible to labour sufficient cold water fit for drinking.

### **SCAFFOLDS**

- 1. 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 a 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 ½ to 1 (1/4 horizontal and 1 vertical).
- 2. Scaffolding or staging more than 4 m. above the ground floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly bolded,





DG Sets

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.

- 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 lever, they shall be closely boarded and shall have adequate width and be suitably fenced as described in (2) above.
- 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 of by suitable railing and danger signals to be installed at night so as to prevent persons slipping into the excavations.
- 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 290 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.
- 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**

- 8. All personnel of the contractor working within the plant site shall be provided with safety helmets. 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.
- 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**

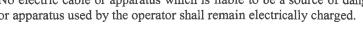
- 10. All trenches, 1.25 m. or more in depth shall at all times be supplied with at least one ladder for each 30 m. in length or fraction thereof. The ladder shall be extended from bottoms of the trench to at least 1 m. above the surface of the ground. Sides of trenches which are 1.5 m. or more in depth 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.
- 11. The contractor shall take all measures on the site of the work to protect the public from accidents and shall be solely bound to bear the expenses of defence 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 contractor, be paid to compromise any claim by any such person. No future claim shall be entertained / made against the bank in this regard.

### **DEMOLITION**

रिसर, व्यय एव

संपदा विभाग

- 12. Before any demolition work is commenced and also during the process of the work:
  - All roads and open areas adjacent to the work site shall either be closed or suitably protected.
  - 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 pre-cautions steps shall be taken to prevent danger to persons employed from the risk fire or explosion or flooding. No floor, roof or other part of

### PERSONAL SAFETY / PROTECTIVE EQUIPMENTS

- 13. 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 contractor 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.

the building shall be so overloaded with debris or materials as to render it unsafe.

- 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 contractor 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 accident to the public.
- f. The contractor 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:
  - No paint containing lead or lead products shall be used except in the form
    of paste or readymade paint. Paints like vinyl and epoxies having toxic
    fumes should be applied after following all precautions laid down by
    manufacturers.
  - 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 contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.
- 14. When the work is done near any public place where there is risk of drowning all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompts 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**

- 15. Use of hoisting machines and tackle including their attachments anchorage and supports shall confirm 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 in good working condition.



- b. Every rope used in hoisting or lowering materials of as means of suspension shall be of durable quality and adequate strength and free from patent defects.
- c. 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.
- d. 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 or testing.
- e. In case of departmental machines, the safe working load shall be notified by the Engineer. As regards contractor's machines, the contractors 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.
- 16. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with such means as will reduce to the minimum of the risk or any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energised, insulating 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.
- 17. 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.
- 18. Adequate washing facilities should be provided at or near places of work.
- 19. 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 contractor.
- 20. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer, Engineers of the Department or their representatives.
- 21. The contractor is solely responsible for the safety and security of the workmen engaged by him or his subcontractors in this project.
- 22. Notwithstanding the above clause from (1) to (21), there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.





### APPENDIX - I

### APPENDIX TO GENERAL CONDITIONS OF CONTRACT

Clause	No		
46	a	Earnest Money Deposit	Rs. 11,0000/- (Rupees Eleven Thousand Only)
	b	Initial Security Deposit (S.D)	2% of the total contract value (shall be submitted within 7 days of receiving Work Order)
	c	Retention Amount (RMD)	5% of actual value of the work
	d	Total Security Deposit (SD)	7% of the total contract price [Initial S.D (2%) + RMD (5%)]
28		Defects Liability Period	12 Months from the date of virtual completion.
8		Date of Commencement	14 days from the date of issue of Work Order/letter of intent or date of handing over site, whichever is later
33		Date of Completion	45 days from the date of issue of Work Order / Letter of intent or date of handing over site, whichever is later
35		Liquidated Damages for Delay	1% per week of the Contract Value for intermediate and final deadlines subject to maximum total of 10% of Contract value.
39		Frequency of Interim Certificate	Payment after completion of works
39	(i)	Period of honoring Interim Certificate by Bank/Owner	NA
	(ii)	Period of honoring Final bill	Four weeks from the date of receipt of Bill recommendations - from Engineer in Charge /
28		Period of Performance Guarantee	3 years from the date of completion of virtual completion.  The tenderer shall be required to deposit 5% of the tendered value of work as performance guarantee (format given in Appendix V) for a period of 3 years in the form of irrevocable bank guarantee of any scheduled bank in accordance with the form prescribed or fixed deposit receipt, within 15 days of the Virtual Completion, before settlement of final bill
31		Insurance	Successful Bidder or Tenderer 's Liability and Insurance for the works

Name, Signature & Stamp of Successful Bidder or Tenderer





### APPENDIX - II

### PROFORMA 'B1'

### **MEASUREMENT SHEET**

Sr. No.	Item		ty. as per ontract	Unit	No. / Len	gth	Qty. of Present Bill	1	
NOTE	: Quantit	ty of Pres	sent Bill shall	be carrie	d forward to	Interi	m Bill.		
				DE					
				PR	ROFORMA	'B2'			
					NTERIM E				
T. 4 - 1	DHAI			<u>II</u>	NTERIM E	BILL			
Interir	n Bill No.			<u>II</u>	NTERIM E	BILL			
				1	NTERIM E	BILL			
Name	of the Wo	ork		Π	NTERIM E	BILL			
Name	of the Wo	ork		Π	NTERIM E	BILL			
Name	of the Wo	ork	Bidder or Ter	nderer	NTERIM E	BILL		Unit Rate	Gross
Name Name	of the Wo	ork	Bidder or Ter	nderer	upto Qt	y. of esent			Gross Amoun
Name Name	of the Wo	ork	Bidder or Ter	nderer	NTERIM E	y. of esent			
Name Name	of the Wo	ork	Bidder or Ter	nderer	upto Qt	y. of esent			
Name Name	of the Wo	ork	Bidder or Ter	nderer	upto Qt	y. of esent			





### APPENDIX - III

### PROFORMA 'C'

(See Clause 31(j)of General Conditions.)

### SUCCESSFUL BIDDER OR TENDERER 'S LIABILITY AND INSURANCE

### **SUMMARY**

	77.41.41		Name
Number Value of of Insurance Policy with description	Validity Insurance	Loss or dama	ge to work  (covered under Policy)  or any part thereof and all materials at site from any cause, whatsoever
	2. 3.	4.	
a)			
b)			
c)			
Damage, loss or injury to any property of the Bank/Owner's or Engine or his agents and servants		Claims under the Workman compensation Act 1923,the Minimum Wages Act 19 Labour (Regulation and Abolition) Act 1970	Remarks 948 &
	6.		7.
a)			
b)			
c)			
<b>NB:</b> Details of furth indicated separately at ap		if any and the loss or damage it	f any under that policy may pleas
		Sign	nature of Successful Bidder or Tend
Address:		Witness:	
का 1 किया था। का का 1 (0.0) परिसर, व्यव एवं संपटा विषाय ने स्वारंडक, Expendium			



### **APPENDIX - IV**

### PROFORMA 'D'

### REPORT OF VIRTUAL COMPLETION

(See Clause 29 of General Conditions)

Draft of letter to be written by the Successful Bidder or Tenderer to the Engineer in Charge / in connection with the Virtual Completion Certificate as per Clause No. 29 of General Conditions of Contract.

Having executed the work in terms of the Contract, we hereby certify and affirm that we have virtually completed the contracted works.

We hereby certify that the work has been executed wholly to our satisfaction and with the materials and workmanship in accordance with the contract.

We do certify further that we have executed the work in accordance with the applicable laws and without any transgression of such laws.



### APPENDIX - V

### Bank Guarantee No.

Date:

### PERFORMANCE BANK GUARANTEE

Indian Bank, a body Corporate constituted under the Banking Companies Acquisition and transfer of undertaking Act, having its Corporate Office at No.254-260, Avvai Shanmugham Salai, Royapettah, Chennai
600 014 (hereinafter referred to as Indian Bank) have entered into Agreement/Contract/Order No
dt (hereinafter called "the said Contract/ the said Order") with M/s
[hereinafter called "the said Successful Bidder or Tenderer /Supplier"] for the work of Supply
Installation, Testing and Commissioning of 1no. 15kVA Diesel Generator Set under buyback of old
Diesel Genset (1no.7.5kVA) at Indian Bank's Premises at No.70, Oliver Road, Mylapore, Chennai - 600
004.
at
at Indian Bank Corporate Office, Building and associated electrical

- 4. The Surety do hereby unreservedly, irrevocably undertake to pay the amounts due and payable under this guarantee without any demur, merely on demand from Indian Bank within 10 days of such demand stating that the amount claimed is due by way of breach of terms and conditions of the Agreement/Contract/Order. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. ------/- (Rs. Amount in words) and We undertake to pay to Indian Bank a amount not exceeding Rs. ------/- (Rs. Amount in words) so demanded not withstanding any dispute or disputes raised by the Successful Bidder or Tenderer /supplier of the equipment in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this guarantee being absolute and unequivocal.

The Surety further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract/Order and that it shall continue to be enforceable till all the dues of Indian Bank under or by virtue of the said Contract/Order have been fully paid and its claims satisfied or discharged or till Indian Bank certifies that the terms and conditions of the said Agreement/Contract/Order have been fully and properly carried out by the said Successful Bidder or Tenderer /supplier(s) and accordingly discharges this guarantee.



The Surety further agree with Indian Bank that Indian Bank shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Successful Bidder or



Tenderer /Supplier of the equipment from time to time or to postpone for any time or from time to time any of the powers exercisable by Indian Bank against the said Successful Bidder or Tenderer /Supplier and to forbear or enforce any of the terms and conditions relating to the said Agreement/Contract/Order and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Successful Bidder or Tenderer / Supplier or for any forbearance, act or omission on the part of Indian Bank or any indulgence by Indian Bank to the said Successful Bidder or Tenderer /Supplier or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. The Surety lastly undertake not to revoke this guarantee during its currency except with the previous consent of Indian Bank in writing and agree that any change in the constitution of the said Successful Bidder or Tenderer /Supplier or the said Bank shall not discharge the Bank of its liability under this deed.

The validity of Bank Guarantee shall be up to DD/MM/YY

And such date shall cover the period of warranty of all the supplies and excludes the period of defect liability. The Bank Guarantee shall remain valid for the period up to which the Successful Bidder or Tenderer is obliged for due performance of the said Agreement/ Contract/Order including the warranty period.

7. This Bank Guarantee shall be governed by and constitute in accordance with Indian Law and shall be subject to exclusive Jurisdiction of Indian Courts.

All the claims under this guarantee must be presented to the bank in writing.

8. Notwithstanding anything contained hereinbefore.

Unless a claim or demand made in writing is presented to us on or before DD/MM/YY, the date of expiry of this guarantee all your rights under this guarantee shall be lapsed and we shall be released and discharged from all liabilities thereunder.

In witness where of the Bank through its officials has set its hand and stamp on ---day of -----and the year----- at ------ at -----

SIGNED AND DELIVERED For and on behalf of

For and on behalf of above named Bank. (Banker's Name and Seal)

Branch Manager (Banker's seal)

SEAL OF THE BANK



Indian Bank-Corporate Office DG Sets

### APPENDIX VI

2 N 3 A 4 H 5 I 6 H 7 I 8 H	Name of the Successful Bidder or Tenderer  Name of the work as given in the Agreement  Agreement No  Estimated tender amount  Date of Commencement of work as per Agreement  Period allowed for completion of work as per Agreement  Date of completion stipulated in Agreement  Period for which extension of time has been given previously  1st extension vide /Bank letter	
3 A 4 H 5 I 6 A 7 I 8 I 1	Agreement No  Estimated tender amount  Date of Commencement of work as per Agreement  Period allowed for completion of work as per Agreement  Date of completion stipulated in Agreement  Period for which extension of time has been given previously	
4 H 5 II 6 H 7 II 8 II	Estimated tender amount  Date of Commencement of work as per Agreement  Period allowed for completion of work as per Agreement  Date of completion stipulated in Agreement  Period for which extension of time has been given previously	
5 II 6 II 7 II 8 II	Date of Commencement of work as per Agreement  Period allowed for completion of work as per Agreement  Date of completion stipulated in Agreement  Period for which extension of time has been given previously	
6 I A A A A A A A A A A A A A A A A A A	Period allowed for completion of work as per Agreement  Date of completion stipulated in Agreement  Period for which extension of time has been given previously	
7 I 8 I I	Agreement  Date of completion stipulated in Agreement  Period for which extension of time has been given previously	
8 I	Period for which extension of time has been given previously	
o I	previously	
a i	1st extension vide /Bank letter	
1	No Dated Month	Days
b 2	2nd Extension vide /Bank letter	
]	No Dated Month	Days
	3rd Extension vide /Bank letter	
]	No Dated Month	Days
4	4th Extension vide /Bank letter	
]	No Dated Month	Days
,	Total extension previously given	
	Reasons for which extensions have been previously give (copies of the Previous applications should be attached)	
10	Period for which extension is applied for	
11	Hindrances on account of which extension is applied for with dates on which hindrances occurred and the period for which these are likely to last	
	a Serial No b Nature of hindrance	
	D	
	d Period for which it is likely to last	
N. STATE	e Period for which extension required for this particular hindrance	
10.0.		
TOTAL X	f Overlapping period of any with reference	
ada DSU/E/	to item (e) above g Net extension applied for	

**DG** Sets

	h Remarks, if any	
12	Extension of time required for extra work	
13	Details of work and the amount involved	
	a Total value of extra work	
	b Proportionate period of extension of time on estimated amount put to tender	
14	Total Extension of time required for 11 & 12	
	Submitted to the / Bank	
	Signature of Successful Bidder or Tenderer	



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**DG** Sets

### APPENDIX-VII

BIDDER DETAILS (TO BE FILLED BY THE BIDDER)

Sl.No	Particulars	,
1.	Name of firm / company /Individual	
2.	Address	
	Registered Office	
	Administrative Office	
3.	Telephone Nos. Including Mobile	
4.	Email address	
5.	Constitution of the firm / company /Individual (Please enclose relevant documents like copy of partnership deed, Memorandum/articles of association etc.)	
6.	Year of Establishment	
7.	Name of Partners/Associates	
8.	Registration with Authorities	
	PAN	
	GST	
	H T or LT Electrical License no and validity of the same (if any)	
9.	Has the bidder or any constituent partner in case of partnership firm / Company, ever been debarred/black listed for tendering in any organization at any time? If so, give details	
10.	Banker's Name	
11.	Field of Core Competence ( Mention the fields on preference basis)	
12.	Any Pending or past litigation (within 3 years)? If yes, please explain with present status ending 31.03.2021	
13.	LOCAL OFFICE AT CHENNAI Contact person name and complete postal address, contact number / email id	

Rlease enclose separate sheets, photographs, documents etc wherever required.

**DG Sets** 

### **DECLARATION**:

- 1. All the information furnished by me / us here is correct to the best of my/our knowledge and belief.
- 2.  $\,$  I / we have no objection if enquiries are made about the work listed by me / us in the accompanying sheets / annexures.

Place:

SIGNATURE OF AUTHORIZED PERSON

NAME & DESIGNATION

Date:



### BRIEF SCOPE OF WORK

- 1) Supply Installation, Testing and Commissioning of 1no. 15kVA Diesel Generator Sets under buyback of old Diesel Genset (1no.7.5kVA) at Indian Bank's Premises at No.70, Oliver Road, Mylapore, Chennai 600 004. The works should be carried out in accordance with the "drawings" and "schedule of quantities". It includes providing all the materials, wastage of material, labour, transport, tools & equipments and management necessary for and incidental to the completion of the work. All work during its progress and upon completion shall conform to the lines, elevations and grades as shown on the drawings furnished by the Bank/Owner. Should any detail essential for efficient completion of the work be omitted from the drawings and specifications it shall be the responsibility of the Tenderer to inform the Bank/Owner so that upon completion of the work the same will be acceptable and ready for use.
- 2) The Successful Bidder or Tenderer is responsible to obtain the necessary clearances/approvals for installation/operation of 15 kVA Diesel Generator Sets, prior to commencement of installation for work if required. Liaisoning for getting all mandatory approval pertaining to subject work etc. The Successful Bidder or Tenderer shall also obtain necessary clearances /approvals for installation of Generator sets from the competent authorities of Premises. Payment to the prospective Successful Bidder or Tenderer for this liasoning work (as per the BOQ) in getting project approval from CEA/CEIG or other respective Govt agencies will be released only on submission of approval for the subject project to the Bank.
- 3) The 15kVA DG Set shall be installed at the ground level over the suitable raised concrete foundation (Construction of foundation under this contract scope). Successful Bidder or Tenderer should make necessary arrangements for lifting and installing the genset at height viz., hoist / scaffolding etc., and necessary road permits before installation etc., quoted price shall be deemed to be inclusive of above. No extra claim will be entertained on any grounds.
- 4) Power Cable laying works and termination of above power cables in the Generator set / AMF Panel / 415V Main Power Panel as required will under this contract.
- 5) DG Set drawings / Panel drawings / Foundation fixing / mounting arrangement shall submit and the same will be vetted by Engineer in Charge / Bank/Owner before installation of DG Set Works.
- 6) The Successful Bidder or Tenderer shall visit the site, understand the site logistics for installation of DG set and access the actual requirement before submitting tender. The vendor should make necessary arrangement towards all kinds / modes of transport / lifting arrangements / hoist / arrangement of scaffolding / ladders etc., to complete the job at the elevated structure. The tender cost deemed to be included in the quoted price and no extra claim will be entertained.
- 7) The complete setup from supply, erection and commissioning and Operation & Maintenance of DG Set Works is under Successful Bidder or Tenderer's scope.
- 8) During DLP period of 12 months Successful Bidder or Tenderer shall carryout the oil service as specified / as per the schedule give the tender document. The cost of oil service during DLP shall be quoted in the tender price schedule. And 2 years AMC cost including oil service (two times) after DLP shall also be quoted in the tender price schedule.
- Successful Bidder or Tenderer will comply with all the IE Rules. 1956, Indian Electricity Act. 2003 / latest standards
- 10) Regarding all factory made products for which ISI marks are available, only products bearing ISI marking shall be used in the work.
- 11) Materials of approved makes as prescribed in tender shall only be used and also colours to be as advised by the Bank/Owner.
- 12) Earthing works as specified for the Genset as be latest BIS (Latest).
- 13) The premised is provided with 1no. 7.5kVA Genset. Upon completion of erection testing & commissioning of Genset, the Successful Bidder or Tenderer shall dismantle the above old existing genset as scrape. During dismantling of above Genset, any damage caused of any kind in nature for the existing infrastructure should be rectified by the Successful Bidder or Tenderer at his own cost and the site shall be kept in clear condition. The tenderer shall quote the amount required for dismantling / transportation / necessary permits, what so ever may be under the buy item itself. Not additional charges will be paid by the Bank in this regards.



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### GENERAL INSTRUCTIONS TO THE BIDDERS

- 1. Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the Tenderers who resort to canvassing will be liable to rejection.
- 2. All rates shall be quoted on the proper form of the tender alone.
- 3. An item rate tender containing percentage below / above will be summarily rejected. However, where a tenderer voluntarily offers a rebate for payment within a stipulated period, this may be considered.
- 4. On acceptance of the tender, the name of the accredited representative(s) of the Tenderer who would be responsible for taking instructions from the Bank/Owner / s shall be communicated to the Bank/Owner.
- 5. Special care should be taken to write the rates in figures as well as in words and the amounts in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the words "Rs." should be written before the figure of rupees and words "P" after the decimal figures, e.g. Rs.2.15p. and in case of words, the word "Rupees" should precede and the word "Paise" should be written at the end, unless the rate is in whole rupees and followed by the words "only", it should invariably be up to two decimal places. While quoting the rate in schedule of quantities, the word "only" should be written closely following the amount and it should not be written in the next line.
- 6. No employee of the Indian Bank is allowed to work as a Tenderer for a period of two years of his retirement from Indian Bank service, without the previous permission of the Indian Bank. The contract is liable to be cancelled if either the Tenderer or any of his employees is found at any time to be such a person who had not obtained the permission of the Indian Bank as aforesaid before submission of the tender or engagement in the Tenderer's service.
- 7. The tender for works shall remain open for acceptance for a period of 120 days from the date of opening of Technical Bid. If any tenderer withdraws his tender before the said period, then the Indian Bank shall be at liberty to forfeit Earnest Money paid along with the tender.
- 8. The tender for the work shall not be witnessed by a Tenderer or Tenderers who himself / themselves has / have tendered or who may and had / have tendered for the same work. Failure to observe this condition would render tenders of the Tenderers tendering as well as witnessing the tender liable to summary rejection.
- 9. It will be obligatory on the part of the tenderer to tender and sign and tender documents for all the component parts and that, after the work is awarded, he will have to enter into an agreement for each component with the Competent Authority in the Indian Bank.
- 10. The tenderer shall submit a blank copy of price bid indicating quoted / not quoted in the relevant column. This is to enable that the tenderer has quoted against all relevant items in order.
- 11. The Tenderer, whose tender is accepted will be required to furnish by way of security deposit for the due fulfillment of his contract, such sum as will amount to two percent of the contract value within 14 days from the date of placement of order.
- 12. The EMD of the Tenderer whose tender is accepted, shall be forfeited in full in case he does not remit the Initial Security Deposit within the stipulated period or start the work by the stipulated date mentioned in the award letter. The successful tenderer to whom the contract is awarded will have to deposit as initial security deposit of 2% of the value of accepted tender cost including the Earnest Money as detailed in clause No.46 of the General Conditions of the Contract.

The acceptance of a tender will rest with the Bank/Owner which does not bind itself to accept the lowest tender, and reserves to itself the authority to reject any or all of the tenders received without assigning any reason. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected. The Bank/Owner reserves the right to accept the tender in full or in part and the tenderer shall have no claim for revision of rates/other conditions if his tender is accepted in part.

- 13. All rates shall be quoted on the proper form of the tender alone.
- 14. Quoted rates and units different from prescribed in the tender schedule will be liable for rejection.

All taxes including Sales tax, work contract tax, or any other tax, any royalties, duties, levies, cess, entry tax, Octroi, profession tax, Sales Tax, purchase tax, turnover tax, or any other tax on material or finished work in respect of this contract shall be payable by the tenderer and the Bank/Owner will not entertain any claim whatsoever in respect of the same, and nothing extra shall be paid/reimbursed for the same subsequently.

- 15. Further the tenderer shall agree that until a formal agreement on stamp paper is prepared and signed, this tender shall constitute a binding contract between the tenderer and the Bank/Owner.
- 16. The tenderer, apart from being a competent Tenderer must associate himself with agencies of appropriate class who are eligible to tender for other related works connected directly or indirectly with the contract and employed by the Bank/Owner.

The Bank/Owner does not bind itself to accept the lowest or any tender and reserves to itself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.

Tenderer are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the site and dimensions, the means of access to the site, and obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. The Tender shall ensure that the proposed DG Sets shall be installed at the existing site conditions. Hence, the tenderers are advised to inspect the site carefully in this regard before quoting for the job.

A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and local site conditions and other factors bearing on the execution of the work.

- 17. All the competitive tenders will be received on the specified date and time. On the same day or on specified date & time in event of any compelling circumstances, the tenders will be opened in the presence of the available tenderer.
- 18. Both the envelope superscribed as "Technical Bid" and "Price Bid" will be simultaneously accepted, but the envelope superscribed as "Technical Bid" alone will be opened and details of EMD etc., shall be recorded, while the Price Bid shall be maintained in the safe custody of the Bank/Owner.
- 19. After the technical evaluation, if necessary after discussions with the tenderer, such of those tenderer found technically acceptable will be short listed and their envelope containing "Price Bid" shall be opened on a given date and time in presence of the short listed tenderers with prior notice to them. The tenderers are expected to attend the tender opening and their inability in participating will not in any way prevent the Bank/Owner undertaking the opening of the bids.
- 20. During the course of technical evaluation if found necessary the Bank/Owner / may seek supplementary price bids to bring the evaluation at par and any such price bids shall be prepared as stated in the tender and submitted in sealed envelopes superscribing "Supplementary Price Bid for the project of .....". Such supplementary price bid shall be opened simultaneously with the original price bid on the prescribed date and taken into consideration in its evaluation.

  Voluntary submission of the supplementary price bid by the Tenderer / tenderer shall not be

Voluntary submission of the supplementary price bid by the Tenderer / tenderer shall not be accepted and supplementary bids shall be limited to the details sought for by the Bank/Owner / only. Any other un-related price variations furnished in supplementary price bids shall not be recognised and might be liable for rejections if undue information are furnished.

In case of other un-successful tenderers, EMD shall be returned treating it individually. The Bank/Owner reserves the right to accept or reject any of the offer's without assigning any reason and no dispute or negotiation will be entertained in this regard. The Bank/Owner's decision will be final in the matter.





- 22. The notice inviting tender, general rules & instructions for the guidance of tenderers shall form a part of the contract document. The successful tenderer/Tenderer, on acceptance of his tender by the Accepting Authority, shall, within 14 days from the stipulated date of start of the work sign on a stamp paper the contract consisting of:
  - a) Standard form of Agreement on stamp paper.
  - b) Notice inviting tender, all the documents including tender, drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto. General conditions, Schedules leading to Technical Specification, Special Conditions, Technical Brochures in schedules submitted by the tenderer etc., Price Bid / Schedule Bill of Quantities.
- 23. The Tenderer shall take the measurement with Indian Bank's representatives and furnish all particulars and assistance in taking such measurement and calculations.
- 24. Final payment of the bill of the Tenderer will be made after the necessary completion certificate is issued by the Engineer Incharge.
- 25. The rates quoted in the tender shall include all charges of any tools and plants, railway freight, labour conditions and fluctuations in the rates, VAT, sales tax, excise duty and other taxes and shall be firm for the duration of the contract. No escalation in the rates will be allowed under any circumstance, time should be considered as the essence of the contract.
- 26. Income tax as well as work contract tax as applicable shall be detected from the bills.
- 27. In case of any dispute, the matter will be referred to the Assistant General Manager, (P&E), Indian Bank, Corporate Office, Chennai 600014.
- 28. For litigations, if any arising thereof, the competent court at Chennai alone will have jurisdiction.
- 29. For any item of work not covered above or any unforeseen items of work, payment will be made according to the rates as approved for similar nature of work and costing done by the Engineer or as per the current PWD / CPWD schedule or as per the analysis of materials costs including labour and 15% of profit to be supplied by the Tenderer.
- 30. All the items required for erection and commissioning of the DG Sets / materials shall be obtained from reputed dealers / stockiest. The Tenderer shall produce to Indian Bank copy of the original bills of material purchased for verification (if required).
- 31. The work should be done in coordination with the officials working at site. Preferably if necessary, the work can be undertaken during weekly holidays





**DG** Sets

### TECHNICAL SPECIFICATIONS FOR EQUIPMENTS

### Technical specifications for 15 kVA DG Set with Standard Control Panel & Climatic conditions:

The output of the DG set specified in tender shall be under the following climatic conditions and in conformity with CPCB approved type tests.

a) Outside maximum temperature 40 degree C b) Height above MSL 1000 Mt c) RH 50%

DG set should be type tested for noise and emission norms/ standards as per CPCB norms

### Diesel Engine:

The engine shall be the standard design of the original manufacturers. It should be 4-stroke, water cooled, naturally aspired/ turbo charged as per manufacturer standard, diesel engine developing suitable BHP for giving a power rating as per ISO 8528-Part-1 in kVA at the load terminals of alternator at 1500RPM at ambient temperature of 40 degree C for a height at 1000 Mt above MSL and 50% RH. The engine shall be capable of delivering specified prime power rating at variable loads for PF of 0.8 lag with 10% overload available in excess of specified output for one hour in every 12 hours. The average load factor of the engine over a period of 24 Hours shall be 0.85 (85%) for prime power output.

The engine shall be fitted with the following accessories subject to the design followed by the manufacturer.

- 1. Dynamically balanced flywheel
- 2. Necessary flexible coupling and guard for alternator and engine
- 3. Air cleaner
- 4. Electronic governor of class-A1 as per ISO 3046/BS 5514 with actuator. The governor shall be self contained unit capable of monitoring speed
- 5. Day fuel service tank with capacity of approx 150 liters fabricated from MS sheet with inlet, outlet connections, air vent tap, drain plug and level indicator, MS fuel piping from tank to engine with valves, unions, reducers, flexible hose connection, twin fuel filters and fuel injectors. The fuel tank shall be located inside the acoustic enclosure itself.
- 6. Dry exhaust manifold with suitable exhaust residential grade silencer to reduce noise level
- 7. Suitable self starter for 12VDC
- 8. Battery charging alternator unit and voltage regulator, suitable batteries, battery rack, interconnecting leads and terminals
- 9. Necessary gear driven oil pump for lubricating oil, priming of engine bearing as well as fuel systems as per manufacturer's recommendations
- 10. Naturally aspired/turbo charger
- 11. Lubrication oil cooler
- 12. Lubrication oil filters with replaceable elements
- 13. Crank case heater as per standards
- 14. Fuel injection system to minimize the fuel consumption
- 15. Fuel control solenoid
- 16. Fuel pump with engine speed adjustment
- 17. Electronic engine management control panel with following
  - a) Start/stop key switch
  - b) Lube oil pressure indication
  - c) Water temperature indication
  - d) RPM indication
  - e) Engine hours indication
  - f) Battery charging indication
  - g) Lube oil trip indication
  - h) High water temperature indication
  - i) Over speed indication
- 18. All moving parts of the engine shall be mechanically guarded in such a manner that a human finger cannot touch any moving part.
- 19. Radiator

का.का. / C.O. परिसर, व्यय एवं संपद्म जिलाग 20. Any other item not mentioned/specified but is a standard design of the manufacturer.

### Common bed plate:

Engine and alternator shall be coupled by means of flexible coupling and both the units shall be mounted on a common bed plate together with all axillaries to ensure perfect alignment of engine and alternator with minimum vibrations. The bed plate shall be suitable for installation on suitable anti vibration mounting system.

### Exhaust system:

The entire MS pipe used for exhaust piping shall conform to IS. The runs forming part of factory assembly on the engine flexible connections up to exhaust silencer shall be exclusive of exhaust piping item. The work includes necessary cladding of exhaust pipe work using 50mm thick glass wool/ mineral wool/ rock wool, density not les than 46 kg/M² and aluminum cladding of 0.8mm thick for the complete portion. The exhaust pipe work includes necessary supports, foundations etc to avoid any load and stress on turbo charger/ exhaust piping. The exhaust system should create minimum back pressure. No of bends should be kept minimum and smooth bends should be used to minimize the back pressure. Exhaust piping inside the acoustic enclosure shall be lagged with asbestos rope along with aluminum sheet cladding to avoid heat input to the room. Exhaust flexible shall have its free length when it is installed.

Class B MS pipes and along bends to be used. The exhaust outlets shall be in the direction of the prevailing winds and should not allow exhaust gases to enter air inlet/ windows etc When tail end is horizontal, 45 degree downward cut should be given at the end of the pipe to avoid rain water entry into the exhaust piping

### Air system:

It is preferred to provide vacuum indicator to indicate choked filter. Maximum air intake restrictions with clean and choked filters should be within prescribed limit as per manufacturer recommendation. Genset shall be supplied with medium duty air cleaner

### Cooling system:

System should be designed for ambient temperature of 40 degree C. Coolant should be mixed with additive in suitable proportion as per recommendation of engine vendor. Radiator fan flow should be free from any obstructions

### Fuel tank:

Fuel tank of capacity of approximately 150 liters shall be located at the bottom of the unit with provision for filling and fitted with gauge. The same shall be fabricated out of 3mm thick Hot Rolled sheet.

### Alternator:

TINDLAN

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संपद्य विषाग

Synchronous alternator, self excited, screen protected, self regulated, brush less alternator, horizontal foot mounted in single/ double bearing construction with following specifications.

Rated PF 0.8 Lag
Rated voltage 230V
Rated frequency 50 Hz
No of phases 1
Enclosure SPDP
Degree of protection IP-23

Ventilation Self ventilated, air cooled

Ambient temperature 40 degree C Max

Insulation class F/H

Temperature rise within limits of class F/H insulation

Voltage regulation +/- 1 %
Voltage variation +/- 5%

Over load duration / capacity 10% for one hour in every 12 hours continuous use

+/-1% (As defined by engine governor)

Frequency variation +/-1% (As d Excitation Self excited Type of AVR Electronic

**DG** Sets

Type of bearing and lubrication

Arrangement Anti friction bearing with grease lubrication Standard IS-4722, IEC-34, BS 2613/1970, IS 4889, BS 269 In the event of any fault due to over voltage/ high bearing temperature/ high winding temperature, or an external fault, the AVR shall remove the excitation voltage to the alternator. An emergency trip PB shall also be provided.

Performance: Voltage dip shall not exceed 20% of the rated voltage for any step load or transient load as per ISO: 8528 Part-1. The winding shall not develop hot spots exceeding safe limits due to imbalance of 20% between any two phases from no load to full load.

The generator shall preferably be capable of withstanding a current equal to 1.5 times the rated current for a period of not more than 15 seconds as required vide clause 14.1.1 of IS 4722:1992.

The performance characteristics of the alternator shall be as below.

a) Efficiency at full load 0.8 PF Not less than 90%

Less than 3%

b) Total distortion factor

1 hour in every 12 Hours of continuous use

c) 10% over loadd) 50% over load

15 seconds

Terminal box:

Suitable for terminating 1R 3.5x 50 Sq mm

Aluminum armored XLPE cables

Earth terminals

2 nos of earth terminals on opposite sides

Space heater

To be provided with on /off switch and thermostat

### Standard Automatic Mains Failure (AMF) Control Panel

Automatic Mains Failure panel will a floor mounting free standing panel to be kept in the electrical control room close to the DG set. Panel shall be made up of CRCG, 14/16 Swg panel with door, painted with Siemens gray with copper busbar of suitable rating. This panel will be equipped with following.

Set of air break contactors mechanically and electrically interlocked of suitable rating to suit the capacity of the DG set; Set of 2/4 pole 100A MCCBs to suit the rating of the DG set with front operating handle and door interlock, Electronic timer, AMF logic micro processor, Annunciation facia with test, acknowledge push buttons, Auxiliary relays as required, Battery charger, Electronic meters for AC voltage, AC current, KWH meter, PF meter, DC ammeter and voltmeter, frequency meter, Electronic hooter etc., with necessary wiring

### AMF Panel for 15kVA Diesel Generator:

- Single Phase
- Automatically Start the Generator when the Main Fails.
- Automatically Stop the Generator when the Main is restored.
- Automatically changes the lines from Main to Gen. & Vice versa.
- Changing over to Main line with the delay. (Programmable).
- Genset stop with the further delay. (Programmable)
- Manual Start & Stop Switch.
- Auto LLOP (Low Lube Oil Pressure) Cutoff protection.
- ➤ High Water Temperature protection.
- Auto/Manual Selector available.
- Auto delay in start of genset.
- Buzzer-alarm annunciation for "fail to start".
- > LED indications for Main On, Gen. On, LLOP, HWT & fail to start.
- 4 switch control to start and stop genset.
- > IP outdoor application

Starting battery

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The AH capacity of starting battery shall be approx 130Ah at 24/12V DC (Note: capacity shall be as per manufacturer recommendation). Batteries supplied with DG set shall be dry and uncharged. The same shall be charged by authorized people before same is connected to DG set. Initial charging shall be done for 72-80 hrs. The batteries shall be placed on stands and relatively cool place inside the acoustic enclosure.

### **Installation:**

### The DG set is to be installed at the space allocated by the purchaser

### Acoustic enclosure:

The acoustic enclosure shall be designed and manufactured confirming to relevant standards suitable for outdoor installation exposed to weather conditions, and to limit overall noise level to  $75 \, \mathrm{dB}$  ( A ) at a distance of 1 Mt from the enclosure as per CPCB norms under free field conditions.

The construction should be such that it prevents entry of rain water splashing into the enclosure and allows free and quick flow of rain water to the ground in the event of heavy rain. The detailed construction shall confirm to details as under.

The enclosure shall be fabricated out of CRCA sheet of thickness not less than 1.6mm on the outside cover with inside cover having not less than 0.6mm thick perforated powder coated CRCA sheet.

The hinged doors shall be made from not less than 16 SWG (1.6mm) thick CRCA sheet and will be made airtight with neoprene rubber gasket and heavy duty locks.

All sheet metal parts should be processed through 9-tank process. The enclosure should be powder coated. The enclosure should accommodate the daily service fuel tank. There should be a fuel gauge which should show the level of fuel even when DG set is not running. The gauge should be calibrated. The fuel tank should be filled from outside provided with a lockable cap. The batteries should be accommodated in the enclosure in the rack.

The canopy should be provided with high enclosure temperature safety device. The acoustic lining shall be made of high quality insulation material like glass wool/ mineral wool/ rock wool with minimum of 50mm thick and 75 Kg/cubic mt for sound absorption as per standard design of manufacturers to reduce the sound level as per CPCB norms. The insulation material shall be covered with fine glass fiber cloth and would be supported by perforated MS sheet duly powder coated.

The enclosure shall be provided with suitable size and number of hinged type doors along the length of the enclosure on each side for easy access inside the acoustic enclosure for inspection, operation and maintenance purpose. Sufficient space will be provided inside the enclosure on all sides of the DG set for inspection, easy maintenance and repairs.

### Testing:

### **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)

### At the Factory test bed:

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The Tests Conducted at the Factory shall be furnished for our verification.

The Generator offered by the Tenderer should be tested for 24 hours at the factory at different load conditions which includes 100% load and 110% load for one hour in every 12 hours of test run as per BS 5514 standard. And Report should be submitted to the Bank

### At the Purchaser 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 for 2 days.

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 devises 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.

### **Commissioning:**

The tenderer shall prepare necessary drawings/tests and test reports for approval by CEA, and obtain approval from them. On receipt of approval from CEA, 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 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 measures:

All equipments shall incorporate suitable safety provisions to ensure safety of the operating personnel as per manufacturer's standard practice.

### Statutory clearances:

Approval/ clearance of the complete installation shall be obtained by the contractor from CPCB/State pollution control board/ Local bodies/ CEIG / CEA / other licensing authorities like TNEB / TANGEDCO. However the application shall be made by the client in consultation with contractor and necessary fee shall be paid by them (contractor).

### Guarantee:

All equipments shall be guaranteed against unsatisfactory performance and/ or break down due to defective design, workmanship or material for a period of 24 months from the date of taking over the installation by client. The equipments or components or any part thereof, so found defective during the guarantee period shall be forthwith repaired or replaced free of cost to the entire satisfaction of the client.

### **UG** cables:

The UG cables shall be 1.1 Kv grade aluminum 3.5x 35 Sqmm conductor steel armoured with XLPE insulation and PVC sheathing Laying:

The cables shall be uncoiled from the drum and laid in straight length so as to avoid sharps on the conductor. The cables should be laid along wall / ceiling in the best workmanlike manner, so as to give a



neat appearance. Excessively sharp bends to the cable shall be avoided.

### Stripping of outer covering:

While cutting and stripping the outer covering of the cables, care shall be taken to see that the sharp edge of cutting instrument does not damage the PVC insulation of the conductors. The insulation shall be stripped off near the connection terminals as far as possible taking care again to see that the conductor is not damaged.

### End termination:

The connecting terminals of the armored and unarmored cable shall be terminated on the switch board etc., by using proper size brass/alloy supporting glands. In case of armored cables, the armored cables shall be supported into the gland and connected to the earth as per conventional practice. Terminations at both ends shall be made with crimping type copper cable lugs.

### Cables laid in trench:

All underground cables shall be routed through PVC pipes laid in the excavated trenches.

### Earthing

Earthing of the equipments shall be carried out as per IS-3043-1987.

Earthing as per the ISI specification with an earth electrode of 2.1 mtr class 'B' GI pipe of dia not less than 40mm, with copper earth plate of size 125mm x 50mm x 6mm with necessary funneling arrangements with necessary masonry work and with 40mm RCC cover / CI cover slab for the brick masonry.

Plate Earthing with copper plate size 600X600 X 3 mm as per the ISI specification with an earth electrode of 2.1 mtr class 'B' GI pipe of dia not less than 40mm, with copper earth plate of size 125mm x 50mm x 6mm with necessary funneling arrangements with necessary masonry work and with 38mm RCC cover slab for the brick masonry.

The electrode shall be installed in a bore of dia 100mm and 3000mm deep and shall be filled with back filling compound mixed with excavated soil. Terminal arrangement for bolting external conductor to be provided with plate and spring washers; Soil conditioner with moisture retaining back fill compound after the installation. The contractor/ electrode vendor shall measure the resistance of electrode and the value should be below 1 Ohm. The earth resistance measured shall be below 3 ohms. (2 nos for DG body and 2 nos for DG neutral). An RCC trough shall be constructed with a heavy duty RCC cover to protect the electrode from external disturbances.

### **Drawings and Manuals**

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

- 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
- 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
- One sets of operation and maintenance manuals for the each of the DG sets and auxiliaries shall be submitted to Employer.

One set of operating tool kits shall be submitted to the Employer for each of the DG sets



## GUARANTEED TECHNICAL PARTICULARS (GTP) FOR 15 kVA GENERATOR SET (Details to be furnished by the tenderer)

Sl. No.	Description	Specification	
1.	Generator kVA Rating / Model No.	15 kVA /	
	Engine		
2.	Make		
3.	Model No.		
4.	BHP Output		
5.	Cooling		
6.	Aspiration		
7.	No. of Cylinders		
8.	RPM	1	
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		



**DG** Sets

Sl. No.	Description	Specification
	Alternator	
28.	Make and Model No.	
29.	Туре	
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.	Туре	
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 deatils	
LAN CAME	a. Engine starting time b. 24 hour running at different loads which includes 100% load and 110 %load for one hour in every 12 hours of test run as per BS 5514 standard. c. Fuel consumption test d. 1 hour running at full load e. 1 hour running at ¾ load	
or apetral Z.	Over Speed Test TEST ON CONTROL PANEL	
3.	a. Insulation resistance test	

**DG** Sets

	b. High voltage withstand test	
	c. Functional and operation test	
	d. Secondary injection test on meters &	
ľ	relays	
	e. Mechanical test on components	
	TEST ON ALTERNATOR	
	TCs to be furnished	
	a. Insulation measurement	
	b. High voltage test on rotor and stator	
	windings	
	c. Temperature rise test (test cert.	
	review)	
4.	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	
	TEST ON EXCITATION SYSTEM	
	TCs to be furnished:	
_	a. High voltage test on windings	
5.0	b. Measurement of stator & rotor	
	resistance	
	c. Response test	
	d. Open Circuit magnetisation test	
6.	TEST ON VOLTAGE REGULATOR:	
0.	a. Sensitivity test	
	b. Response time test GENERAL	
	51 1 2 1	
7.	a. Dimensional Check b. Bill of Material	
	c. Checking of Assembly as per GA	
	TEST ON ASSEMBLED SET:	
	a. No load Test	
	b. Load Tests at different loads for	
	Specific Fuel Consumption	
8.	c. Sound and Vibration measurement Test	
0.	at different loads	
	d. AVT / Governor response Test	
	e. Overspeed Test	
	f. Load Throw-off Test	
9	AMF Control Panel	
9.1	Make	
0.0	T	
9.2	Type	
0.0	O11 1'' // D T	
9.3	Overall dimensions (L x B x H)	
0.1	T2: 1.1	
9.4	Finish	
0.5	G1 4 4.1	
9.5	Sheet metal size	
0.6	Make and type of contactors / circuit	
9.6	breakers	
Equ.		
kg 17917	Make and type of instruments	
WARG Z	M.114	
9.8	Make and type of switch fuse units	
- B. B.	Other facilities incorporated	
O P	•	





### LIST OF PREFERRED MAKE OF MATERIALS

1. Alternator : Kirloskar / Stamford / Leroy Somer / Crompton Greaves

2. Engine : Escort / TATA/ Kirloskar Greens / Eicher

Cummins / Baudouin / Ashok Leyland / Perkins / MTU /

Catterpillar

3. ACB : L&T / Siemens / Merlin Gerin

4. Contactors & Relays : L&T / Siemens / Merlin Gerin

5. Control Wires, etc. : ATLAS / Finolex / Powerflux / Polycab

RR Cables

6. Meters : Cadal / Rishiba / AE / Schneider

7. Push Button / Selector Switches : L&T / Essen / Vaishnav

8. Armoured Cables : Polycab / CCI / Finolex / Universal /

9. Batteries : Exide / Amron / OEM recommended make

10. MCB/MCCB : Schneider / L&T / Siemens / hager



### FINAL CHECK LIST FOR SUBMISSION OF TENDER BY THE BIDDERS

SL.NO	DESCRIPTION OF ENCLOSURES	STATUS
01	EMD for Rs. 11,000/- in the form of DD in favour of Indian Bank	YES / NO
02	MSME Certificate if applicable	YES / NO
03	Tender declaration in bidders Letter Head	YES / NO
04	Cover – 1: Technical bid in separate cover with EMD & Tender Fee (i.e Technical bid and un-priced bid sealed and signed) with necessary enclosed in support of Eligibility Criteria.	YES / NO
05	Cover – 2: Price Bid in separate cover	YES / NO
06	Cover – 3: Cover-1 & 2 sealed in this cover	YES / NO
07	Work order copies as per eligibility criteria Sl.No.2 along with completion certificate	YES / NO
08	Copy of P&L Statement for the last 3 years ending 31.03.2021	YES / NO
09	Copy of GST Certificate	YES / NO
10	Copy of Certificate of Incorporation	YES / NO
11	Copy of EA Grade license Certificate	YES / NO
12	MAKE List of all Equipments / Materials to be supplied under the Successful Bidder or Tenderer as per terms of tender	YES / NO
13	Technical Data Sheet of all Equipments / Materials as per terms of tender	YES / NO
14	Completely filled the bidder details in Appendix VII	YES / NO
15	Guaranteed Technical Particulars (GTP) of 15kVA	YES / NO

### ΛΛΛΛΛΛ



## INDIAN BANK, CORPORATE OFFICE,

No.254 - 260, Avvai Shanmugam Salai, Royapettah, Chennai - 600 014.

Ph: 044-28134401/4308

PART II: PRICE BIL
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Supply Installation, Testing and Commissioning of 1no. 15kVA Diesel Generator Sets under buyback of old Diesel Genset (1no.7.5kVA) at Indian Bank's Premises at No.70, Oliver Road, Mylapore, Chennai - 600 004

### **ISSUED TO**

M/s.

(This document contains 05 pages)



इंडियन वेंक 🥋 Indian Bank

# CORPORATE OFFICE,

PH: 044-28134401/4308 NO.254-260, AVVAI SHANMUGAM SALAI, ROYAPETTAH, CHENNAI - 600 014.

Bill of Quantities for Supply Installation, Testing and Commissioning of 1no. 15kVA Diesel Generator Sets under buyback of old Diesel Genset (1no.7.5kVA) at Indian Bank's Premises at No.70, Oliver Road, Mylapore, Chennai - 600 004

## PART II - PRICE BID

50	13	PARTICHLARS	OTV	TINII	Si	Supply (Rs)	Inst	Installation (Rs)	Total Amount
	OFFICE OF		÷		RATE	AMOUNT	RATE	AMOUNT	(Ks)
	-	Supply, installation, testing and commissioning of 15 kVA / 12kW, 230V 50Hz DG set (latest CPCB norms) with Standard control panel, acoustic enclosure, fuel tank, starting battery, battery charger and other accessories, including all control cables / sensing cables including terminations as required etc., to be erected on a concrete platform. The Dg set shall confirm the technical specifications mentioned in the tender and cost shall include unloading and positioning etc., as required to complete the job		No					
AND THE PROPERTY OF THE PROPER	a l	Supply, installation, testing and commissioning, standard Automatic Mains Failure (AMF) Control Panel with necessary wiring / power & control cables / breakers. Power and control cables between Genset to AMF and to EB metering panel with necessary end termination etc., to complete the iob.	-	Job					
संपद्ध विकास	ğı	EXHAUST SYSTEM:							

Total Amount	(Ks)							-		
Installation (Rs)	AMOUNT									
Inst	RATE									
Supply (Rs)	AMOUNT									
S	RATE									
UNIT		Mts		nos.	Mtrs.		qoi	Mtrs		mtrs
OTY		5		4	40		1	20		20
PARTICULARS		Supply & installation of suitable size exhaust pipe of MS with Al. cladding, bends; Insulation and aluminium cladding for exhaust pipe / Silencer with necessary exhaust pipe / turbo charger supports with MS and painting with 1 coat of red oxide & 2 coats of enamel paint.	EARTHING	Supply & Installation of / Providing GI pipe earth pit with necessary civil works as per BIS (2Nos Body earthing & 2 Nos Neutral Earthing) and as per inspectorate norms	Supply & laying of 8 SWG Copper cable for Neutral and Body earth interconnection.	CIVIL	A PCC foundation of Concrete mix M-20 grade with a depth of 200mm below ground and 300mm above ground for placing the DG set with acoustic enclosure. The length and breadth of the foundation shall be 250mm more than the size of the enclosure. After preparing the foundation the same shall be checked diagonally as well as across the length for even flatness.	Supply & Laying of 63 mm dia HDPE pipe from DG set to AMF panel (near EB Panel) and to EB Metering boards, including removing the existing tiles / floor and relaying the same to match the existing flooring level and without disturbing other walkway. The damage if any to the structure should be made good by the contractor at their cost.	SITC of POWER CABLING AND TERMINATION	Supply & laying of 4C x 35sq.mm AL armoured Power cable from DG set to AMF

4

4.1

3.2

3.1

3

SL.No

4.2

्रहे.स. १८०. दिस्त, व्यय पर्व संपद्म विश्वाम premises, Expendium

5.1

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Total Amount	(Rs)				2:								Page 4 of 5
Installation (Rs)	AMOUNT												
Inst	RATE												Α
Supply (Rs)	AMOUNT												
ns	RATE												
LIND			Set		No		No				job		Set
OTY	, y		4		1		П				1		-1
PARTICILARS		and to EB panel	Supply & Installation of Cable End Termination for 4C x 35sq.mm	Fire Extinguisher	Supply and installation of CO2 fire extinguisher 2.5 Kg capacity near the DG set	SITE TRIAL RUN & SUBMISSION OF REPORT	Trial run of 15kVA DG set with consumables (including first charging of lubricating oil & necessary fuel) for 8 hrs with variable load. for 2 days and submission of site test report and training of site personnel for operation of genset	SUBTOTAL - I (SUPPLY + INSTALLATION) Exclu GST	MISC ITEM	APPROVAL FROM CEIG / CEA	Preparation of necessary drawings for DG set approval by Chief Electrical Inspector to Government / CEA, obtain approval for the same, arrange for the inspection by the Electrical Inspectorate / CEA Officials and obtain safety certificate from them for commissioning the DG set.	SUBTOTAL-II (Exclu GST)	Buy back value for existing old 7.5 kVA DG set and Dismantling of the existing DG Set room such as brick wall (4nos), RCC roof etc., acoustic, power cabling, earthing, exhaust piping, AMF panel / transportation etc. disposing of debris as per Chemai Corporations norms and cleaning the site as required to install new genset.  (inclusive of all taxes & duties)
N.			5.2	0.9	6.1	7	7.1				<b>∞</b>		6

Page 4 of 5

SL.No	PARTICULARS	OTY	UNIT	Š	Supply (Rs)	Inst	Installation (Rs)	Total Amount
		į		RATE	AMOUNT	RATE	AMOUNT	(Rs)
	SUBTOTAL-III							
	TOTAL A = (I+II)-(III)- Exclu GST							
10	ANNUAL MAINTENANCE CONTRACT for 2 years. (to be considered for Tender Evaluation purposes)							
	Scope of AMC: AMC shall include supply of required Lubricating oil, greasing, oiling, replacement of filters viz., Air filter, Oil filter, Fuel filter, etc. as specified by the manufacturer from time to time, at periodical intervals of once in a year for every 300 hours of running / as per manufacture recommendations. This includes all the consumables/ materials required for conducting the AMC checks as prescribed by the manufacturer from time to time.							
= (	AMC for 2 years which includes all the consumables/materials/checks / oil service etc., as prescribed by the manufacturer from time to time.	1	Job					
## pan had 22%	SUBTOTAL – B (Exclu GST)  TOTAL (C = A + B) - Excluding GST							
A Estis Dept.	GST (D)							

Authorized Signatory Seal with Signature Page 5 of 5 Date:

GRAND TOTAL (Inclu GST) E = C + D

(Amount in words inclusive of GST)