

Tender ID AMR201912007
Date 05/12/19

# SBI INFRA MANAGEMENT SOLUTIONS PVT. LTD., (SBIIMSPL),

(WHOLLY OWNED SUBSIDIARY OF SBI)

#### **AMARAVATI CIRCLE OFFICE**

#### **INVITES e-TENDERS ON BEHALF OF**

# STATE BANK OF INDIA

# THROUGH E-TENDERING PROCESS

#### **FOR**

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 1 X 125 KVA DIESEL GENERATOR SET & ALLIED ELECTRICAL WORKS AT SBILD, MACHILIPATNAM, KRISHNA DISTRICT, ANDHRA PRADESH (SBI Code: 07858)

Manufacturers/ Authorized dealers of reputed brands are only eligible. (Bidder should submit proof of the same)

Note: Firm should possess valid digital signature for this tender

Last date for submission of e-Tender: 3:00 P.M. (IST) on 19.12.2019

Opening of e Tenders: 3:30 P.M. (IST) on 19.12.2019

The Vice president,
SBI Infra Management Solutions Pvt. Ltd.
Amaravati Circle Office
2<sup>nd</sup> Floor, SBI Amaravati LHO Building,
Gun foundry, Abids
Hyderabad – 500 001
Ph: 040-23387364, 365

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# **NOTICE INVITING TENDER (NIT)**

SBI Infra Management Solutions Pvt Ltd. Invites Online e tenders on behalf of SBI for the below mentioned work from the *Manufacturers/ Authorized dealers of reputed brands are only eligible.* (Bidder should submit proof of the same).

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1	Name of the work	SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 1 X 125 KVA DIESEL GENERATOR SET & ALLIED ELECTRICAL WORKS AT SBILD, MACHILIPATNAM, KRISHNA DISTRICT, ANDHRA PRADESH (SBI Code: 07858)	
2	Cost of Tender Documents	1) Rs 1,000.00 /- (Non-refundable) to be paid through SB Collect Payment Portal (in account of respective Tender ID mentioned above) available in SBI internet banking site https://www.onlinesbi.com/.	
		<b>2)</b> Proof for crediting the amount i.e. Receipt / Unique Reference No. should be enclosed along with EMD.	
		For further details see Page No. 8, clause 5 in "Instructions to the Tenderer".	
3	Date and Time where tender forms are available	Available from <b>05.12.2019</b> to <b>19.12.2019</b>	
	tonasi isimis are avallabis	at (i). https://etender.sbi/ (ii). SBI Procurement news.	
4	Time and last date of submission of online e- Tender	Up to 3.00pm on 19.12.2019	
5	Place, Time& Address for submission of e tender/contact person /telephone no/email address.	A) Tender documents (as specified) through online at https://etender.sbi/	
	audiess.	B) EMD, Tender fees credit proof physically at the Address:	
		SBI Infra Management Solutions Pvt. Ltd. Amaravati Circle Office	
		2 <sup>nd</sup> Floor, SBI Amaravati LHO Building, Gun foundry, Abids,	
		Hyderabad – 500 001 Ph: 040-23387364, 365	
		e- mail id: headand.sbiims@sbi.co.in	
6	Date, Time and Place of opening of e - Tenders	On 19.12.2019 at 3:30 PM	
		SBI Infra Management Solutions Pvt. Ltd. Amaravati Circle Office	
		2 <sup>nd</sup> Floor, SBI Amaravati LHO Building,	
		Gun foundry, Abids, Hyderabad – 500 001	
		Ph: 040-23387364, 365 email id: <b>headand.sbiims@sbi.co.in</b>	
7	Quantum of Earnest Money	Rs. 9,000.00 /- (DD-Drawn in favor of SBI Infra Management	
8	Deposit (EMD).  Quantum of Security	Solutions Pvt. Ltd. payable at Mumbai)  1. Initial Security Deposit (ISD) – 2% of the Tender value	
	<u> </u>	,	

	Deposit (SD).	including EMD.  2. Retention Money- Deductible in running bills @ 10% of the value of work and Total deductible is 5% of value of work including EMD, ISD.	
9	Estimated cost	Rs. 8,80,000.00 /-	
10	Terms of payment of Bills	1. No Advance will be paid	
11	Penalty clause/Liquidated Damages	@ 0.5% of the value of work per week of delay subject to a maximum penalty of 5% of the value of work would be strictly imposed.	
12	Stipulated time for completion of the work/supply.	FOUR WEEKS	
13	Validity period of the tender.	90 days from last date for receipt of tender	
14	Eligible Taxes	A) Income Tax will be deducted at source as per Govt. Guidelines.  B) Reimbursement of GST will be made only on submission of proper GST invoice as per applicable GST provisions/Rules. The contractor should comply with the following;  ◆ Contractor should have GST Registration Number.  ◆ Invoice should specifically/separately disclose the amount of GST levied at applicable rate as per GST provisions/Rules.  ◆ In case of Correction in the bills after scrutiny, contractor should submit fresh bills for payment.  ◆ Contractor should timely file his GST return in accordance with GST provisions to enable the bank to claim the credit of GST paid to the contractor.  ◆ The GST Number of State Bank of India are For Andhra Pradesh state-37AAACS8577K1ZO For Telangana State -36AAACS8577K1ZQ For Puducherry U.T -34AAACS8577K1ZU	
15	Electronic Payment	Electronic payment shall be preferred. All the contractor must furnish contact details for communication in addition to,  1) Name of their bank 2) Name of their branch 3) Account number 4) Name of the account holder as in the bank account 5) IFSC No of the branch 6) PAN number.	
16	For further Clarifications on Technical matters & Agency for arranging etender/online bidding	1. All e-Tender/Online bidding related issues, e-Procurement Technologies Limited, Ahmedabad. Primary Contact Numbers: - Ms. Shubhangi Banodiya, Contact No.:- 079-68136826/6824/6868, +91-9879996111, Email: shubhangi@auctiontiger.net  Sujith Nair: - 079-68136857, sujith@eptl.in JaymeetRathod:07968136829,jaymeet.rathod@eptl.in Vinayak Khambe: - 079-68136835, vinayak.k@eptl.in Nadeem Mansuri: - 079-68136853, nadeem@eptl.in Nandan Valera: - 079-68136843, nandan.v@eptl.in Hemangi Patel: - 079-68136852, hemangi@eptl.in Kanchan Kumari: - 079-68136820, kanchan.k@eptl.in	

		Deepak Narekar: - 079-68136863, deepak@eptl.in	
		Anshul Juneja:- 079-68136840, anshul.juneja@eptl.in	
		Salina Motani: - 079-68136831, salina.motani@eptl.in	
		Devang Patel: - 079-68136859, devang@eptl.in	
		Alternate Contact No.: - Mr. Samjad khan, Contact No.: - 079-	
		68136868, +91-9265871720, Email: samjad@auctiontiger.net	
		2 All tachnical matters contact	
		2. All technical matters contact,	
		Sri. A. Devarajan, AVP(Electrical), +91-9676950049.	
		Sri. A. Rajasekhar, AM(Electrical), +91-9674710679.	
17	Defect Liability Period/	One years from date of Virtual Completion	
	Warranty period.		
18	Any additional Information	The quoted rate should be inclusive of materials, labour,	
		wages, fixtures, transportation, installation, all taxes	
		(excluding GST), wastage's, Octroy, machinery, temporary	
		works such as scaffolding, cleaning, overheads, profit,	
		statutory expenses, incidental charges and all related	
		expenses to complete the work	

- ♦ Any clarifications sought after opening of the tenders will not be entertained at any cost. Firm should visit the website till last date of submission for changes/ corrigendum if any.
- ♦ In case the date of opening of tenders is declared as a holiday, the tenders will be opened on the next working day at the same time.
- ♦ The SBIIMS reserves the right to cancel or postpone the tenders at any stage without assigning any reason, thereafter.

For and behalf of State Bank of India, VICE PRESIDENT, SBIIMSPL, AMARAVATI.

#### MANDATORY / CHECKLIST DOCUMENTS

#### TO BE SUBMITTED BY BIDDER

Bidder has to upload the following documents in the Technical Bid Section which is mandatory.

- ✓ Scanned copy of Tender Fees / Cost credit proof must be uploaded and physically the same needs to be submitted at given address within due date of tender.
- ✓ Scanned copy of D.D/B.C of EMD must be uploaded and physically the same needs to be submitted at given address within due date of tender.
- ✓ Scan copy of declaration copy duly signed by the respective bidder to be uploaded.
- ✓ Manufacturer authorized Dealership certificate/letter for dealership proof (of brand to be supplied) should be uploaded.
- ✓ GST Registration certificate & PAN.
- ✓ Firm Registration / License certificate with registered address in Andhra Pradesh pertaining valid address proof.
- ✓ Purchase/work order (minimum 3 Nos.) copies issued by any Govt. / Semi Govt. / PSU Organizations within last 5 years (as mentioned in page No.8 clause 4.2).
- ✓ DG specifications (to be supplied by bidder) or leaflet catalogues of all type of accessories (like Alternator, Engine, AVR, AMF Panel ..etc.) separately(individually) self-attested by bidder (Annexure-III)
- ✓ Annexure-I & II duly filled up & signed by respective bidder.
- ✓ P&L Statements/Audited turnover statements of last three years for proof of average turnover (as mentioned in page No.8 clause 4.2).
- ✓ Scan copies of Satisfactory performance certificates given by any Govt./PSUs/Semi Govt. organization for similar kind of works done within last 5 years.
- ✓ The signed and scanned copy of entire tender document in pdf format which is downloaded from https://etender.sbi/.

All the photocopies of mandatory checklist documents should be sent through courier/registered post to the SBIIMSPL, Amaravati Circle Office and also scan copies should be uploaded in https://etender.sbi/.

#### INSTRUCTIONS TO THE TENDERER

#### 1.0 NAME OF WORK

Sealed Tenders are invited by M/s SBIIMSPL for and behalf of State Bank of India for the work of SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 1 X 125 KVA DIESEL GENERATOR SET AT SBILD, MACHILIPATNAM, KRISHNA DISTRICT, ANDHRA PRADESH (SBI Code: 07858)

#### 1.1 SITE AND ITS LOCATION

The proposed work is to be carried out at: State Bank of India,

SBILD Machilipatnam, Opp. Lakshmi Talkies, Machilipatnam, Krishna District.

Andhra Pradesh - 521002.

#### 2.0 TENDER DOCUMENTS

2.1 The work should be carried out strictly according to the conditions stipulated in tender consisting the following documents and the most workman like manner,

Instructions to tenderer
General Conditions of Contract
Special Conditions of Contract
Additional Conditions for Electrical Installation
Technical Specifications
Drawings
Priced Bid

2.2 The above documents shall be taken as complementary and mutually explanatory of one another but in case of ambiguities or discrepancies, shall take precedence in the order given below .

Price Bid
Technical Specifications
Additional Conditions for Electrical Installation
Special Conditions of Contract
General Conditions of Contract
Instructions to Tenderer

- 2.3 Complete set of tender documents including relative drawings can be obtained/downloaded from the
  - (i). <a href="https://etender.sbi/">https://etender.sbi/</a>
  - (ii). SBI Procurement news

on any Day during the period mentioned in the NIT.

2.4 The tender documents are not transferable.

#### 3.0 SITE VISIT

3.1 The tenderer must obtain himself on his own responsibility and his own expenses all information and data which may be required for the purpose of filling this tender document and enter into a contract for the satisfactory performance of the work. The Tenderer is requested satisfy himself regarding the availability of water, power, transport and communication facilities, the character quality and quantity of the materials, labour, the law and order situation, climatic conditions local authority's requirement, traffic regulations etc.; The tenderer will be fully responsible for considering the financial effect of any or all the factors while submitting his tender.

3.2 The tenderer should visit the site to ascertain the working conditions and local authority regulations / restrictions if any and other information required for the proper execution of the work. The work should be carried out at any floor.

#### 4.0 TENDER EVALUATION

#### 4.1 Submission of Bids/Tender:

Tenders should be submitted online in the website <a href="https://etender.sbi/">https://etender.sbi/</a>. The tender shall be submitted online in two parts, viz., Technical Bid and Financial/Price Bid with acceptance of Tender Conditions. In addition, scanned copies of required (as mentioned in NIT) Mandatory checklist documents should be submitted online with help of our service provider on the website at <a href="https://etender.sbi/">https://etender.sbi/</a>. The tender document is not required to be sent to us in hard copy.

#### 4.2 Technical bid

The list of documents, which are mandatory & specified in Tender Notice are to be furnished by the bidder. Only Technical Bids of those contractors, who submit the earnest money in the prescribed manner, will be opened. All Technical bid documents will be verified at the tender opening time specified in Notice Inviting Tender.

# Eligible criteria:

- 1. Technical bids of bidders whose EMD was not received physically, will not be opened.
- 2. If the Bidders failed to submit the listed mandatory documents, they will be disqualified.
- 3. Tender documents found partly or fully modified / altered/ corrected etc. shall stand summarily rejected.
- 4. Scan copies of Purchase/ work orders undertaken during last 5 years with Government Department/PSU's/Semi Govt. organizations :

Three similar completed works each costing not less than the amount of Rs. 3.6 lacs

UK

Two similar completed works each costing not less than the amount of Rs. 4.5 lacs

OR

One similar completed work costing not less than Rs. 7.20 lacs

- 5. P&L Statements/Audited turnover statements of last three years for proof of average turnover shall not be less than Rs. 30,000.00
- 6. Only Manufacturers/ Authorized dealers of SBI approved makes/ brands are eligible to participate.

Financial bids of those bidders who qualified in technical bid will only be opened. Any clarifications sought after opening of the tenders will not be entertained at any cost. If any bidder submits false/fake document, they will be banned from doing work in SBI.

#### 4.3 Financial bid

The rates to be quoted in Financial Bid should be in Indian Rupees and excluding GST. The rates are summed up automatically in the SBI e-Tender portal. The rates quoted by the Bidder will be validated/scrutinized by committee and compared to market price for adaptability. The lowest total rate quoted will be considered for award of work.

The Bank/SBIIMS will not be bound to accept the lowest tender and reserves the right to accept or reject any or all the tenders without assigning any reason whatsoever.

#### 5.0 TENDER FEES / COST OF TENDER DOCUMENTS

The Tender Fees as mentioned in Notice shall be paid through "SB Collect" Payment Portal available in SBI internet banking site <a href="https://onlinesbi.com/">https://onlinesbi.com/</a>.

For Tender Fees Payment process follow the below mentioned steps,

- 1. Tenderer needs to use SBI internet banking site i.e. <a href="https://onlinesbi.com/">https://onlinesbi.com/</a> and select SB Collect from the Task bar / Top menu bar for quick access.
- 2. Go through the "**Terms used**" in the home page of State Bank Collect and click on "**Proceed**" button after accepting terms & conditions.
- 3. Select "All India" in State of Corporate / Institution & select "Commercial Services" in Type of Corporate / Institution. Click on "Go" button below shall lead to next page.
- 4. Select "SBI Infra Management Solutions" in Commercial Services Name and click on "Submit" button below for proceed to next page.
- 5. In Select Payment Category opt for "**Tender Application Fee**" & Enter Tender ID exactly as mentioned above in Tender Notice. Click on "**Submit**" button below to proceed to next page.
- 6. The next page shall be ready with few of the Preloaded Tender details such as Tender ID, Tender name, Opening date, End date...etc., remaining blank details to be filled up by tenderer.
- 7. Tenderer have to fill up the fields properly whichever mentioned and complete the payment process through portal.
- 8. After completing the payment, a receipt will be generated with a **Unique Reference No.** A copy of receipt to be send to SBIIMSPL, Amaravati Office address (mentioned in NIT) along with EMD and same to be uploaded online in technical bid.

Tenderer have to pay the tender fee within stipulated time as given in Notice. Tenders uploaded without Tender Application fees shall be rejected summarily. For any Clarification, Contact the SBIIMSPL representative / SBIIMSPL Circle Office as mentioned in NIT.

#### **6.0 EARNEST MONEY DEPOSIT**

- 6.1 The tenderer is requested to submit the Earnest Money (as mentioned in NIT) in the form of Demand Draft or Banker's Cheque in favour of State Bank of India drawn on any Bank in India.
- 6.2 EMD in any other form other than as specified above will not be accepted. Tender not accompanied by the EMD in accordance with clause 4.1 above shall be rejected.
- 6.3 No interest will be paid on the EMD.
- 6.4 EMD of unsuccessful tenderer will be returned within 30 days of award of Contract.
- 6.5 EMD of successful tenderer will be returned after submission of security deposit.

*Forfeit of EMD:* The EMD will be forfeited under the following conditions:

- (a) If the tenderer withdraws or amend, impairs or derogates from the tender in any respect within the period of validity of the tender.
- (b) If the bidder withdraws the bid before the expiry of the validity period of 90 days of the bid or within the time frame of extension given by SBI in special case communicated before the expiry of the bid.

- (c) If the bidder fails to comply with any of the provisions of the terms and conditions of the bid document.
- (d) If the selected bidder fails to execute agreement in prescribed format and furnish the Bank Guarantee within the prescribed time.

#### 7.0 INITIAL SECURITY DEPOSIT

The successful tenderer will have to submit a sum equivalent to 2.5% of contract value less EMD by means of D/D drawn in favour of State Bank of India within a period of 15 days of acceptance of tender.

#### **8.0 SECURITY DEPOSIT**

8.1 Total security deposit comprise of:

Earnest Money Deposit Initial Security Deposit Retention Money

and shall be 5% of contract value. Out of this 2.5% of contract value is in the form of initial security deposit which includes the EMD. Balance 2.5% shall be deducted from the running account bill of the work at the rate of 10% of the respective running account bill i.e. deduction from each running bill account will be 10% till total 2.5% of contract value is reached. 50% of the total security shall be paid to the contractors on the basis of SBI/SBIIMSPL/Architects certifying the virtual completion. The balance 50% would be paid to the contractors after the defects liability period as specified in the contract.

8.2 No interest shall be paid to the amount retained by the Bank as Security Deposit.

#### 9.0 SIGNING OF CONTRACT DOCUMENTS

The successful tenderer shall be bound to implement the contract by signing an agreement and conditions of contract attached herewith within 15 days from the receipt of intimation of acceptance of his tender by the Bank. However, the written acceptance of the tender by the Bank will constitute a binding agreement between the Bank and successful tenderer whether such formal agreement is subsequently entered into or not.

#### **10.0 COMPLETION PERIOD**

The Successful Tenderer shall be complete the work within time period (as mentioned in the NIT) from the date of the work order issued to the contractor to commence the work.

- i) The work shall be considered as complete only when the certificate of virtual completion is issued by the architects/Bank/SBIIMS.
- ii) The 'defects liability period' as prescribed in the contract shall commence only from date of such virtual completion.
- iii) Any defect that may appear within the defects liability period shall be rectified by the contractor within reasonable time on receipt of necessary instructions from Bank/SBIIMS to that effect.

#### 11.0 VALIDITY OF TENDER

Tenders shall remain valid and open for acceptance for a period of 3 (Three) months from the date of opening price bid. If the tenderer withdraws his/her offer during the validity period or makes modifications in his/her original offer which are not acceptance to the Bank without prejudice to any other right or remedy the Bank shall be at liberty to forfeit the EMD.

# **12.0 PAYMENT TERMS**

No advance payment in any from will be granted for the works proposed. Running A/c Bills shall be granted in approved format as mentioned in NIT. Period of taking up the final bill will be one month from/ after satisfactory virtual completion or the date of submission of the final bill whichever is later.

#### **13.0 TAXES AND DUTIES**

The tenderer must include in their tender prices quoted for all taxes (except GST) and duties royalties, cess, local charges if applicable. No extra claim on this account will in any case be entertained.

#### 14.0 RATES AND PRICES

14.1 The tenderer shall quote their rates for individual items both in words and figures in case of discrepancy between the rates quoted in words and figures the unit rate quoted in words will prevail. If no rate is quoted for a particular item, the contractor shall not be paid for that item when it is executed.

The amount of each item shall be calculated and the requisite total is given. In case of discrepancy between the unit rate and the total amount calculated from multiplication of unit rate and the quantity the unit rate quoted will govern and the amount will be corrected.

- 14.2 The tenderer need not quote their rates for which no quantities have been given. In case the tenderer quote their rates for such items those rates will be ignored and will not be considered during execution.
- 14.3 The tenderer should not change the units as specified in the tender. If any unit is changed the tenders would be evaluated as per the original unit and the contractor would be paid accordingly.

The tenderer should not change or modify or delete the description of the item. If any discrepancy is observed, he should immediately bring to the knowledge of the SBI/SBIIMSPL/ Bank.

- 14.4 Each page of the BOQ shall be signed by the authorized person and cutting or overwriting shall be duly attested by him.
- 14.5 Each page shall be totaled and the grand total shall be given.
- 14.6 The rate quoted shall be firm and shall include all costs, allowances, taxes, VAT, levies, etc. excluding GST.
- 14.7 Bank/SBIIMS has the right to offer the contractor to modify the old material wherever/ whenever necessary instead of new supplies.
- 14.8 The quantities of various items given in the schedule of quantities are approximate. The quantities of work may vary at time of allotment / execution of work. Bank/SBIIMS reserves the right to omit / delete any item(s) of work from the schedule at the time of allotment / before. Contractor will be paid for the actual work done at the site duly verified by the concerned official of the Bank/SBIIMS.

The acceptance of a tender will rest with the Competent Authority, who does not bind himself to accept the lowest tender and reserves to himself the authority to reject any or all of the tenders received, without assigning any reasons. All tenders in which any of the prescribed conditions are not fulfilled, or are incomplete in any respect are liable to be rejected.

-Sd-

SBI Infra Management Solutions Pvt Ltd, Amaravati.

# FORM OF SUBMISSION OF TENDER

(To be filled by the tenderer)

The Vice president, SBI Infra Management Solutions Pvt. Ltd., Amaravati Circle Office,2<sup>nd</sup> Floor, SBI Amaravati LHO Building, Gun foundry, Abids, Hyderabad – 500 001.

Dear Sir/s,

Ref: TENDER FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 1 X 125 KVA DIESEL GENERATOR SET AT SBILD, MACHILIPATNAM, KRISHNA DISTRICT, ANDHRA PRADESH (SBI Code: 07858)

I/ We hereby declare that I/ We have carefully gone through the conditions laid down in the Notice Inviting Tender, General notes, General Conditions of Contract, Special conditions, Schedule of approximate quantities and rates, Form of Agreement, General Specification, Approved manufacturers/ natural source of materials Technical Specifications of schedule of quantities, and clearly understood all the same and on the basis of the same I/We quoted our rates in the Schedule of Quantities (i.e. BOQ) attached with the tender documents.

I / We do here by undertaken to execu	ute and complete the whole or part of the	e work (as desired by	
you) at the respective rates quoted.	I/ We are depositing a sum of Rs	.00	
(Rupees	ONLY) as earnest money deposit by v	way of demand draft	
drawn in favor of SBI Infra Managen	nent Solutions Pvt. Ltd., payable at Mu	mbai along with this	
tender for due execution of the work at my/ our tendered rates.			

In the event of this Tender being accepted I/ We agree to enter into the agreement and submit the declaration on requisite non-judicial stamp papers as and when required and execute the contract according to your form of Agreement etc., in default whereof, I/ We do hereby bind my-self / ourselves to forfeit the aforesaid deposit. In the event of this Tender being accepted I/ We agree to obtain the labor license and the CAR and Third party insurance policy and deposit the balance E.M.D. amount and adhere/comply to all other instructions as given in TENDER DOCUMENT.

I / We further agree to complete the work included in the said schedule of quantities within time FOUR WEEKS from the date of the work order issued to commence the same. Date of commencement shall be either one week from the date of work order issued to the contractor or the date on which mark out of work at site has been given to contractor; whichever is later.

I / We agree not to employ sub-contractors other than those that may be approved by Employer. I / We agree to pay all taxes (except GST), insurance charges as prevailing from time to time, on such items for whom same is to be levied by/ for the government, and the rates quoted by me / us are inclusive of all the same.

Yours Faithfully,	Signature of Witness:
Contractor's Signature	1.
Name:	2.
Address:	3.

#### **GENERAL CONDITIONS OF CONTRACT**

#### 1.0 Definitions

"Contract" means the documents forming the tender and the acceptance thereof and the formal agreement executed between State Bank of India (Client) and the contractor, together with the documents referred therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the SBI/SBIIMSPLs/Bank and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.

- 1.1 In the contract the following expressions shall, unless the context otherwise requires, have the meaning hereby respectively assigned to them.
- 1.1.1 'SBI' shall mean State Bank of India (client) a body Corporate created under State Bank of India Act 1955, having its Corporate Centre at State Bank Bhavan, Madame Cama Road, Mumbai 400 021 and a LHO at Hyderabad and includes the client's representatives, successors and assigns.
- 1.1.2 'SBIIMSPL' shall mean SBI Infra Management Solutions Pvt Ltd.
- 1.1.3 'Site Engineer' shall mean an Engineer appointed by the Bank as their representative to give instructions to the contractors.
- 1.1.4 'The Contractor' shall mean the individual or firm or company whether incorporated or not, undertaking the works and shall include legal personal representative of such individual or the composing the firm or company and the permitted assignees of such individual or firms of company.
- 1.1.5 The expression 'works' or 'work' shall mean the permanent or temporary work described in the 'Scope of Work" and/or to be executed in accordance with the contract and includes materials, apparatus, equipment, temporary supports, fittings and things of all kinds to be provided, the obligations of the contractor hereunder and work to be done by the contractor under the contract.
- 1.1.6 'Engineer' shall mean the representative of the SBI/SBIIMSPL/Architect.
- 1.1.7 '**Drawings**' shall mean the drawings prepared by the SBI/SBIIMSPLs and issued by the Engineer and referred to in the specifications and any modifications of such drawings as may be issued by the Engineer from time to time 'Contract value shall mean the value of the entire work as stipulated in the letter of acceptance of tender subject to such additions thereto or deductions there from as may be made under the provision herein after contained.
- 1.1.8 '**Specifications**' shall mean the specifications referred to in the tender and any modifications thereof as may time to time be furnished or approved by the SBI/SBIIMSPL/ Architect "Month" means calendar month.
- 1.1.9 "Week" means seven consecutive days.
- 1.1.10 "Day" means a calendar day beginning and ending at 00 Hrs. and 24 hrs. respectively.

#### 2.0 Scope of Work

The contractor shall carry out, complete and maintain the said work in every respect strictly in accordance with this contract and with the directions of and to the satisfaction of the Bank to be communicated through the SBIIMSPL/Architect. The SBIIMSPL/Architect at the directions of the Bank from time to time issue further drawings and/or written instructions, details directions and explanations which are hereafter collectively referred to as SBI/SBIIMSPL's/Architect's instructions

in regard to: the variation or modification of the design, quality or quantity of work or the addition or omission or substitution of any work, any discrepancy in the drawings or between the BOQ and/or drawings and/or specifications, the removal from the site of any material brought thereon by the contractor and the substitution of any other materials thereof, the demolition, removal and/or re-execution of any work executed by him, the dismissal from the work of any person employed/engaged thereupon.

# 3.0 (i) Letter of Acceptance

Within the validity period of the tender the Bank shall issue a letter of acceptance either directly or through the Architect/SBIIMSPL by registered post or otherwise depositing at the address of the contractor as given in the tender to enter into a Contract for the execution of the work as per the terms of the tender. The letter of acceptance shall constitute a binding contract between the SBI and the contractor.

#### (ii)Contract Agreement

On receipt of intimation of the acceptance of tender from the SBI/SBIIMSPL/Architect the successful tenderer shall be bound to implement the contract and within fifteen days thereof he shall sign an agreement in a non-judicial stamp paper of appropriate value.

# **Copies of Agreement**

Two copies of agreement/tender document duly signed by both the parties with the drawings shall be handed over to the contractors.

## 4.0 Detailed drawings and instructions

The SBI through its SBIIMSPL/Architects shall furnish with reasonable promptness additional instructions by means of drawings or otherwise necessary for the proper execution of the work. All such drawings and instructions shall be consistent with the contract documents, true developments thereof and reasonably infer-able there from.

The work shall be executed in conformity therewith and the contractor prepare a detailed program schedule indicating therein the date of start and completion of various activities on receipt of the work order and submit the same to the SBI through the SBIIMSPL/Architect.

#### Ownership of drawings

All drawings, specifications and copies thereof furnished by the SBI through its SBIIMSPL/Architects are the properties of the SBI. They are not to be used on other work.

# 5.0 Commencement of Works

The date of commencement of the work will be reckoned as the recorded date of handing over site by the SBI/SBIIMSPL or 15 days from the date of issue of Letter of Acceptance of Bank, whichever is later.

#### 6.0 Schedule of Quantities

- i) The bill of quantities (BOQ) unless or otherwise stated shall be deemed to have been prepared in accordance with the Indian Standard Method of Measurements The rate quoted shall remain valid for variation of quantity against individual item to any extent subject to maximum variation of the contract value by 25%. The entire amount paid under Clause 20 hereof as well as amounts of prime cost and provisional sums, if any, shall be excluded.
- ii) Variation exceeding 25%: The items of work executed in relation to variation exceeding 25% shall be paid based on provisions of clause 21(e) hereof.

# **Approximate Quantities and Rates**

✓ The quantities given in BOQ are those upon which the lump sum cost of the work is based. They are subjected to alterations omissions, deductions or additions as provided for in the conditions of this contract and do not necessarily show the actual quantities of the work to be done. The unit rate noted below are those governing payment of extras or deductions for

omissions, according to the conditions of the contract as set forth in the preliminary specifications of the Andhra Pradesh detailed standard specifications and other conditions or specifications of this contract.

- ✓ It is to be expressly understood that the measured work is to be taken net (notwithstanding) any custom or practice to the contrary according to the actual quantities when in place and finished according to the drawings or as may be directed from time to time by the SBI/SBIIMSPLs, and the cost calculated by measurements or weight, at the respective prices, without any additional charge for any necessary or contingent works connected there with. The rates quoted are for work in site and complete in every respect.
- ✓ If any operation of work, which is specified in the respective items mentioned in the schedule of quantities, is not executed by the contractor then proportionately the amount shall not be paid.

# 7.0 Language Errors, Omissions and Discrepancies

In case of errors, omissions and/or disagreement between written and scaled dimensions on the drawings or between the drawings and specifications etc., the following order shall apply.

- i) Between scaled and written dimension (or description) on a drawing, the latter shall be adopted.
- ii) Between the written or shown description or dimensions in the drawings and the corresponding one in the specification the former shall be taken as correct.
- iii) Between written description of the item in the specifications and descriptions in bills of quantities of the same item, the latter shall be adopted.
- iv) In case of difference between rates written in figures and words, the rate in words shall prevail.
- v) Between the duplicate/subsequent copies of the tender, the original tender shall be taken as correct.

# 8.0 Materials, Appliances and Employees

Unless or otherwise specified the contractor shall provide and pay for all materials, labour, water, power, tools, equipment transportation and any other facilities that are required for the satisfactory execution and completion of the work. Unless or otherwise specified all materials shall be new and both workmanship and materials shall be best quality. The contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the work assigned to him. Workman whose work or behavior is found to be unsatisfactory by the SBI/SBI/SBIIMSPL/Architect he shall be removed from the site immediately.

# 9.0 Quality of Materials, Workmanship & Test

#### (i) All materials and workmanship

All materials & workmanship shall be best of the respective kinds described in the contract and in accordance with SBI/SBIIMSPL/Architect instructions and shall be subject from time to time to such tests as the SBI/SBIIMSPL/Architect may direct at the place of manufacture or fabrication or on the site or an approved testing laboratory. The contractor shall provide such assistance, instruments, machinery, labour and materials

#### (ii)Samples

All samples of adequate numbers, size, shades & pattern as per specifications shall be supplied by the contractor without any extra charges. If certain items proposed to be used are of such nature that samples cannot be presented or prepared at the site detailed literature/test certificate of the same shall be provided to the satisfaction of the SBI/SBIIMSPL/ Architect. Before submitting the sample/literature the contractor shall satisfy himself that the material/equipment for which he is submitting the samples/literature meet with the requirement of tender specification. Only when the samples are approved in writing by the SBI/SBIIMSPL/Architect the contractor shall proceed with the procurement and installation of the particular material/equipment.

The approved samples shall be signed by the SBI/SBIIMSPL/Architect for identification and shall be kept on record at site office until the completion of the work for inspection/comparison at any time. The SBI/SBIIMSPL/Architect shall take reasonable time to approve the sample. Any delay that might occur in approving the samples for reasons of its not meeting the specifications or other discrepancies inadequacy in furnishing samples of best qualities from various manufacturers and such other aspects causing delay on the approval of the materials/equipment's etc. shall be to the account of the contractor.

# (iii)Cost of tests

The cost of making any test shall be borne by the contractor if such test is intended by or provided for in the specifications or BOQ.

#### (iv)Cost of test not provided for

If any test is ordered by the SBI/SBIIMSPL/ Architect which is either:

(a) If so intended by or provided for or (in the cases above mentioned) is not so particularized or through so intended or provided for but ordered by the SBI/SBIIMSPL/Architect which is either to be carried out by an independent person at any place other than the site or the place of manufacture or fabrication of the materials tested or any Government/approved laboratory, then the cost of such test shall be borne by the contractor.

#### **10.0 Work Performed at Contractors Risk**

The contractor shall take all precautions necessary and shall be responsible for the safety of the work and shall maintain all lights, goods, signs, temporary passages or other protection necessary for the purpose. All works shall be done by the contractor's risk and if any loss or damage shall result from fire or from others cause, the contractor shall promptly repay or replace such loss or damage free from all expenses to the employer. The contractor shall be responsible for any loss or damage to materials, tools or other articles used held for use in connection with the work. The work shall be carried on to completion without interferences with the operations of existing machinery or equipment, if any

#### 11.0 Authorities, Notices, Patent rights and Royalties

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

The contractor/s shall arrange to give all notices required for by the said Acts, Regulations or Byelaws to be given to any authority, and to pay to such authority or to any public officer all fees that may be properly chargeable in respect of the work and lodge the receipts with the Employer

The Contractor shall identify the Employer against all claims in respect of patent rights, designs, trademarks or name or the protected rights in respect of any constructional plant, machine, work or material used for or in connection with the works or temporary works and from and against all claims, demands, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation thereto. The Contractor shall defend all actions arising from such claims, unless he has informed the SBI/SBIIMSPLs, before any such infringement and received their permission to proceed and shall himself pay all royalties, license fees, damages, coat and charges of all and every sort that may be legally incurred in respect thereof.

#### 12.0 Permits, Laws and Regulations

Permits and licenses required for the execution of the work shall be obtained by the contractor at his own expenses. The contractor shall give notices and comply with the regulations, laws, and ordinances rules, applicable to the contractor. If the contractor observes any discrepancy between

the drawings and specifications, he shall promptly notify the SBI in writing under intimation of the SBI/SBIIMSPL/Architect. If the contractor performs any act which is against the law, rules and regulations he shall meet all the costs arising there from and shall indemnify the SBI any legal actions arising there from.

# 13.0 Setting out Work

The contractor shall set out the work and shall be responsible for the true and perfect setting out of the same and for the correctness of the positions, levels, dimensions, and alignment of all parts thereof and get it approved by the SBI/SBIIMSPL/Architect before proceeding with the work. If at any time any error in this respect shall appear during the progress of the works, irrespective of the fact that the layout had been approved by the SBI/SBIIMSPL/Architect the contractor shall be responsible for the same and shall at his own expenses rectify such error, if so, required to satisfaction of the SBI.

# 14.0 Protection of works and property

The contractor shall continuously maintain adequate protection, of all his work from damage and shall protect the SBI's properties from injury or loss arising in connection with contract. He shall make good any such damage, injury, loss due to his fault or negligence except which are due to causes beyond his control. He shall take adequate care and steps for protection of the adjacent properties. The contractor shall take all precautions for safety and protection of his employees on the works and shall comply with all applicable provisions of Government and local bodies' safety laws and building codes to prevent accidents, or injuries to persons or property of about or adjacent to his place of work. The contractor shall take insurance covers as per clause 22.0 at his own cost. The policy may be taken in joint names of the contractors and the SBI and the original policy may be lodged with the SBI.

## 15.0 Obtaining Information related to execution of work

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

#### **16.0 Contractor's superintendence**

The contractor shall give necessary personal superintendence during the execution of the works and as long, thereafter, as the SBI/SBIIMSPL/Architect may consider necessary until the expiry of the defects liability period, stated hereto.

#### 17.0 Dismissal of Workmen

The contractor shall on the request of the Employer immediately dismiss from works any person employed thereon by him, who in the opinion of the Employer be unsuitable or incompetent or who may misconduct him. Such discharges shall not be the basis of any claim for compensation or damages against the Employer or any of their officer or employee.

#### 18.0 Rate of progress

Whole of the materials, plant and labour to be provided by the contractor and the mode, manner and speed of execution and maintenance of the works are to be of a kind and conducted in a manner to the satisfaction of the SBI/SBIIMSPL/Architect. Should the rate of progress of the work or any part thereof be at any time be in the opinion of the SBI/SBIIMSPL/ Architect too slow to ensure the completion of the whole of the work by the prescribed time or extended time for completion the SBI/SBIIMSPL/Architect shall thereupon take such steps as considered necessary by the SBI/SBIIMSPL/Architect to expedite progress so as to complete the woks by the prescribed time or extended time. Such communications from the SBI/SBIIMSPL/Architect neither shall relieve the contractor from fulfilling obligations under the contract nor he shall be entitled to raise any claims arising out of such directions.

#### 19.0 Assignment and subletting

The whole of work included in the contract shall be executed by the contractor and he shall not directly entrust and engage or indirectly transfer assign or under let the contract or any part or share thereof or interest therein without the written consent of the SBI through the SBIIMSPL and no undertaken shall relieve the contractor from the responsibility of the contractor from active superintendence of the work during its progress.

#### 20.0 Variations:

No alteration, omission or variation ordered in writing by the SBI/SBIIMSPL/Architect shall vitiate the contract.

In case the SBI/SBIIMSPL/Architect thinks proper at any time during the progress of works to make any alteration in, or additions to or omission from the works or any alteration in the kind or quality of the materials to be used therein, the SBI/SBIIMSPL/Architect shall give notice thereof in writing to the contractor or shall confirm in writing within seven days of giving such oral instructions the contractor shall alter to, add to, or omit from as the case may be in accordance with such notice but the contractor shall not do any work extra to or make any alteration or additions to or omissions from the works or any deviation from any of the provisions of the contract, stipulations, specifications or contract drawings without previous consent in writing of the SBI/SBIIMSPL/Architect and the value of such extras, alterations, additions or omissions shall in all cases be determined by the SBI/SBIIMSPL/Architect and the same shall be added to or deducted from the contract value, as the case may be.

#### 21.0 Valuation of Variations

No claim for an extra shall be allowed unless it shall have been executed under the authority of the SBI/SBIIMSPL/Architect with the concurrence of the SBI 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 contract shall determine the valuation of the extra work where such extra work is of similar character and executed under similar conditions as the work priced herein.
- ii) Rates for all items, wherever possible should be derived out of the rates given in the priced Bill of Quantities.
- **b)** The net prices of the original tender shall determine the value of the items omitted, provided if omissions do not vary the conditions under which any remaining items of works are carried out, otherwise the prices for the same shall be valued under sub clause (c) hereunder.
- c) Where the extra works are not of similar character and/or executed under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items or works are carried out, then the contractor shall within 7 days of the receipt of the letter of acceptance inform the SBI/SBIIMSPL/Architect of the rate which he intends to charge for such items of work, duly supported by analysis of the rate or rates claimed and the SBI/SBIIMSPL/Architect shall fix such rate or prices as in the circumstances in his opinion are reasonable and proper, based on the market rate.
- d) Where extra work cannot be properly measured or valued the contractor shall be allowed day work prices at the net rates stated in the tender of the BOQ or, if not, so stated then in accordance with the local day work rates and wages for the district; provided that in either case, vouchers specifying the daily time (and if required by the SBI/SBIIMSPL/Architect) the workman's name and materials employed be delivered for verifications to the SBI/SBIIMSPL/Architect at or before the end of the week following that in which the work has been executed.
- e) It is further clarified that for all such authorized extra items where rates cannot be derived from

the tender, the contractor shall submit rates duly supported by rate analysis worked on the "market rate basis" for material, labour, hire/running charges of equipment and wastage's etc plus 15% towards establishment charges, contractor's overheads and profit. Such items shall not be eligible for escalation.

#### 22.0 Insurance of Works

**22.1** Without limiting his obligations and responsibilities under the contract the contractor shall insure in the joint names of the SBI and the contractor against all loss or damages from whatever cause arising other than the excepted risks, for which he is responsible under the terms of contract and in such a manner that the SBI and contractor are covered for the period stipulated in clause 23 of GCC and are also covered during the period of maintenance for loss or damage arising from a cause, occurring prior to the commencement of the period of maintenance and for any loss or damage occasioned by the contractor in the course of any operations carried out by him for the purpose of complying with his obligations under clause.

- a) The works for the time being executed to the estimated current Contract value thereof, or such additional sum as may be specified together with the materials for incorporation in the works at their replacement value.
- b) The constructional plant and other things brought on to the site by the contractor to the replacement value of such constructional plant and other things.
- c) Such insurance shall be effected with an insurer and in terms approved by the SBI which approval shall not be unreasonably withheld and the contractor shall whenever require, produce to the SBI/SBIIMSPL/Architect the policy of insurance and the receipts for payment of the current premiums.

#### 22.2 Damage to persons and property

The contractor shall, except if and so far as the contract provides otherwise indemnify the SBI against all losses and claims in respect of injuries or damages to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the works and against all claims proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto except any compensation of damages for or with respect to:

- a) The permanent use or occupation of land by or any part thereof.
- b) The right of SBI to execute the works or any part thereof, on, over, under, in or through any lands.
- c) Injuries or damages to persons or properties which are unavoidable result of the execution or maintenance of the works in accordance with the contract.
- d) Injuries or damage to persons or property resulting from any act or neglect of the SBI, their agents, employees or other contractors not being employed by the contractor or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the contractor, his servants or agents such part of the compensation as may be just and equitable having regard to the extent of the responsibility of the SBI, their employees, or agents or other contractors for the damage or injury.

# 22.3 Contractor to indemnify SBI

The contractor shall indemnify the SBI against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the provision sub-clause 22.2 of this clause.

#### 22.4 Contractor's superintendence

The contractor shall fully indemnify and keep indemnified the SBI against any action, claim, or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claim made under or action brought against SBI in respect of such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expenses to settle any dispute or to conduct any litigation that may arise there from, provided that the contractor shall not be liable to indemnify the SBI if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the SBI/SBIIMSPL/Architect in this behalf.

# **22.5 Third Party Insurance**

25.5.1 Before commencing the execution of the work the contractor but without limiting his obligations and responsibilities under clause 09.0 of GCC shall insure against his liability for any material or physical damage, loss, or injury which may occur to any property including that of SBI, or to any person, including any employee of the SBI, by or arising out of the execution of the works or in the carrying out of the contract, otherwise than due to the matters referred to in the provision to clause 2.0 & 9.0 thereof.

**22.5.2 Minimum Amount of Third Party Insurance:** Such insurance shall be affected with an insurer and in terms approved by the SBI which approval shall not be reasonably withheld and for at least the amount stated below. The contractor shall, whenever required, produce to the SBI/SBIIMSPL/Architect the policy or policies of insurance cover and receipts for payment of the current premiums.

#### 22.6 Minimum Insurance Cover

The minimum insurance cover for physical property, injury, and death is Rs.5.0lacs per occurrence with the number of occurrences limited to four. After each occurrence contractor, will pay additional premium necessary to make insurance valid for four occurrences always.

# 22.7 Accident or Injury to Workmen

**22.7.1** The SBI shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workmen or other person in the employment of the contractor or any sub-contractor, save and except an accident or injury resulting from any act or default of the SBI or their agents, or employees. The contractor shall indemnify and keep indemnified SBI against all such damages and compensation, save and except as aforesaid and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

#### 22.7.2 Insurance against accidents etc. to workmen

The contractor shall insure against such liability with an insurer approved by the SBI during the whole of the time any person employed by him on the works and shall, when required, produce to the SBI/SBIIMSPL/Architect such policy of insurance and receipt for payment of the current premium. Provided always that, in respect of any persons employed by any sub-contractor the contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that SBI is indemnified under the policy but the contractor shall require such sub-contractor to produce to the SBI/SBIIMSPL/Architect when required such policy of insurance and the receipt for the payment of the current premium.

# 22.7.3 Remedy on Contractor's failure to insure

If the contractor fails to effect and keep in force the insurance referred to above or any other insurance which he may be required to effect under the terms of contract, then and in any such case the SBI may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the SBI

as aforesaid and also deduct 15% of contract value from any amount due or which may become due to the contractor, or recover the same as debt from the contractor.

**22.7.4** Without prejudice to the other rights of the SBI against contractors, in respect of such default, the Bank shall be entitled to deduct from any sums payable to the contractor the amount of any damages costs, charges, and other expenses paid by the SBI and which are payable by the contractors under this clause. The contractor shall upon settlement by the insurer of any claim made against the insurer pursuant a policy taken under this clause, proceed with due diligence to rebuild or repair the works destroyed or damaged. In this event, all the monies received from the insurer in respect of such damage shall be paid to the contractor and the contractor shall not be entitled to any further payment in respect of the expenditure incurred for rebuilding or repairing of the materials or goods destroyed or damaged.

#### 23.0 Extension of Time

If, in the opinion of the SBI/SBIIMSPL/Architect, the work be delayed for reasons beyond the control of the contractor, the SBI/SBIIMSPL/Architect may submit a recommendation to the SBI to grant a fair and reasonable extension of time for completion of work as per the terms of contract. If the contractor needs an extension of time for the completion of work or if the completion of work is likely to be delayed for any reasons beyond the due date of completion as stipulated in the contract, the contractor shall apply to the SBI through the SBI/SBIIMSPL/Architect in writing at least 30 days before the expiry of the scheduled time and while applying for extension of time he shall furnish the reasons in detail and his justification if any, for the delays. The SBI/SBIIMSPL/Architect shall submit their recommendations to the SBI in the prescribed format for granting extension of time. While granting extension of time the contractor shall be informed the period extended time which will qualify for levy of liquidated damages. For the balance period in excess of original stipulated period and duly sanctioned extension of time by the SBI the provision of liquidated damages as stated under clause 24.0 of GCC shall become applicable. Further contract shall remain in force even for the period beyond the due date of completion irrespective whether the extension is granted or not.

# 24.0 Liquidated Damages

If the contractor fails to maintain the required progress in terms of clause 18.0 of GCC or to complete the work and clear the site including vacating their office on or before the contracted or extended date or completion without justification in support of the cause of delay, he may be called upon without prejudice to any other right of remedy available under the law to the SBI on account of such breach to pay a liquidated damages at the rate of 0.5% of the contract value per week subject to a maximum of 5% of the contract value.

#### 25.0 Inspection of Work

The SBI/SBIIMSPL/Architect or their representatives shall at all reasonable time have free access to the work site and/or to the workshop, factories or other places where materials are lying or from where they are obtained and the contractor shall give every facility to the SBI, SBIIMSPL/Architect and their representatives necessary for inspection and examination and test of the materials and workmanship. No person unless authorized by the SBI/SBIIMSPL/Architect except the representative of Public authorities shall be allowed on the work at any time. The proposed work either during its construction stage or its completion can also be inspected by the Chief Technical Examiner's organization a wing of Central Vigilance Commission.

#### 26.0 No compensation for restrictions of work

If at any time after acceptance of the tender SBI shall decide to abandon or reduce the scope of work for any reason whatsoever and hence not require the whole or any part of the work to be carried out, the SBIIMSPL/Architect shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter.

The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on

account of any profit or advantage which he might have derived from the execution of the work fully but which he did not derive in consequence of the foreclosure of the whole or part of the work. Provided that the contractor shall be paid the charges on the cartage only of materials actually and bonafied brought to the site of the work by the contractor and rendered surplus as a result of the abandonment, curtailment of the work or any portion thereof and then taken back by the contractor, provided however that the SBIIMSPL/Architect shall have in such cases the option of taking over all or any such materials at their purchase price or a local current rate whichever is less. In case of such stores having been issued from SBI stores and returned by the contractor to stores, credit shall be given to him at the rates not exceeding those at which were originally issued to the contractor after taking into consideration and deduction for claims on account of any deterioration or damage while in the custody of the contractor and in this respect the decision of SBIIMSPL/Architect shall be final.

#### 27.0 Time for completion

Time is the essence of the contract and shall be strictly observed by the contractor. The entire work shall be completed within a period as mentioned in Notice from the date of commencement. If required in the contract or as directed by the SBIIMSPL/Architect, the contractor shall complete certain portions of work before completion of the entire work. However, the completion date shall be reckoned as the date by which the whole work is completed as per the terms of the contract.

#### 28.0 Action Where there is no Specification

In case of any class of work for which is there is no specification mentioned, the same will be carried out in accordance with the Indian Standards Specifications subject to the approval of the Employer / SBIIMSPL.

## 29.0 Suspension of work

i)The contractor shall, on receipt of the order in writing of the SBIIMSPL/Architect (whose decision shall be final and binding on the contractor) suspend the progress of works or any part thereof for such time and in such manner as SBIIMSPL/ Architect may consider necessary so as not cause any damage or injury to the work already done or endanger the safety thereof for any of following reasons.

- a) On account, any default on the part of the contractor, or
- b) For proper execution of the works or part thereof for reasons other than the default of the contractor, or
- c)For safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the SBIIMSPL/Architect.

ii) If the suspension is ordered for reasons (b) and (c) in sub-Para (i) above:

The contractor shall be entitled to an extension of time equal to the period of every such suspension. No compensation whatsoever shall be paid on this account.

#### 30.0 Action when the whole security deposit is forfeited

In any case in which under any clause or clauses of this contract, the Contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit the SBIIMSPL/Architect shall have the power to adopt any of the following course as they may deem best suited to the interest of the SBI.

- a) To rescind the contract (of which rescission notice in writing to the contractor by the SBIIMSPL/Architect shall be conclusive evidence) and in which case the security deposit of the contractor shall be forfeited and be absolutely at the disposal of SBI.
- b) To employ labour paid by the SBI and to supply materials to carry out the work, or any part of the work, debiting the contractor with the cost of the labour and materials (the cost of such labour and materials as worked out by the SBIIMSPL/ Architect shall be final and conclusive against the contractor) and crediting him with the value of the work done, in all

respects in the same manner and at the same manner and at the same rates as if it had been carried out by the contractor under the terms of this contract the certificate of SBIIMSPL/Architect as to the value of work done shall be final and conclusive against the contractor.

c) To measure up the work of the contractor, and to take such part thereof as shall be unexecuted, out of his hands, and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor, if the whole work had been executed by him (of the amount of which excess the certificates in writing of the SBIIMSPLs/Architect shall be final and conclusive) shall be borne by original contractor and may be deducted from any money due to him by SBI under the contract or otherwise, or from his security deposit or the proceeds of sale thereof, or sufficient part thereof.

In the event of any of above courses being adopted by the SBI the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any material or entered into any engagements or make any advances on account of, or with a view to the execution of the work or the performance of the contract and in case the contract shall be rescinded under the provision aforesaid, the contractor shall not be entitled to recover or to be paid any sum or any work thereto for actually performed under this contract, unless, and until the SBIIMSPL/Architect will have certified in writing the performance of such work and the value payable in respect thereof, and he shall only be entitled to be paid the value so certified.

#### 31.0 Prices for Extras etc., Ascertainment

The rates of extra items will be ascertained as below

- a) The rates will be derived from the rates of items already quoted in the original tender for the extra work.
- b) Where extra work cannot be properly measured or valued, the contractor shall be allowed any work prices at the net rates stated in the tender or the priced schedule of quantities, or if not so stated, then in accordance with the local day work, rates and wages for the district, provided that in either case vouchers specifying the daily time (and if required by the SBIIMSPL, the workman's name) and materials employed at or before the end of the week following that in which the work has been executed.
- c) The measurements and valuations in respect of the extra items of contract shall be completed within the 'period of final measurement' or within three months of the completion of the contract works as defined under clause (Certificate of Virtual Completion)

#### 32.0 Extra Items Rates

The work or extra items shall be started only after the approval of extra items rates by client / SBIIMSPL. Rates for additional or extra items work which cannot be derived from the contract item rates shall be calculated on the basis of actual cost plus 15 % for profit.

#### 33.0 Virtual Completion Certificate (VCC)

On successful completion of entire works covered by the contract to the full satisfaction of the SBI, the contractor shall ensure that the following works have been completed to the satisfaction of the SBI.

- a) Clear the site of all scaffolding, wiring, pipes, surplus materials, contractor's labour, equipment and machinery.
- b) Demolish, dismantle and remove the contractor's site office, temporary works, structures including labour sheds/camps and constructions and other items and things whatsoever brought upon or erected at the site or any land allotted to the contractor by the SBI and not incorporated in the permanent works.

- c) Remove all rubbish, debris etc. from the site and the land allotted to the contractor by the SBI and shall clear, level and dress, compact the site as required by the SBI.
- d) Shall put the SBI in undisputed custody and possession of the site and all land allotted by the SBI.
- e) Shall hand over the work in a peaceful manner to the SBI.
- f) All defects/imperfections have been attended and rectified as pointed out by the SBI to the full satisfaction of SBI.

Upon the satisfactory fulfillment by the contractor as stated above, the contractor shall be entitled to apply to the SBI/SBIIMSPL/Architect for the certificate. If the SBI/SBIIMSPL/Architect is satisfied of the completion of the work, relative to which the completion certificate has been sought, the SBI/SBIIMSPL/Architect shall within fourteen (14) days of the receipt of the application for virtual completion certificate, issue a VCC in respect of the work for which the VCC has been applied.

This issuance of a VCC shall be without prejudice to the SBI's rights and contractor's liabilities under the contract including the contractor's liability for defects liability period nor shall the issuance of VCC in respect of the works or work at any site be construed as a waiver of any right or claim of the SBI against the contractor in respect of works or work at the site and in respect of which the VCC has been issued.

#### 34.0 Removal of Improper Work

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

#### 35.0 Defects after Completion

The contractor shall make good at his own cost and to the satisfaction of the Employer all defects, peeling off laminate, false ceiling cracks, or any other faults, which may appear within 12 months after completion of the work. In the default, the Employer may employ and pay other persons to amend and make good such damages, losses and expenses consequent thereon or incidental thereto shall be made good and borne by the contractor and such damages, loss and expenses shall be recoverable from him by the Employer or may be deducted by the employer, in lieu of such amending and making good by the contractor, deduct from any money due to the contractor a sum equivalent to the cost of amending such work and in the event of the amount retained being insufficient recover that balance from the contractor from the amount retained(retention money) together with any expenses the Employer may have incurred in connection therewith.

#### 36.0 Works to be measured

The SBI/SBIIMSPL/Architect may from time to time intimate to the contractor that he required the work to be measured and the contractor shall forthwith attend or send a qualified representative to assist the SBI/SBIIMSPL in taking such measurements and calculation and to furnish all particulars or to give all assistance required by any of them. Such measurements shall be taken in accordance with the Mode of measurements detailed in the specifications. The representative of the SBI/SBIIMSPL/Architect shall take joint measurements with the contractor's representative and the measurements shall be entered in the measurement book.

The contractor or his authorized representative shall sign all the pages of the measurement book in which the measurements have been recorded in token of his acceptance. All the corrections shall be duly attested by both representatives. No over writings shall be made in the M book. Should the contractor not attend or neglect or omit to depute his representative to take measurements then the measurements recorded by the representative of the SBI/SBIIMSPL/Architect shall be final. All authorized extra work, omissions and all variations made shall be included

in such measurements.

#### **37.0 Final Measurement**

The measurement and valuation in respect of the contract shall be completed within six months of the virtual completion of the work.

#### 38.0 Work by other agencies

The SBI/SBIMSPL/Architect reserves the rights to use premises and any portion of the site for execution of any work not included in the scope of this contract which it may desire to have carried out by other persons simultaneously and the contractor shall not only allow but also extend reasonable facilities for the execution of such work. The contractor however shall not be required to provide any plant or material for the execution of such work except by special arrangement with the SBI. Such work shall be carried out in such manners not to impede the progress of the works included in the contract.

# **39.0 Notices and Statutory Regulations**

The contractor shall give all notices and pay all fees and shall comply all Acts and Regulations for the successful completion of the contract works. The whole of the work is to be complied with as per the requirements and bylaws of the relevant statutory authorities including contract labor (Regulation and Abolition) Act 1970.

# **40.0 Clearing Site on Completion**

On completion of the works the contractor shall clear away and remove from the site all machinery, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and the works clean and in a workmanlike condition to the satisfaction of the Employer/SBI/SBIIMSPLs.

#### 41.0 Architect's Delay in Progress

The SBI/SBIIMSPL may delay the progress of the works in case of rains or otherwise, without vitiating the contract and grant such extension of time with the approval of the employer for the completion of the contract as he may think proper and sufficient in consequences of such delay, and the contractor, shall not make any claim for compensation or damage in relation thereto.

# 42.0 Failure by Contractor Comply with Architect Employer's Instructions

If the contractor after receipt of written notice from the employer/SBI/SBIIMSPL requiring compliance with such further drawings and / or instruction, fails within seven days to comply with the same, the Employer / SBI/SBIIMSPL may employ and pay other persons to execute any such work whatsoever as may be necessary to give effect thereto and all cost incurred in connection there with shall be recoverable from the contractors by the Employer as a debit or may be deducted from any money due or which become due to the Contractors.

# 43.0 Owner's Right to Terminate the Contract

If the contractor being an individual or a firm commit any 'Act of Insolvency' or shall be adjusted an insolvent or being an incorporated company shall have an order for compulsory winding up voluntarily or subject to the supervision of Government and of the Official Assignees of the liquidator in such acts of insolvency or winding up shall be unable within seven days after notice to him to do so, to show to the reasonable satisfaction of the SBI/SBIIMSPL/Architect that he is able

to carry out and fulfill the contract, and to give security therefore if so required by the SBI/SBIIMSPL/Architect. Or if the contractor (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 contractor. Or shall assign or sublet this contract without the consent in writing of the SBI through the SBI/SBIIMSPL/Architect or shall charge or encumber this contract or any payment due to which may become due to the contractor there under.

- a) Has abandoned the contract; or
- b) Has failed to commence the works, or has without any lawful excuse under these conditions suspended the progress of the works for 14 days after receiving from the SBI through the SBI/SBIIMSPL/Architect written notice to proceed, or
- c) Has failed to proceed with the works with such diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or has failed to remove the materials from the site or to pull down and replace work within seven days after written notice from the SBI through the SBI/SBIIMSPL/Architect that the said materials were condemned and rejected by the SBI/SBIIMSPL/Architect under these conditions; or 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 contractor for seven days after written notice shall have been given to the contractor to observe or perform the same or has to the detriment of good workmanship or in defiance of the SBI's or SBI/SBIIMSPL's/Architect's instructions to the contrary subject any part of the contract. Then and in any of said cases the SBI and or the SBI/SBIIMSPL/Architect, may not withstanding any previous waiver, after giving seven days' notice in writing to the contractor, determine the contract, but without thereby affecting the powers of the SBI or the SBI/SBIIMSPL/Architect or the obligation and liabilities of the contractor the whole of which shall continue in force as fully as if the contract had not been so determined and as if the works subsequently had been executed by or on behalf of the contractor. And, further the SBI through the SBI/SBIIMSPL/Architect, their agents or employees may enter upon and take possession of the work and all plants, tools, scaffolding's, materials, sheds, machines lying upon the premises or on the adjoining lands or roads, use the same by means of their own employees or workmen in carrying on and completing the work or by engaging any other contractors or persons to complete the work and the contractor shall not in any was interrupt or do any act, matter or thing to preventer hinder such other contractor or other 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 SBI or the SBI/SBIIMSPL/Architect shall give a notice in writing to the contractor to remove his surplus materials and plants and should the contractor fail to do so within 14 days after receipt thereof by him the SBI sell the same by public auction after due publication and shall adjust the amount realized by such auction. The contractor shall have no right to question any of the act of the SBI incidental to the sale of the materials etc.

## 44.0 Certificate of Payment

The contractor shall be entitled under the certificates to be issued by the SBI/SBIIMSPL/Architect to the contractor within 10 working days from the date of certificate to the payment from SBI from time to time. The SBI shall recover the statutory recoveries and other dues including the retention amount from the certificate of payment. Provided always that the issue of any certificate by the SBI/SBIIMSPL/Architect during the progress of works or completion shall not have effect as certificate of satisfaction or relieve the contractor from his liability under clause.

The SBI/SBIIMSPL/Architect shall have power to withhold the certificate if the work or any part thereof is not carried out to their satisfaction.

The SBI/SBIIMSPL/Architect may by any certificate make any corrections required in previous certificate.

The SBI shall modify the certificate of payment as issued by the SBI/SBIIMSPL/Architect from time to time while making the payment.

The contractor shall submit interim bills only after taking actual measurements and properly recorded in the Measurement book (M.B).

The contractor shall not submit interim bills when the approximate value of work done by him is less than amount specified in NIT and the minimum interval between two such bills shall be one month.

The final bill may be submitted by contractor within a period of one month from the date of virtual completion and SBI/SBIIMSPL/Architect shall issue the certificate of payment within a period of two months. The SBI shall pay the amount within a period of three months from the date of issue of certificate provided there is no dispute in respect of rates and quantities.

# 45.0 Settlement of Disputes and Arbitration

Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, design, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the work or the execution or failure to execute the same, whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:

i)If the contractor considers that he is entitled to any extra payment or compensation in respect of the works over and above the amounts admitted as payable by the SBI/SBIIMSPL or in case the contractor wants to dispute the validity of any deductions or recoveries made or proposed to be made from the contract or raise any dispute, the Contractor shall forthwith give notice in writing of his claim, or dispute to the Assistant General Manager (Premises& Estate)/Dy. General Manager (Premises)and endorse a copy of the same to the SBI/SBIIMSPL, within 30 days from the date of dis allowance thereof or the date of deduction or recovery. The said notice shall give full particulars of the claim, grounds on which it is based and detailed calculations of the amount claimed and the contractor shall not be entitled to raise any claim nor shall the Bank be in any way liable in respect of any claim by the contractor unless notice of such claim shall have been given by the contractor to the Assistant General Manager (Premises& Estate)/Dy. General Manager (premises) in the manner and within the time as aforesaid. The contractor shall be deemed to have waived and extinguished all his rights in respect of any claim not notified to the Assistant General Manager (Premises& Estate)/Dy. General Manager (Premises) in writing in the manner and within the time aforesaid.

ii)The Assistant General Manager (Premises& Estate)/Dy. General Manager (premises) shall give his decision in writing on the claims notified by the contractor. The contractor may within 30 days of the receipt of the decision of the Assistant General Manager (Premises& Estate)/Dy. General Manager (premises) submit his claims to the conciliating authority namely the Circle Development Officer/General Manager (Corporate Services) for conciliation along with all details and copies of correspondence exchanged between him and the Assistant General Manager (Premises& Estate)/Dy. General Manager (premises).

iii)If the conciliation proceedings are terminated without settlement of the disputes, the contractor shall, within a period of 30 days of termination thereof shall give a notice to the concerned Chief

General Manager/Dy. Managing Director & Corporate Development Officer of the Bank for appointment of an arbitrator to adjudicate the notified claims failing which the claims of the contractor shall be deemed to have been considered absolutely barred and waived.

iv)Except where the decision has become final, binding and conclusive in terms of the contract, all disputes or differences arising out of the notified claims of the contractor as aforesaid and all claims of the Bank shall be referred for adjudication through arbitration by the Sole Arbitrator appointed by the Chief General Manager/Dy. Managing Director & Corporate Development Officer. It will also be no objection to any such appointment that the Arbitrator so appointed is a Bank Officer and that he had to deal with the matters to which the Contract relates in the course of his duties as Bank Officer. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid by the said Chief General Manager/Dy. Managing Director & Corporate Development Officer. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each dispute along with the notice for appointment of arbitrator.

It is also a term of this contract that no person other than a person appointed by such Chief General Manager aforesaid should act as arbitrator.

The conciliation and arbitration shall be conducted in accordance with the provisions of the Arbitration & Conciliation Act 1996 or any statutory modification or re-enactment thereof and the rules made there under.

It is also a term of the contract that if any fees are payable to the arbitrator these shall be paid equally by both the parties. However, no fees will be payable to the arbitrator if he is a Bank Officer.

It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

# SPECIAL CONDITIONS OF CONTRACT

In the event of any discrepancy with clauses mentioned anywhere else in the tender with the clauses mentioned within special conditions of contract, the clauses mentioned within the special conditions of contract shall supersede those mentioned elsewhere.

#### 1.0 Work during nights and holidays

Subject to any provision to the contrary contained in the contract no permanent work shall save as herein provided be carried on during the night or on holidays without the permission in writing of the SBI/SBIIMSPL/Architect, save when the work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the work in which case the contractor shall immediately advise the SBI/SBIIMSPL/Architect. However, the provision of the clause shall not be applicable in the case of any work which becomes essential to carry by rotary or double shifts in order to achieve the progress and quality of the part of the works being technically required and continued with the prior approval of the SBI/SBIIMSPL/Architect at no extra cost to the SBI. All work at night after obtaining approval from competent authorities shall be carried out without unreasonable noise and disturbance.

#### 2.0 Site Supervision

The contractor shall appoint at his own cost competent and adequate number of qualified Engineers at site,

- (1) for joint measurements and preparations of bills,
- (2) for testing materials at site and outside laboratory,
- (3) for other general supervision. Their appointment shall be approved by the Employer / SBI/SBIIMSPL.
- (4) The site Engineers shall not be removed from the site without the written consent of the Employer / SBI/SBIIMSPL.

#### 3.0 Cutting and Making Good

Where it is found necessary to interfere with finished work in order to execute this contract, the contractor will be required to do all necessary work at his expenses. Only approved hangers and bolts or other metal fixing devices shall be used to secure frames panels and other units in position. Wooden plugs will not be permitted. Holes shall be formed with electric drills whenever possible. Structural members shall not be cut or drilled without prior consent of the client.

#### 4.0 Typographical Clerical Errors

The Employer / SBI/SBIIMSPL clarification regarding partially omitted particulars of typographical or Clericals errors shall be final and binding on the contractors.

#### 5.0 Water supply

The contractor shall make his own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions:

- i) That the water used by the Contractor shall be fit for construction purpose to the satisfaction of the SBI/SBIIMSPL/Architect.
- ii) The Contractor shall make alternative arrangements for the supply of water if the arrangements made by the Contractor for procurement of water in the opinion of the SBI/SBIIMSPL/Architect is unsatisfactory.

#### 6.0 Power supply

The contractor shall make his own arrangements for power and supply/distribution system for driving plant or machinery for the work and for lighting purpose at his own cost. The cost of running and maintenance of the plants are to be included in his tender prices. He shall pay all fees and

charges required for the power supply and include the same in his tendered rates and hold the owner free from all such costs. He has to obtain necessary approvals from the appropriate authorities, if required.

#### 7.0 Treasure Trove etc.

Any treasure trove, coin or object antique which may be found on the site shall be the property of SBI and shall be handed over to the Bank immediately.

#### 8.0 Unfixed Materials

When any materials intended for the works shall have been placed at site by the Contract, such material shall not be removed there from (except for the purposes of being used on the works) without the written authority of the Employer / SBI/SBIIMSPL and when the contractor shall have received payment in respect of any certificate in which the SBI/SBIIMSPL shall have stated that he has taken in to account to value of such unfixed materials on the works such material shall become the property of the Employer and the contractor shall be liable for any loss or damage to any such materials.

# 9.0 Custody and Security of Materials

The contractors shall be responsible for the custody and security of all materials and equipment at site and he will provide full time watchman / watchmen to lock after his materials, stores equipment's etc.

#### 10.0 Method of Measurement

Unless otherwise mentioned in the schedule of quantities or in mode of measurement, the measurement will be on the net quantities or work produced in accordance with up to date. Rules laid down by the Bureau of Indian Standards. In the event, any dispute/disagreement the decision of the SBI/SBIIMSPL/Architect shall be final and binding on the contractor.

#### 11.0 Maintenance of Registers

The contractor shall maintain the following registers as per the enclosed format at site of work and should produce the same for inspection of SBI/SBI/SBIIMSPL/Architect whenever desired by them. The contractor shall also maintain the records/registers as required by the local authorities/Government from time to time.

- i) Register for secured advance
- ii) Register for hindrance to work
- iii) Register for running account bill
- iv) Register for labour

#### 12.0 Force maieure

- 12.1 Neither contractor not SBI shall be considered in default in performance of their obligations if such performance is prevented or delayed by events such as war, hostilities revolution, riots, civil commotion, strikes, lockout, conflagrations, epidemics, accidents, fire, storms, floods, droughts, earthquakes or ordinances or any act of god or for any other cause beyond the reasonable control of the party affected or prevented or delayed. However, a notice is required to be given within 30 days from the happening of the event with complete details, to the other party to the contract, if it is not possible to serve a notice, within the shortest possible period without delay.
- 12.2 As soon as the cause of force majeure has been removed the party whose ability to perform its obligations has been affected, shall notify the other of such cessation and the actual delay incurred in such affected activity adducing necessary evidence in support thereof.
- 12.3 From the date of occurrence of a case of force majeure obligations of the party affected shall be suspended during the continuance of any inability so caused. With the cause, itself and inability resulting there from having been removed, the agreed time of completion of the respective obligations under this agreement shall stand extended by a period equal to the period of delay

occasioned by such events.

12.4 Should one or both parties be prevented from fulfilling the contractual obligations by a state of force majeure lasting to a period of 6 months or more the two parties shall mutually decide regarding the future execution of this agreement.

# 13.0 Local Laws, Acts, Regulations

The contractor shall strictly adhere to all prevailing labour laws inclusive of contract labour (regulation and abolition act of 1970) and other safety regulations. The contractor shall comply with the provision of all labour legislation including the latest requirements of all the Acts, laws, any other regulations that are applicable to the execution of the project.

i)Minimum Wages Act, 1948 (Amended)

ii)Payment of Wages Act 1936 (Amended)

iii)Workman's Compensation Act 1923 (Amended)

iv)Contract Labour Regulation and Abolition Act 1970 and Central Rules 1971 (Amended)

v)Apprentice Act 1961 (Amended)

vi)Industrial Employment (Standing Order) Act 1946 (Amended)

vii)Personal Injuries (Compensation Insurance) Act 1963 and any other modifications

viii)Employees' Provident Fund and Miscellaneous Provisions Act 1952 and amendment thereof

ix)Shop and Establishment Act

x)Any other Act or enactment relating thereto and rules framed there under from time to time.

#### 14.0 Amendment

The central government may from time to time add to or amend the regulation and on any question as to the application, interpretation or effect of these regulations the decision of the chief labour commission or deputy chief labour commission to the government of India, or any other person authorized by the central government in that behalf shall be final.

#### 15.0 Contractor's Labour Regulations

Contractors should strictly follow the labour regulations as per the latest Indian Government acts. Periodical wages, Insurance coverages, Employee minimum allowances...etc. must be availed for all the staff. All the Licenses and necessary Registers to be maintained by the Contractor shall be verified by SBI anytime.

#### 16.0 Delayed Payments

Any amounts payable by the Employer to the contractor in pursuance of any Certificate given by the SBI/SBIIMSPL hereunder shall, if not paid within the 'Period of honoring of Certificate' no interest will be paid by the Employer.

#### 17.0 SAFETY CODE/SAFETY MEASURES

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

- **1.** All personnel at site should be provided with Helmets and Safety Boots with some Identification Mark. Visitors also should be provided with Helmets. It should be ensured that these are used properly.
- 2. First Aid Box should be kept at site with all requisite materials.
- 3. No one should be allowed to inspect / work at a height without Safety Belt.

- **4.** Suitable scaffolds should be provided for workmen for all Works that cannot safely be done from the ground, or from solid construction except such short period Work as can be done safely from ladders. When a ladder is used an extra Mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well as suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than ½ to 1 (½ horizontal and 1 vertical).
- **5.** Scaffolding or staging more than 3.5 meters above the ground or floors, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached, bolted, braced and otherwise secured at least 1 Meter high 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.

- **6.** Working platforms, Gangways, and Stairways should be so constructed that they do not sag unduly or unequally, and if the height of the platform or the Gangway or the Stairway is more than 3-5 Meters above ground level or floor level they should be closely boarded, should have adequate width and should be suitably fenced, as described.
- **7.** Every opening in the floor of a building or in a working platform 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 Meter.
- **8.** Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 Meters in length while the width between side rails in rung ladder shall in no case be less than 30cms for ladder up to and including Meters in length. For longer ladders this width should be increased at least 6mm for each additional 30 cm. Uniform step spacing shall not exceed 30 cm.
- **9.** Adequate precautions shall be taken to prevent danger from electrical equipment's. For electrical on line works gloves, rubber mats, and rubber shoes shall be used.
- **10.** All trenches 1.2 Meters or more in depth shall at all times be supplied with at least one ladder for each 30 Meters length or fraction thereof. Ladder shall be extended from bottom of the trench to at least 1 Meter above the surface of the ground. The sides of the trenches, which are 1.5 Meters 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 Meters of the edge of the trench or half of the depth of the trench whichever is more cuttings shall be done from top to bottom. Under no circumstances undermining or under cutting shall be done.

- 11. Before any demolition work is commenced and also during the process of the work:
  - a) All roads and open areas adjacent to the Work Site shall either be closed or suitably protected;
  - b) No electrical cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
  - c) All practical steps shall be taken to prevent danger to persons employed from risk or

fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.

- d) All necessary personal safety equipment as considered adequate by the Site Engineer 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 Contractor should take adequate steps to ensure proper use of equipment by those concerned.
- e) Workers employed on mixing Asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
- f) Those engaged in white washing and mixing or stacking of cement bags or any materials which is injurious to the eyes shall be provided with protective goggles.
- g) Those engaged in welding works shall be provided with Welder's protective eyeshields.
- h) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- i) 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 the manholes and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals and boards to prevent accident to the Public.
- **12.** Use of hoisting machines and tackle including their attachments, anchorage and support shall conform to the following standard or conditions:
  - a) These shall be of good mechanical construction, sound material and adequate strength and free from patent defect and shall be kept in good repairs and in good working order.
  - b) Every rope used in hoisting or lowering materials or as a 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 should be in-charge of any hoisting machine including any scaffold, winch or give signals to the operator.
  - d) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or lowering or as means of suspension the safe working load shall be ascertained by adequate means.
  - e) Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of hoisting machine having a variable safe working load, each safe working load of the conditions under which it is applicable shall be clearly indicated. No part of any machine or of any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
  - f) Motor, Gearing, Transmission, Electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards, hoisting appliances should be

provided with such means as will reduce to the minimum the risk of accidental descent of the load, adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced.

- g) When workers are employed on electrical installation, which are already energized, 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.
- **13.** All scaffolds, ladders and other safety devices, mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities shall be provided at or near places of work.

#### 18.0 Accidents

The contractor shall immediately on occurrence of any accident at or about the site or in connection with the execution of the work report such accident to the SBI/SBIIMSPL/Architect. The contractor shall also report immediately to the competent authority whenever such report is required to be lodged by the law and take appropriate actions thereof.

# ADDITIONAL CONDITIONS FOR DG SET PROCUREMENT AND ALLIED WORKS

Unless otherwise specified in Technical specifications / General Conditions / Special Conditions the additional conditions for DG Set Procurement shall be adopted. The Allied Electrical works and other accessories shall comply with latest IS (Indian Standard Codes) and National Electrical code – 1985.

- ✓ The contractor should submit & approve make list with bank's engineer/ SBIIMSPL representative/ Architect before working & submit signed copy with final bill submission.
- ✓ The contractor should check approved make list before quote.
- ✓ The contractor should submit test certificate of panel from panel, but the panel should be made as per CPRI terms & conditions & also approved by bank's electrical engineer / Architect. the contractor should follow the GA drawing & panel SLD if given in tender (if given).
- ✓ Earth resistance should be checked & submitted the report with duly signed by electrical contractor at the time of bill checking.
- ✓ Vendor has to submit MTC / test reports & Inspection certificate of Company wherever required.
- ✓ Concealed Work: The contractor shall give due notice to the Employer/SBI/SBIIMSPLs whenever any work is to be covered up or finished up or otherwise becoming inaccessible later on, in order that the work may be inspected and correct dimensions taken before such covering, in default whereof the same shall, at the opinion of the Employer/SBI/SBIIMSPL be either opened up for measurement at the contractor's expenses 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 Employer / SBI/SBIIMSPLs shall be accepted as correct and binding on the contractor.
- ✓ All the laborer's, electricians etc., involved in work shall be efficient, qualified electrical license holders and well experienced in Electrical installations and allied works. All employees should be under the coverage of P.F./Minimum Wages Act, as per labour laws. All rules and regulations as per the extant guidelines of labour department are to be followed.
- ✓ MCCB fault level shall be of minimum 16 ka, whereas fault level for all MCBs shall be of minimum 3 ka.
- ✓ All copper wires & aluminum cables shall be 1.1 KV grade. All copper wires used for wiring shall be FRLS type.
- ✓ All medium voltage equipment's (Manual Control Panel, AMF Panel, starting motors...etc.) shall be earthed by two separate and distinct connections with the earth.
- ✓ If necessary, any additional cutouts and patching up gaps/holes side by the Electrical fittings/ accessories are to be repaired by successful bidder only.
- ✓ Job to be carried out at working office environment, So successful bidder shall co-ordinate

with Electrical Facility Management Team on site for proper permissions and non-hindrance of SBI regular functions.

- ✓ The successful tenderer will arrange staff/ fuel/ POL for test run at his cost.
- ✓ All major items/ equipment i.e. engine & alternator in assembled condition, Electrical control panel etc. shall be offered for initial inspection at factory/ manufacturers works.

The requirement of testing of DG Set at manufacturer's premises, in presence of representative of the SBI, can be dispensed with/ waived off, keeping in view the exigency of works, with the prior approval of the SBI/ SBIIMSPL Engineer. However, test certificates of the particular DG Set on full load, shall be submitted at the time of delivery of DG Set at site.

#### STATUTORY CLEARANCE(S)

Approval/ clearance of the complete installation shall be obtained by the contractor from CPCB/ State Pollution Control Boards/ Local Bodies/ Central Electricity Authority (CEA)/ other licensing authorities wherever required. However, application shall be made by SBI and any statutory fee, as applicable, shall be paid by SBI directly to the govt. authorities concerned.

#### TRIAL RUN/ RUNNING-IN-PERIOD

After successful testing of the DG Set, a trial run at available load will be carried out for 12 Hours or 3 days (4 hrs per day) whichever is earlier. The DG Set will be operated and a log of all relevant parameters will be maintained during this period. The arrangement of staff for trial run/ running in period will be made by the successful tenderer. However, diesel shall be provided by Department. The contractor will be free to carry out necessary adjustments.

The DG Set will be said to have successfully completed the trial run, if no break-down or abnormal/ unsatisfactory operation of any component of the entire installation included in the scope of work of the contract, occurs during this period. After this the DG Set will be made available for beneficial use. After the DG Set has operated without any major break-down/ trouble, it shall be taken over by the department subject to guarantee clause of the contract. This date of taking over of the DG Set, after trouble free operation during the trial run/ running-in period, shall be the date of acceptance/ taking over.

#### **GUARANTEE**

All equipment's shall be guaranteed, against unsatisfactory performance and/ or break down due to defective design, workmanship or material, for a period of 12 months from the date of taking over the installation by the department. The equipment's or components, or any part thereof, so found defective during guarantee period shall be forthwith repaired or replaced free of cost, to the satisfaction of the Engineer-in- Charge. In case it is felt by the department that undue delay is being caused by the contractor in attending the defect/ fault removed, the same will be got done by the department at the risk and cost of the contractor. The decision of the Engineer-in- charge in this regard shall be final.

# TENDER DRAWINGS, DRAWINGS FOR & COMPLETION DRAWINGS

The contractor shall prepare & submit three sets of following drawings and get them approved from the Engineer-in-charge before the start of the work. The approval of drawings however does not absolve the contractor not to supply the equipment's/ materials as per agreement, if there is any contradiction between the approved drawings and agreement.

✓ Lay out drawings of the equipment's to be installed including control cables, fuel/

lube oil pipes and supports/ structure for exhaust piping, Chimney and bus ducts/ cable trays.

- ✓ Drawings including section, showing the details of erection of entire equipment's.
- ✓ Dimensioned drawings of Acoustic enclosure/ Engine-Alternator set and Electrical control panel.
- ✓ Drawings showing details of supports for pipes, chimney cable trays, ducts etc.
- ✓ Two sets of the following laminated drawings shall be submitted by the contractor while handing over the installation to the Department. In addition, drawings will be given on Compact Disc (CD).
- ✓ DG set installation drawings giving complete details of all the equipment's, including their foundations, Line diagram and layout of all electrical control/AMF panels giving switchgear ratings and their disposition, cable feeder sizes and their layout.
- ✓ Control wiring drawings with all control components and sequence of operations to explain the operation of control circuits in AMF panel/PCC.
- ✓ Manufacturer's technical catalogues of all equipment's and accessories.
- ✓ Operation and maintenance manual of all major equipment's, detailing all adjustments, operation and maintenance procedure.

### **AFTER SALES SERVICES**

The contractor shall ensure adequate and prompt after sales service free of cost during guarantee period, and against payment after the guarantee period is over, in the form of maintenance, spares and personnel as and when required during normal life span of the equipment's and shall minimize the breakdown period. In case of equipment supplied by other manufacturers the firm shall furnish a guarantee from the manufacturer for the same before the DG Set installation is taken over.

### **TECHNICAL SPECIFICATIONS**

### 1. SCOPE

DG sets of 125 KVA capacity required to be supplied, installed, tested and commissioned with acoustic enclosure as per CPCB norms. The tenderer has to certify that the engine & alternator meets the capacity requirement after de-rating as per IS/ BIS. DG Set should be type tested for Noise and Emission norms/standards as per CPCB.

### 2. DIESEL ENGINE

### 2.1 Engine Rating

The engine shall be of standard design of the original manufacturers. It should be 4 stroke cycles, water cooled, naturally aspirated/ 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 1500 rpm at actual site conditions.

The engine shall be capable for 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 period of 24 hours shall be 0.85 (85%) for prime power output.

The engine shall conform to IS:10000/ ISO 3046/ BS:649/ BS 5514 amended up to date. Necessary certificate indicating the compliance of the above capacity requirement for the engine model so selected along with compliance of Noise and Emission norms as per latest CPCB guidelines for DG set capacity up to 1000 KVA, should be furnished from the manufacturers along with the technical bid.

The engine shall be fitted with following accessories subject to the design of the manufacturer:

- Dynamically balanced Fly wheel, governor with self-contained unit capable of monitoring speed, as per ISO 3046/ BS 5514 with actuator shall be provided as per standard design of manufacturer
- Necessary flexible coupling and guard for alternator and engine. A common bed plate together with all auxiliaries 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.
- Air cleaner (dry/ oil bath type) as per manufacturer standard.
- A mechanical/ electronic governor to maintain engine speed at all conditions of load.
- Daily fuel service tank of minimum capacity, fabricated from M.S. sheet with inlet, outlet connections air vent tap, drain plug and level indicator (gauge) M.S. fuel piping from tank to engine with valves, unions, reducers, flexible hose connection and floor mounting pedestals, twin fuel filters and fuel injectors. The location of the tank shall depend on standard manufacturers design. If piping length is more than 10 meters, detail engineering is required in consultation with OEM/ Manufacturers.
- Dry exhaust manifold with suitable exhaust residential grade silencer to reduce the noise level.

- Suitable self-starter for 12 V DC.
- Battery charging alternator unit and voltage regulator, suitable for starting batteries, battery racks with interconnecting leads and terminals.
- Necessary gear driven oil pump for lubricating oil, priming of engine bearing as well as fuel systems as per manufacturer recommendations.
- Naturally aspirated/ turbo charger (as per manufacturer standard)
- Lubrication oil cooler
- Lubrication oil filters with replaceable elements
- Crank case heater as per manufacturer recommendations
- Fuel injection: Engine should have suitable fuel injection system in order to achieve low fuel consumption
- Fuel control solenoid
- Fuel pump with engine speed adjustment.
- Engine Control Panel: fitted and having digital display for following:
  - (a) Start/stop kev switch.
- (f) Battery charging indication
- (b) Lube oil pressure indication (g) Low lube Oil trip indication
- (c) Water temp. indication
- (h) High water temp. indication
- (d) RPM indication
- (i) Over speed indication.
- (e) Engine Hours indications
- Any other item not included/ specified but is a standard design of the manufacturer

All moving parts of the engine shall be mechanically guarded in such a manner that a human finger cannot touch any moving part.

### 2.2 Frequency Variation

The engine speed shall be so maintained that frequency variation at constant load including no load shall remain within a band of 1% of rated frequency.

# 2.3 Lubricating Oil System

It shall be so designed that when the engine starts after a long shut down lubrication failure does not occur. Necessary priming pump for the lube oil circuit as per recommendation of manufacturer shall be installed, to keep bearings primed. This pump shall be normally automatically operative on AC/ DC supply available with the set.

### 2.4 Starting System

This shall comprise of necessary set of heavy duty batteries 12V DC (as per manufacturer standard). A timer in the control panel to protect the starter motor from excessively long cranking runs shall be suitably integrated with the engine protection system and shall be included within the scope of the work. Battery capacity shall be suitable for meeting the needs of starting system, as well as the requirements of control panel, indications and auxiliaries such as priming pump as applicable etc. The scope shall cover all cabling, terminals, including initial charging etc. The system shall be capable of starting the DG set within 20-30 sec., even in winter condition with an ambient temperature down to 0°C.

### 2.5 Battery Charger

The battery charger shall be suitable to charge required numbers of batteries at 12V/ 24 volts complete with, transformer, rectifier, charge rate selector switch, indicating ammeter & voltmeter etc. Connections between the battery charger & batteries shall be provided with suitable copper leads with lugs etc.

### 2.6 Piping Work

Necessary flexible pieces in the exhaust, fuel, lube oil and water lines as are necessary in view of the vibration isolation requirement in the installation. Piping of adequate size shall be used for lube oil of the material as per manufacturer standard. However, only M.S. pipes for the exhaust shall be used. For fuel lines within the acoustic enclosure, PVC braided pipe as per manufacturer recommendations can be used. The pipe work shall be inclusive of all fittings and accessories required for complete DG Set operative such as bends, reducers, elbows, flanges, flexible connections, necessary hardware etc.

# 2.7 Exhaust System

All M.S. Pipes for exhaust lines shall be conforming to relevant IS. The work includes necessary cladding of exhaust pipe work using 50 mm thick Loosely bound resin (LBR) mattress/ mineral wool/ Rockwool, density not less than 120 kg/m<sup>3</sup> and aluminium cladding (0.6 mm thick) for the complete portion. The exhaust pipe work includes necessary supports, foundation etc. to avoid any load & stress on turbo charger / exhaust piping.

Number of bends should be kept minimum and smooth bends should be used to minimize back pressure, flexible bellows can be used. Exhaust piping inside the Acoustic Enclosure/ Genset room should be lagged with asbestos rope along with aluminium sheet cladding / insulated to avoid heat input to the room. The exhaust outlet should be in the direction of prevailing winds and should not allow exhaust gases to enter air inlet/ windows etc. Proper arrangements should be given at the end of the pipe to avoid rain water entry into exhaust piping. Silencer should be installed with drain plug at bottom. Care should be taken to ensure that no carbon particles emitted due to exhaust leakage enters and deposits on alternator windings and on open connections.

### 2.8 Air System

It is preferable to provide vacuum indicator with all engines to indicate choked filter. Maximum air intake restrictions with clean and choked filters should be within prescribed limit as per OEM/ manufacturer recommendation for the particular model of the engine. Gensets should be supplied with medium duty air cleaners.

### 2.9 Cooling System

System should be designed for ambient temperature of 40 Deg.C. The DG set shall be radiator cooled & engine jacket water used, shall be mixed with additive as per recommendation of manufacture. Radiator fan flow should be free from any obstruction. In this the cooling media is ambient air

Optional items as under may be included as per site requirement at the discretion of Technical Sanctioning authority:

### **Cooling System**

Jacket Water Heater Crankcase Oil Heater After cooler jacket turbo charger, electrical pre-heat systems.

**Fuel System** 

Fuel Water Separator Auxiliary Fuel Pump

**Exhaust System** 

Residential Grade Muffler Critical Grade Muffler

### **Start System**

Battery Warmer Plate Automatic Float Equalizing Trickle

#### 3. ALTERNATOR

### 3.1 Synchronous Alternator

Self-excited, screen protected, self-regulated, brush less alternator, Horizontal foot mounted in Single/Double bearing construction suitable for the following:

Rated PF	:	0.8 (lag)
Rated voltage	:	415 volts
Rated frequency	:	50 Hz
No. of Phases	:	3
Enclosure	:	SPDP
Degree of protection	:	IP-23
Ventilation	:	Self-ventilated air cooled Ambient Temperature
40° C Maximum Insulation Class	:	Н
Temperature Rise	:	50° C
Within class F/H limits at rated	:	+/- 1%
load Voltage Regulation		
Voltage variation	:	+/- 5%
Overload duration/capacity	:	10% for one hour in every 12 hours of
		continuous use.
Frequency variation	:	As defined by the Engine Governor (+/-1%)
Excitation	:	Self-excited system
Type of AVR	:	Electronic
Type of Bearing and	:	Anti-friction bearings with Grease Lubrication
		arrangement
Standard	:	IS 4722 & IEC:34 as amended up to date.

Alternator should be able to deliver output rating at actual site conditions.

### 3.2 Excitation

The alternator shall be brushless type and shall be self-excited, self- regulated having static excitation facility. The rectifier shall be suitable for operation at high ambient temperature at site.

### 3.3 Automatic Voltage Regulators (AVR)

In order to maintain output terminal voltage constant within the regulation limits i.e. +/- 1%, Automatic voltage regulator unit shall be provided as per standard practice of manufacturer.

### 3.4 Fault tripping

In the event of any fault e.g. 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 shall also be provided.

### 3.5 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 IS 4722:1992.

The performance characteristics of the alternator shall be as below:

Efficiency at full load 0.8 P.F. : not less than 90% Total distortion factor : Less than 3 %

(i) 10% overload : One hour in every 12 hrs. of

continuous use

(ii) 50% overload : 15 seconds.

### 3.6 Terminal Boxes

Terminal boxes shall be suitable for U.G. cables/ Bus Trunking. The terminal box shall be suitable to withstand the mechanical and thermal stresses developed due to any short circuit at the terminals and adequate space for looping cable cores.

#### 3.7 Earth Terminals

2 Nos. earth terminals on opposite side with vibration proof connections, non-ferrous hardware etc. with galvanized plate and passivated washer of minimum size 12 mm dia. hole shall be provided.

### 4. MANUAL/ AMF PANEL, BATTERIES AND ELECTRICAL SYSTEM

Associated AMF panel/ Manual panel of the DG Set can be located outside the acoustic enclosure as per manufacturer's standard.

### 4.1 Manual Control Panel

The control panel shall be fabricated out of 1.6 mm sheet steel, totally enclosed, dust, damp and vermin proof wall mounted/ free standing floor mounted type with IP-53 degree of protection & front operated.

The Standard control panel shall consist the following instruments:

- 1. Composite meter for digital display of:
  - 1. Voltage
  - 2. Current
  - 3. Power factor
  - 4. Frequency
  - 5. Energy Meter
- 2. HRC fuses of suitable rating.
- 3. Push button-switch or ON/ OFF Switch for ON and OFF operation
- 4. Pilot lamps.
- 5. Battery charger complete with voltage regulator, Voltmeter and Ammeter for charging the battery from external mains. This will be in addition to the battery charging alternator or dynamo fitted on the engine.
- 6. Instrument fuses.

All the components in the control panel shall be properly mounted, duly wired and labeled. Suitable terminals are to be provided for panel incoming and outgoing connections.

#### 4.2 AMF Control Panel

#### 4.2.1 General Features:

The control panel shall be fabricated out of 1.6 mm thick sheet steel, totally enclosed, dust, damp and vermin proof free standing floor mounted type & front operated. It shall be made into sections such that as far as feasible, there is no mixing of control, power, DC & AC functions in

the same section and they are sufficiently segregated except where their bunching is necessary. Hinged doors shall be provided preferably double leaf for access for routine inspection from the rear. There is no objection to have single leaf hinged door in the front, all indication lamps, instruments meter etc. shall be flushed in the front. The degree of protection required will be IP-42 conforming to IS 2147.

# 4.2.2 Terminal Blocks and Wiring:

Terminal blocks of robust type and generally not less than 15 Amps capacity, 250/500 V grade for DC up to 100 V and 660/ 1100 volts' grade for AC and rest of the junction shall be employed in such a manner so that they are freely accessible for maintenance. All control and small wiring from unit to unit inside the panel shall also be done with not less than 1.5 sq.mm copper conductor PVC insulated and 660/ 1100 volts grade. Suitable colour coding can be adopted. Wiring system shall be neatly formed and run preferably, function wise and as far as feasible segregated voltage wise. All ends shall be identified with ferrules at the ends.

### 4.2.3 Labeling:

All internal components shall be provided with suitable identification labels suitably engraved. Labels shall be fixed on buttons, indication lamps etc.

# 4.2.4 Painting:

The entire panel shall be given primer coat after proper treatment and powder coating with 7 tanks process before assembly of various items.

### 4.2.5 Equipment requirements:

The control cubical shall incorporate into assembly general equipment and systems as under:

- Control system equipment's and components such as relays, contactors, timers, etc. both for automatic operation on main failure and as well as for manual operation.
- Equipment and components necessary for testing generating set's healthiness with test mode and with load on mains.
- Necessary instruments and accessories such as voltmeter, power factor meter, KW meter, KWH meter, Ammeter, Frequency meter etc. in one energy analyzer unit with selector switch to obtain the reading of desired parameters.
- Necessary indication lamps, fuses, terminal blocks, push buttons, control switches etc. as required.
- Necessary engine/ generating set shut down devices (Emergency switch) due to faults /abnormalities.
- Necessary visual audio alarm indication and annunciation facility as specified.
- Necessary battery charger.
- Necessary excitation control and voltage regulating equipment. (Alternatively provided on the Alternator itself).

#### 4.2.6 System Operation:

The above mentioned facilities provided shall afford the following operational requirements.

### **Auto Mode:**

When the mains supply voltage fails completely or falls below set value (variable between 80 to 95% of the normal value) on any phase, the monitor module shall initiate start-up of diesel engine. To avoid initiation due to momentary disturbance, a time delay adjustment between 0 to 5

second shall be incorporated in start-up initiation.

When the main supply is restored and is healthy as sensed by the line voltage monitor setting, both for under voltage and unbalance, the system shall be monitored by a suitable timer which can be set between 1 minute to 10 minutes for the load to be transferred automatically to main supply. The diesel alternator set reverts to standby for next operation.

#### Manual Mode:

In a manual mode, it shall be feasible to start-up the generator set by the operator on pressing the start push button. Three attempt starting facility shall be operative for the start-up function.

#### Test Mode:

When under 'test' mode pressing of 'test' button shall complete the startup sequence simulation and start the engine.

**4.2.7 Engine shut down and alternator protection equipment:** Following shut down and protection system shall be integrated in the control panel.

### **Engine Protection:**

Low lubricating oil pressure shut down. This shall be inoperative during start up and acceleration period.

High coolant (water) temp. shut down.

Engine over speed shut down.

Alternator Protection: Following protection arrangement shall be made:

Over load

Short circuit

Earth fault

Over voltage

### 4.2.8 Monitoring and Metering Facilities:

Necessary energy analyzer unit for visual monitoring of mains, alternator and load voltage, current, frequency, KWH, power factor, etc. A set of visual monitoring lamp indication for:

Load on set

Load on mains

Set on test.

Set of lamp for engine shut down for over speed, low lub. oil pressure and high coolant water temperature, overload trip of alternator, earth fault trip of alternator, engine lock out and failure to start etc. All these indications shall have an audio and visual alarm (Annunciation Panel).

### 4.2.9 Operating Devices:

A set of operation devices shall be incorporated in the front of panel as under:

Master Engine Control Switch: This shall cut off in 'OFF' position DC control to the entire panel, thus preventing start-up of engine due to any cause. However, battery charger, lamp test button for testing the healthiness of indication lamps, DC volt mater / ammeter etc. shall be operative. It shall be feasible to lock the switch in OFF position for maintenance and shut down purposes. Also, Operation selector switch OFF/AUTO/MANUAL/TEST position, Energy analyzer unit for display of various electrical parameters like voltage, current, frequency, KW, power factor, etc., Necessary battery charger with boost/ trickle selector, DC voltmeter and DC ammeter as required.

### 5. CABLING

Power cabling between alternator and control panel and control panel and change over switch to mains should be done with recommended cable sizes. Overheating due to loose thimbling / undersize cables causes most of electrical failures, hence correct size of cable and thimbles

should always be used, if cable is specified.

While terminating cables, avoid any tension on the bolts/ bus bars (if cable is specified). While terminating R, Y& B phase notations should be maintained in the alternator and control panel for easy maintenance. Crimped cables should be connected to alternator and control panel through cable glands, if cable is specified. Multi-core copper cables should be used for inter connecting the engine controls with the switchgear and other equipment's. For AMF application, multicore 1.5 sq.mm flexible stranded copper cable for control cabling should be used. For proper terminations between links and switchgear terminals, the contact area must be adequate.

### **6. ACOUSTIC ENCLOSURE**

As per CPCB norms, restriction has been imposed for new DG sets up to 1000 KVA for noise level. Therefore, in terms of these norms, acoustic enclosure should be type tested at the climatic conditions through one of the authorized laboratory.

#### 6.1 Installation

Acoustic enclosures are supplied with built in Anti Vibration Mountings (AVMs). As such Genset can be installed directly on the leveled surface. Exhaust piping outlet should not be turned towards window / ventilator of home or occupied building. Provision of rain cap should be ensured. The acoustic enclosure placement should be such that there is no restriction in front of air inlet and outlet from canopy.

### 6.2 Service Accessibility

Genset / Engine control panel should be visible from outside the enclosure. Routine / periodical check on engine / alternator (filter replacement and tappet setting etc.) should be possible without dismantling acoustic enclosure. Sufficient space should be available around the Genset for inspection and service.

### 6.3 General Design Guidelines

Temperature rise inside the enclosure should not be more than 5°C for maximum ambient above 40°C and it should be below 10°C for ambient below 40°C. There should be provision for oil, coolant drain and fill. Fuel tank should have provision for cleaning. The enclosure should be designed to meet the total air requirement for the D.G. Set at full load at site conditions as recommended by the engine manufacturer.

### **6.4 Specifications for Acoustic Enclosure**

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

The detailed construction shall conform to the details as under:

The enclosure shall be fabricated out the CRCA sheet of thickness not less than 1.6 mm on the outside cover with inside cover having not less than 0.6 mm thick perforated powder coated CRCA sheet. The hinged doors shall be made from not less than 16 SWG (1.6 mm) thick CRCA sheet and will be made air tight with neoprene rubber gasket and heavy duty locks. All sheet metal parts should be processed through 7-tank process & powder coated.

The batteries should be accommodated in the enclosure in battery rack. The canopy should be provided with high enclosure temperature safety device. The acoustic lining should be made up of high quality insulation material of appropriate thickness & density for sound absorption as per standard design of manufacturer's 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 M. S.

Sheet duly powder coated / GI sheet/ aluminium sheet. The acoustic enclosure should be provided with gland plates/ to enable cable entry & exit/ suitable round openings. Such arrangements on acoustic enclosure should be water proof & dust-proof conforming to IP-65 protection.

The inside of enclosure should be provided with at least two nos. fluorescent tube light luminaire controlled by a 5A switch for adequate lighting during servicing etc. of the DG Set. The power supply to this luminaire should be from the load side of the AMF Panel so that it can remain energized under all conditions.

#### 7. EARTHING

This section covers the earthing requirement of DG Set installations. Copper plate earthing (Neutral Grounding) shall be provided for DG Sets. The body earthing shall generally be of G.I.

Earth sets for each DG Sets are required as under:

- ✓ 2 earthing sets for Genset/ control panel body.
  - ✓ 2 earthing sets for neutral.

For Gensets with AVM's the body earthing must be done at the engine/ alternator and not at base-rail. Genset should be earthed at two distinct points through a conductor strip having cross-section suitable to carry the short circuit (three phase dead short circuit with ground) current without burning out in conformity to IS 3043. Test joints should be provided for testing the earthing as and when required. For further details of Earthing work, like size of plate/ earth strip, depth of earthing, method etc., refer IS 3043.

### 8. INSPECTION AND TESTING

For DG set testing shall necessarily be carried out at site. However, initial inspection can be done at factory/manufacturer works before dispatch at site of work at the discretion of Engineer-in-Charge. The cost of the Engineer's visit to the factory will be borne by the Bank. After initial inspection, DG Set and associated Electrical panel equipment's shall be cleared for dispatch at site.

Copies of all documents of routine and type test certificates of the equipment, carried out at the manufacturers premises shall be furnished to the Engineer-in-charge and consignee. After completion of the installation work in all respects, the contractor shall offer the DG Sets for testing.

# **FORM OF AGREEMENT**

ARTICLES of AGREEMENT made this day of year 2018 between the State Bank of India, Assistant General Manager, Amaravati LHO (Hereinafter referred to as the "Employer/Owner/client" which expression shall, unless excluded by or repugnant to the context, includes its successors and assigns) of the ONE PART and of (Hereinafter referred to as "Contractor" unless excluded by or repugnant to the context, includes its successors and assigns) of the OTHER PART.
WHEREAS the Employer intends to carry out <b>SUPPLY</b> , <b>INSTALLATION</b> , <b>TESTING AND COMMISSIONING OF 1 X 125 KVA DIESEL GENERATOR SET AT SBILD</b> , <b>MACHILIPATNAM</b> , <b>KRISHNA DISTRICT</b> , <b>ANDHRA PRADESH (SBI Code</b> : 07858) and shall herein after referred to as "Project".
AND WHEREAS for the purpose of the above said project, the Employer invited sealed tenders from experienced, resourceful and bonafied contractors vide his Notice Inviting Tender (No dated).
WHEREAS the contractor submitted his Tender Documents containing Notice Inviting Tender, General notes, General Conditions of Contract, Special conditions, Schedule of approximate quantities and rates, Form of Agreement, General Specification, Approved manufacturers/ natural source of materials, Declaration, Technical Specifications as in Schedule of Quantities etc. for the above said project, (Hereinafter collectively referred to as the "said conditions"), duly signed on each page as a token of his acceptance of the same, along with requisite Earnest Money Deposit
AND WHEREAS out of the Tenders received, the Tender of the contractor was found to be most suitable for the project.
AND WHEREAS the Employer has accordingly issued the work order (No Dt) to the contractor subject to his furnishing the requisite Security Deposit.
AND WHEREAS the Contractor has accepted the aforesaid Work Order vide his letter of acceptance NO dt and has also deposited with the Employer a sum of Rs which with the Earnest Money of RS forms the requisite Security Deposit @ 2 % of the accepted Tender Value of Rs
NOW, therefore, it is hereby agreed to and between the parties as follows:
1) Contract documents The following documents shall constitute the Contract Documents.
<ul> <li>I. This Article of Agreement.</li> <li>II. Tender Document submitted by the Contractor including the "said conditions", N.I.T and Schedule of quantity.</li> <li>III. All correspondence between the Employer and the Contractor from the date of issue of N.I.T and the date of issue of work order.</li> <li>IV. Work order Nodt</li></ul>
2) In consideration of the payments to be made to the Contractor as hereinafter provided the Contractor shall upon and subject to the said conditions, execute and complete the contracted project works shown upon the said drawings etc. and such further detailed drawings as may be furnished to the contractor by the said Employer and described in the said Specifications and the said Schedule of Quantities.

- **3)** Notwithstanding what are stated in the **N.I.T conditions of Tendering, Conditions of Contract** of herein stated before, the Employer reserves itself the right of altering the drawings and the nature of the work and addition to or omitting any items of work or of having portions of same carried out departmentally or otherwise and such alterations or variations shall be carried out without prejudice to this contract.
- **4)** As mentioned in Article 1 above, the "**said conditions**" shall be read and be treated as forming part of this agreement and parties hereto will respectively be bound thereby and to abide by and submit themselves to the conditions and stipulations and perform the same on their parts to be respectively observed and preferred.
- **5)** Any dispute arising under this agreement shall be referred to the Arbitration in a manner specified in the General Conditions of the Contract and all legal disputes shall be limited within the territorial jurisdiction of the Hyderabad thereto. The decision of the arbitration shall be final and binding on both the parties.

**IN WITNESS, WHEREOF THE PARTIES** to their present have here under set and subscribed their hands, the day, month and year first above written.

Signed and delivered for and	on behalf of	
State Bank of India, Shri 1. (Name and Address)	its duly au	uthorized official, In the presence of –
2. (Name and Address)		
Signed and delivered for and	on behalf of	
The Contractor official, in the presence of – 1. (Name and Address)	by Shri	his duly authorized
2. (Name and Address)		
READ, UNDERSTOOD AN	D ACCEPTED	
SIGNATURE OF THE CONT	RACTOR WITH SEAL	

# **DECLARATION**

The Vice president,
SBI Infra Management Solutions Pvt. Ltd.,
Amaravati Circle Office,2<sup>nd</sup> Floor,
SBI Amaravati LHO Building,
Gun foundry, Abids,
Hyderabad – 500 001.

I/We have inspected the site **SBILD**, **MACHILIPATNAM**, **ANDHRA PRADESH** (**CODE**: **07858**) and I/We have made me/ us fully acquainted with the local conditions in and around the sites of works and Lay out drawings of works, drawings of each items etc. complete.

I/We hereby declare that I/ We have carefully gone through the conditions laid down in the Notice Inviting Tender, General notes, General Conditions of Contract, Special conditions, Schedule of approximate quantities and rates , Form of Agreement, General Specification, Approved manufacturers/ natural source of materials (i.e. all parts of Technical bid), Technical Specifications of schedule of quantities (i.e. all parts of Price bid), and clearly understood all the same and on the basis of the same I/ We have quoted our rates in the Schedule of Quantities/BOQ attached with the tender documents.

We accept all the terms and conditions of tender documents. We will abide by the technical specification mentioned in the tender. We here by undertake to use only specified material/ make as per the tender schedule. I/ We hereby declare that, in particular during execution of all works at site; it will be my/ our sole responsibility to strictly adhere to/ meticulously follow the General Specification, Approved manufacturers/ natural source of materials, Technical Specifications of schedule of quantities, all drawings of layout and items.

For any type of deviation (to any of above or subsequent instructions), it will be my/ our responsibility to obtain the written instruction of the Engineer-in-charge for the same failing which it shall be deemed that I have carried out any such deviations at my own and I shall be duty bound to replace the all deviated material/ works from the site at my/ our cost as well as I shall be liable to penalized by the employer as deemed fit and for all such loses made thereof, I/ we shall not have any right to arbitrate in any manner.

I/ We hereby declare that I/ We shall obtain necessary drawings of items from employer in time and also shall uniformly maintain such progress as may be directed by the employer to ensure completion of same within the target date/ time as mentioned in the tender document.

Date:	Signature and seal of Contractor/ Tenderer
Witness:	
1.	
2.	

### ANNEXURE-I

# BID FORM (TECHNICAL BID)

No.: Date:

To,
The Vice President,
SBI Infra Management Solutions Pvt. Ltd.,
Amaravati Circle Office,
2<sup>nd</sup> Floor, SBI Amaravati LHO Building,
Gunfoundry, Abids,
Hyderabad – 500 001.

Dear Sir,

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 1 X 125 KVA DIESEL GENERATOR SET AT SBILD, MACHILIPATNAM, KRISHNA DISTRICT, ANDHRA PRADESH (SBI Code: 07858)

We have examined the Notice, the receipt of which is hereby duly acknowledged and subsequent modifications / revisions, if any, furnished by the Bank and we offer to supply, install DG Set at SBILD, Machilipatnam, Andhra Pradesh as per the terms and conditions given in the Notice. We shall participate and submit the commercial bid through online auction to be conducted by the Bank's authorized service provider, on the date advised to us.

### 2. While submitting this bid, we certify that:

- ➤ The undersigned is authorized to sign on behalf of the VENDOR and the necessary support document delegating this authority is enclosed with this letter.
- Quoted prices submitted by us have been arrived at without agreement with any other Bidder of this Notice for the purpose of restricting competition.
- ➤ The Quoted prices submitted by us have not been disclosed and will not be disclosed to any other Bidder responding to this Notice.
- > We have not induced or attempted to induce any other Bidder to submit or not to submit a bid for restricting competition.
- The rate quoted in the for the products are as per the Notice and subsequent pre-bid clarifications/ modifications/ revisions furnished by the Bank, without any exception.
- 3. If our offer is accepted, we undertake to complete the formalities for the above rate contract within a period of **4 weeks** from date of Purchase Order.
- 4. We also undertake to provide maintenance support till the end of life of the product at a reasonable charge after warranty and guarantee period.
- 5. We agree to abide by the Bid and the rates quoted therein for the orders awarded by the Bank up to the period prescribed in the Bid, which shall remain binding upon us.
- 6. Until a formal contract is prepared and executed, this Bid, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.
- 7. We undertake that, in competing for (and, if the award is made to us, in executing) the above

contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

- 8. We also certify that the information/ data/ particulars furnished in our bids are factually correct. We also accept that in the event of any information / data / particulars proving to be incorrect, the Bank will have the right to disqualify us from the bid.
- 9. We understand that you are not bound to accept the lowest or any Bid you may receive.

10. Details of EMD			
	<ul><li>a) Name of bank</li><li>b) Amount</li><li>c) DD No.</li><li>d) Date</li></ul>		
Dated this	day of 201	7	
(Signature)	(Name)	(In the capacity of)	Seal
Office Addres	s: -		
The above-mo	entioned official is authorized to	sign the tender Bid for and on behalf o	f
DATE:		APPLICANT SIGNA	ATURE:
PLACE:		STAMP:	

### **ANNEXURE-II**

### MANUFACTURERS'/PRODUCERS' AUTHORIZATION FORM

No. Da	te:
To,	
The Vice President,	
SBI Infra Management Solutions Pvt. Ltd.,	
Amaravati Circle Office,	
2 <sup>nd</sup> Floor, SBI Amaravati LHO Building,	
Gunfoundry, Abids,	
Hyderabad – 500 001.	

Dear Sir:

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 1 X 125 KVA DIESEL GENERATOR SET AT SBILD, MACHILIPATNAM, KRISHNA DISTRICT, ANDHRA PRADESH

- 2. We hereby extend our full guarantee and warranty for the Solution, Products and services offered by the above firm against this Bid Invitation.
- 3. We also undertake to provide any or all of the following materials, notifications, and information pertaining to the Products manufactured or distributed by the Vendor:
  - (a)Such Products as the Bank may opt to purchase from the Vendor, provided, that this option shall not relieve the Vendor of any warranty obligations under the Contract; and
  - (b)in the event of termination of production of such Products:
    - (i) advance notification to the Bank of the pending termination, keeping sufficient time to permit the Bank to procure needed requirements; and
    - (ii) following such termination, furnishing at no cost to the Bank, the blueprints, design documents, operations manuals, standards, source codes and specifications of the Products, if requested.
- 4. We duly authorize the said firm to act on our behalf in fulfilling all installations, Technical support and maintenance obligations required by the contract.

Yours faithfully,

(Name of Manufacturers / Producers)

**Note:** This letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having the power of attorney to bind the manufacturer. The Bidder in its Bid should include it.

### **ANNEXURE-III**

### SCHEDULE OF TECHNICAL PARTICULARS

DG Set Catalogue consisting of following details SI. No.

### I. Engine

- 1. Make
- 2. Model/ISS reference
- 3. No. of cylinders
- 4. Rated R.P.M.
- 5. Method of Starting
- 6. Aspiration Method
- 7. BHP
- 8. Specific Fuel oil consumption (gm/BHP/hr.)
- 9. Lub. Oil recommended
- 10. Lub. Oil pressure
- 11. Qty. of lub. oil required
- 12. Time required for starting
- 13. Lub. oil sump capacity
- 14. Nos. of exhaust pipe required.
- 15. Dia. of exhaust pipe
- 16. Whether meets CPCB norms for Emission
- 17. Fuel Consumption at full load, 50% load and 25% load.
- 18. Speed control Governing.
- 19. Fuel tank with gauge
- 20. Any other data.

### II. Alternator

- 1. Make
- 2. Enclosure Details
- 3. Full Load output in KVA
- 4. Full Load output in KW at 0.8 PF
- 5. Designed over load capacity at max. ambient temp.
- 6. Efficiency at full load
- 7. Class of Insulation of rotor
- 8. Class of Insulation stator
- 9. AVR provided

### III. General:

- 1. Overall Length of DG set L x W x H
- 2. Overall Weight of DG set
- 3. Noise Level of DG Set at one Metre with Acoustic Enclosure

# IV. AMF Panels

- 1. Make
- 2. Type (Floor/Wall mounted)
- 3. Overall dimensions (L x B x H)
- 4. Finish
- 5. Metering & Indicators

### V. Generator Control Panel:

1. Make

#### VI. Acoustic Enclosure:

- 1. Make
- 2. Size
- 3. Details of Acoustic Lining Material & Make

# LIST OF APPROVED MAKES OF MATERIALS

Sr. No.	Item		Makes
1	Engine	:	Kirlosker/ Ashok Leyland/ Cummins/ Koelgreen / TATA
2	Alternator	:	Stamford/ Kirloskar/ Kirloskar Electric/Crompton Greaves.
3	AMF	:	Designed & manufactured by DG set supplier Milestone Switch Gear Pvt. Ltd./Neptune System Pvt. Ltd./ Trico lite Electrical Industries Manufacturers with CPRI Test Certificate
4	Acoustic Panel	:	Designed & Manufactured by DG Set supplier
5	Relays	:	Siemens/ ABB/ Alstom/Schneider
6	Contactors	:	L&T/ Siemens/ABB
7	Anti Vibrations Mountings	:	Designed & Manufactured by DG Set/ Dunlop
8	Batteries (SMF)	:	Exide/ HBL/ Panasonic/ Rocket
9	MCCBs/Switchgear	:	GE Power /Hager(Compact) /L&T/ABB/Schneider/ Legrand
12	Copper Conductor wires	:	Finolex /RR Cable/Havells/ Power flex/ Poly Cab/KEI
13	MCBs /MCB Distribution boards(Powder coated Only)	:	ABB/Siemens/ Legrand / Schneider /L&T/ Havells
14	MCCBs/Switchgear	:	GE Power /Hager(Compact) /L&T/ ABB/Schneider/ Legrand
15	Underground Cables	:	CCI /Havells/ Universal/ Poly Cab
16	Cable Glands	:	HMI /Comet/ Cosmos/Dowells (Biller India)/ Hax Brass
17	Cable Lugs	:	Dowell's / 3D
18	Measuring Instruments	:	Conzerv/ CMS/ El measure/IME/ L&T/ Schneider Electric
19	Indication Lamps LED		Schneider / Vaishno / Binay
20	Resin cast CTs		AE / Kappa
21	Selector Switches	:	Vaishno / Salzer / Kaycee

All accessories/ material to be selected by the Engineer in charge of SBIIMSPL out of three samples submitted by the successful bidder. Prompting to use specific unauthorized brand material is strictly prohibited.