No. 10(13)/2010-NICSI

NATIONAL INFORMATICS CENTRE SERVICES INC.

(A Government of India Enterprise under NIC) 6th Floor, Hall No. 2 & 3, NBCC Tower, 15, Bhikaji Cama Place, New Delhi – 110066. Tel –2610 5054, Fax -26105212

TENDER NO.NICSI/DG-GENSET/2010/15

Tender Document

For

Empanelment of vendor for Supply, Installation and Commissioning of Diesel Generator Set

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EMPANELMENT OF VENDORS FOR THE SUPPLY, TESTING AND INSTALLATION OF Diesel GENERATOR SET.

1. Introduction

National Informatics Centre Services Inc., a Government of India Enterprise, under NIC, Department of Information Technology, Ministry of Communication and Information Technology, undertakes projects on total IT solutions involving the supply of Hardware, Software provision of Training and Support Services to various Government organizations spread throughout the country.

NICSI invites sealed bids, valid for 120 days from the date of opening from the original diesel generator manufacturers, for the supply, testing, installation and commissioning of diesel generators of capacities 5KVA, 7.5KVA, 10KVA, 15KVA, 20KVA & 30 KVA as per annexure-A.

The empanelment of vendors for each capacity of genset will be for an initial period twenty four months from the date of empanelment on the rates finalized through this tender. The empanelment can be extended for a further period of one year through mutual consent.

Bidders are requested to clearly understand the tender terms and conditions. Bids not conforming to the tender terms will not be considered.

2. AVAILBILITY OF TENDER

On-Line bidding through NICSI E-Procurement System.

The tender document is available at NICSI e-procurement site http://eproc-nicsi.nic.in Prospective bidders desirous of participating in this tender may view and download the tender document free of cost from above mentioned website. However bidders need to submit the tender fee of Rs. 500/- (Rupees Five hundred only) through demand draft / pay order from a schedule commercial bank drawn in favour of National Informatics Centre Services Incorporation New Delhi along with the bid.

3. IMPORTANT DATES

Date of publication	01.09.2010 at NICSI e-procurement site http://eproc-nicsi.nic.in
Start of Sale of Tender	01.09.2010
Document:	
Seek clarification start date	03.09.2010
Seek Clarification end date	13.09.2010
Pre-bid Meeting:	15.09.2010 at 11:30 Hrs at National Informatics Centre Services Inc., Hall No. 2 & 3, 6 th Floor, 15 NBCC Tower, 15 Bhikaji Cama Place, New Delhi
Bid submission start date	22.09.2010
Bid submission end date:	29.09.2010 upto 15:00 Hrs
Opening of Tender Bids (Eligibility & Technical):	29.09.2010 at 15:30 Hrs

Annexure-A

S. No.	Component Description	Detailed specification at
1	5KVA Diesel Generator (1500 rpm) rated for 0.8 PF power.	Annexure-I (Config-A)
1	5KVA Diesel Generator (3000 rpm) rated for 0.8 PF power.	Annexure-I (Config-B)
2	7.5KVA Diesel Generator (1500 rpm) rated for 0.8 PF power.	Annexure-II (Config-A)
2	7.5KVA Diesel Generator (3000 rpm) rated for 0.8 PF power.	Annexure-II (Config-B)
3	10KVA Diesel Generator (1500 rpm) rated for 0.8 PF power.	Annexure-III (Config-A)
3	10KVA Diesel Generator (3000 rpm) rated for 0.8 PF power.	Annexure-III (Config-B)
4	15KVA Diesel Generator (1500 rpm) rated for 0.8 PF power.	Annexure-IV (Config-A)
4	15KVA Diesel Generator (3000 rpm) rated for 0.8 PF power.	Annexure-IV (Config-B)
5	20KVA Diesel Generator (1500 rpm) rated for 0.8 PF power.	Annexure-V (Config-A)
3	20KVA Diesel Generator (3000 rpm) rated for 0.8 PF power.	Annexure-V (Config-B)
6	30KVA Diesel Generator (1500 rpm) rated for 0.8 PF power.	Annexure-VI (Config-A)
0	30KVA Diesel Generator (3000 rpm) rated for 0.8 PF power.	Annexure-VI (Config-B)

4 Eligibility Criteria

1 The bidder must be a **manufacturer of Diesel Generators**.

Each capacity of genset will be treated as a Separate Tender for the purpose of evaluation, processing, empanelment and ordering. Bidders may quote any or all capacity of genset.

2 Annual sales turnover of bidder (in case the bidder being the manufacture of diesel engine and quoted the diesel genset using their manufactured diesel engine) from sale of DG sets within India must be more than 300 (Three Hundred) crores during the financial year 2008-09.

In case the bidder being manufacturing/integrating the diesel getset using the diesel engine & Alternator of reputed brands, then the bidder turnover from sales of diesel genset in India during financial year 2008-09 must be more that Rs. 50 (fifty) crores and Engine OEM turnover in this case from sales of diesel engine must be more than Rs. 300 (three hundred) crores. The bidder must also submit the authorization letter from Engine & Alternator OEM as per annexure-H. In absence of authorization letter from these OEM, the bid shall be rejected.

The Alternator OEM turnover from sales of alternator during financial year 2008-08 must be more than Rs. 100 (One hundred) crores in all cases.

Bidder must submit audited balance sheet for all the above (Own as well as of Engine OEM & Alternator OEM) to substantiate their claim.

- 3 Bidder should be an ISO 9001:2000 certified Company.
- The bidder/Engine OEM must have country wide infrastructure support in the form of direct service centre or authorized service centre in major cities like Delhi, Mumbai, Hyderabad, Chennai, Bangalore, Kolkatta, Pune, Bhuwneshwar etc. across the country including north eastern states however he should be capable to provide service support upto block level across the country as per defined service level during warranty/AMC support. The information should be furnished as per format given in the Technical Details Performa (Annexure-B). In case of service support through Engine & Alternator OEM or their authorized service partner, then the bidders must submit the undertaking from Engine & Alternator OEM clearly indicating that the Engine & Alternator OEM will take complete responsibility of providing the service support during entire period of warranty & AMC.
- 5 The bidders should have a valid VAT/ST/CST, Service Tax registration number and PAN for the bidder's firm.
- 6 Attested copies of Articles of Association (in case of registered firm), Byelaws and certificates for registration (in case of registered co-operative Societies), partnership deed (in case of partnership firm) also must be submitted along with the technical bid.
- 7 The bidder shall submit a certificate (self certified on letter head) that the firm has not been black listed by any institution of the State/Central Government in the past.

- 8 The bidders must submit signed copy of tender document and corrigendum if any or self declaration letter the he/she has read and understood all tender terms & conditions and all tender conditions are acceptable to him/her, as token of acceptance of all tender terms & conditions.
- 9 The bidders must submit copy of at least three orders executed of a value of 50 lakhs each of supply of diesel gensets.

The Bidders are requested to furnish documents to establish their eligibility for each of the above clauses. Relevant portions, in the documents submitted in pursuance of eligibility criterion mentioned above, should be highlighted. If tender were not accompanied by all the above documents mentioned, the same would be rejected. Undertaking for subsequent submission of any of the above document will not be entertained. However NICSI reserves the right to seek fresh set of documents or seek clarifications on the already / submitted documents. All documents should be submitted electronically in PDF format. However, Financial Bid should be submitted in XLS format.

Upon verification, evaluation / assessment, if in case any information furnished by the Bidder is found to be false / incorrect, their bid shall be summarily rejected and no correspondence on the same shall be entertained.

THE BID SUBMITTED BY ANY BIDDER NOT FULFILLING THE ELIGIBILITY CONDITIONS / CRITERIA STIPULTED ABOVE, WILL NOT BE CONSIDERED

5. TERMS & CONDITIONS

5.1 Pre-Bid Meeting

NICSI shall hold a pre bid meeting with the prospective bidders at 11:30 AM on 15.09.2010 in the NICSI conference hall. Queries received, from the bidders, two days prior to the pre bid meeting shall be addressed. The queries can be sent to NICSI through email at tendernicsi@nic.in or faxed on 26105212. After pre-bid session, a half day training program will be conducted for participating bidders to provide them information on "How to bid through e-procurement system".

5.2 Bid Submission

- 5.2.1 Online bids (complete in all respect) must be uploaded on http://eproc-nicsi.nic.in latest by 15:00 hours on 29.09.2010.
- 5.2.2 The Online bids should be submitted as under:

EN-I Bank Draft(s) towards EMD and TENDER FEE in one cover sealed and superscripted "EMD and Tender Fee - NICSI tender for "**Diesel Generators**" due on **29.09.2010 at 15:00 Hrs**." A letter specifying the draft details should be submitted physically. However the scanned copy of Bank drafts must be uploaded (PDF format) electronically on http://eproc-nicsi.nic.in.

EN-2 The PDF file, containing the following information, should be titled as

"Eligibility Criteria - NICSI tender for "Diesel Generators".

- a. Bidder's profile as per Annexure-B.
- b. Compliance sheet as per Annexure-C and the supporting documents.
- c. All the relevant documents justify eligibility mentioned in eligibility criteria.

EN-3 The PDF file, containing the following information, should be titled as

Technical Bid- NICSI tender for "Diesel Generators".

- a. Diesel Generators being quoted as per annexure-A and their technical compliance as per annexure-I to VI.
- b. Deviations as per Annexure-D. Separate sheet for each configuration.
- c. Technical literature about the diesel generators offered and comparative studies available should be enclosed.

This PDF file not containing the above documents or containing the financial bid in explicit/implicit form will lead to rejection of the bid.

- EN-4 The XLS file titled as 'FIN_A' for "Financial Bid- NICSI tender for "Diesel Generators" and should contain the Financial Bid as per Annexure-E.
- 5.2.3 Earnest Money Deposit (EMD) of Rs. 10,00,000 (Rupees Ten Lakh only) has to be submitted. The EMD is to be submitted through Demand Draft / Pay Order of any Scheduled Commercial Bank drawn in favour of National Informatics Centre Services Inc., New Delhi physically before 15:00 Hrs on 29.09.2010. Otherwise bids will be rejected. However the scanned copy of Bank drafts must be uploaded (PDF format) electronically on http://eproc-nicsi.nic.in. No Bank Guarantee towards EMD will be acceptable. EMD of unsuccessful bidders will be returned, without any interest, on tender finalization. EMD of successful bidders for any annexure will be converted into bank guarantee for the period of empanelment/extended empanelment. The BG will be released after the empanelment or execution of all pending orders whichever is later.
- 5.2.4 All the bids documents should be digitally signed by the authorized signatory.
- 5.2.5 All pages of the bid being submitted must be sequentially numbered by the bidder.
- 5.2.6 NICSI will not be responsible for any delay on the part of the vendor in obtaining the terms and conditions of the tender notice or submission of the online bids.
- 5.2.7 The bids submitted by telex/ telegram/ fax/ E-mail / manually etc. shall not be considered. No correspondence will be entertained on this matter.
- 5.2.8 The rates are to be quoted in strict compliance to the financial bid otherwise the bid is liable to be rejected.
- **5.2.9** Percentage (%) of taxes etc. if any to be claimed shall be indicated in the Price bid, otherwise it will be presumed that rates are inclusive of all taxes and no plea would be accepted in this regard after opening of the tenders.
- 5.2.10 The basic prices in Indian rupees should be quoted separately for each generator set as given in **Annexure-E Financial Bid Performa** inclusive of all accessories, Documentations of sub assemblies of quoted item and Operating Manuals, Packing, Forwarding, Freight, Insurance, Installation & commissioning charges at sites and Warranty etc. Certificates for Exemption of Octroi charges / entry tax shall be furnished by NICSI users. **It shall be the exclusive responsibility of the vendor to collect these Forms/Documents from the NICSI users**. In states where octroi exemption certificates is not applicable, the bidder will be re-imbursed actual charges paid by them on submission of bill.
- 5.2.11 The selected bidders shall be empanelled with NICSI for a period of 24 months, which can be extended for a further period of 12 months through mutual consent. Rates quoted shall be valid for the period of empanelment and the extended period, unless revised as per the provisions of clause 5.11.

- 5.2.12 The rates are to be quoted by the bidders in Indian Currency and payment shall be made to successful bidders in Indian currency only.
- 5.2.13 The price shall be for delivery at desired destination in India including installation/commissioning and complete operationalization. Installation includes making required RCC/PCC platform, input/output cables and switchgear, earting etc. complete as required at site for operationalization of the machine.
- 5.2.14 The bidder should certify support for the supplied genset, in case NICSI/NIC or its users decide to go in for in-house maintenance or through a third party after warranty support, the vendor shall supply the spare parts to NICSI users/NICSI or a party designated by NICSI to give the complete support of minimum five years after warranty period of supplied product.
- 5.2.15 Conditional tenders shall not be accepted on any ground and shall be rejected straightway. If any clarification is required, the same should be obtained before submission of the bids.
- 5.2.16 Bidder shall furnish a compliance statement (Point-wise) of specifications & features of offered equipments with the Technical Bid. Deviations from technical specifications should be furnished as per **Annexure-D.** Deviation on lower side of specifications will not be considered. No deviations in terms & conditions of the tender document will be accepted in any case.

5.3 Bid Opening:

Online bids (complete in all respect) received along with Demand Draft of tender fee & EMD (Physically) will be opened at **15:30 hours on 29.09.2010** in presence of bidders representative if available. Bid received without tender fee & EMD will be rejected straight way.

5.4 EVALUATION OF BIDS

5.4.1 Technical Evaluation

- 5.4.1.1 A duly constituted Technical Evaluation Committee (TEC) will first select Bidders on the basis of eligibility criteria of this tender. The Bids conforming to the eligibility criterion will be considered for further evaluation.
- 5.4.1.2 The TEC will evaluate the quoted gensets with respect to the technical parameters specified in this tender document. The short listed Bidders may be asked to offer each quoted capacity as per specifications set out in the annexure, along with their own test and measuring instruments and the 0.8 p.f. load for demonstration/ evaluation at NICSI HQ or any other site as may be finalized by NICSI, as per schedule to be intimated to them. Alternatively TEC may visit the bidder's premises for technical evaluation, if required. During Technical Evaluation the quoted product shall be physically verified for the required tender specifications, tested for reliability, functionality, efficiency and other features as decided by the TEC. In case the bidder fails to offer the quoted products for evaluation within the prescribed limit given by the NICSI for evaluation, the bid shall be rejected. In case TEC decides to inspect the items at Bidder's/OEM's premises, the expenditure on travel etc. will be borne by NICSI.
- 5.4.1.3 If during the technical evaluation, any of the quoted genset fails then no subsequent chance will be given to the Bidder. However, alternate item (1) of already quoted make and model or (2) improved latest model of same make on account of technological trends which meets all the tendered technical specifications and superior in specifications then the quoted model, if available instantly on the spot could be considered by TEC for evaluation only once. Based on the demonstration/evaluation test results, Bidders will be short listed further and the names of short listed Bidders will be informed to only those Bidders who's Technical Bids qualify for opening the Financial Bids.

In their own interest the bidders are advised to ensure that the quoted Gensets offered by them for evaluation confirm to all tendered technical parameters/specifications and are functional. Quoted Genset brought/ produced for evaluation not meeting complete tender specifications or lower in specification will not be considered for evaluation.

5.4.1.4 For Technical Evaluation, Bidders have to ensure the availability of appropriate specialist, along with every type of documentation and consumable required, from their organization for interacting with TEC and evaluation team. If the required specialist along with proper documentation is not made available by Bidders, then such defaulting Bidders will automatically be debarred from the tender evaluation process.

5.4.2 Financial Evaluation

- 5.4.2.1 The Financial Bids of only technically qualified bidders will be opened electronically in the presence of their representatives on a specified date and time duly notified. The financial bids will then be passed on to a duly constituted Financial Evaluation Committee (FEC) for evaluation. If NICSI considers necessary, revised Financial Bids can be called, before opening the original Financial Bids. In that case, the revised bids should not be higher than the original bids.
- 5.4.2.2 L1 bidder will be worked out as per the procedure given in financial bid Annexure-E1 & E2.
- 5.4.2.3 To have a penal of bidders NICSI may ask other bidders to match the L1 rates, in case their quote is less than or equal to 120% of L1 rates. In case none of the bidder's quote falls within 120% of L1 quote, then by way of successive opportunity a panel of maximum three bidders will be formed for each capacity. The decision of NICSI arrived at, as above, will be final for empanelment and no representation of any kind shall be entertained. If none of the bidders agree to match L1 rates then L1 alone shall be on the panel.
- 5.4.2.4 The maximum period allowed for matching the L1 rates by any Bidder will not be more than 7 working days from the date of issuance of offer letter from NICSI. If the Bidder fails to match the L1 rates within stipulated time as stated above, the offer will be treated as withdrawn and will then be extended to next Bidder in the order of their bids.
- 5.4.2.6 The above process of financial evaluation and empanelment will be followed separately for all categories of gensets separately.

5.5 EMPANELMENT OF BIDDERS

- 5.5.1 The panel will be valid for a period of 24 (Twenty four) months in the first instance from the date of empanelment. It may be extended for a further period of 12(Twelve months) depending upon the need of NIC / NICSI's project requirements with mutual consent.
- 5.5.2 All empanelled Bidders shall have to enter into a written agreement with NICSI for honoring all tender conditions and adherence to all aspects of fair trade practices in executing the purchase orders placed by NIC/NICSI on behalf of its clients. Empanelment letter will be issued to selected bidders on submission of required BG at the rate of Rs. 2,00,000/- (Rupees two lakh) per empanelled capacity of generator set.
- 5.5.3 In the event of an empanelled Company or the concerned division of the Company is taken over /bought over by another company or name changed, all the obligations and execution responsibilities under the agreement with the NICSI, should be passed on for compliance to the new company in the negotiation for their transfer.
- 5.5.4 If the name of the product is changed, the renamed product should have equivalent or superior in technical specifications.
- 5.5.5 The empanelment under this tender, with all its terms and conditions, can be used by NIC also.
- 5.5.6 In case L1 bidder refuses to sign empanelment within seven days of communication from NICSI, the offer would be treated as withdrawn and the bidder's EMD will be forfeited and

tender for that capacity will be scraped. If other bidders refuses to sign the empanelment after matching L1 rates, their EMD will be forfeited and offer will be extended to other qualified bidders to make a penal. The defaulting bidder may also be debarred from participating in NICSI tenders for a period of three years.

- 5.5.7 In case of empanelled bidder is found in breach of any condition(s) of tender or supply order, at any stage during the course of supply/installation or warranty period, the legal action as per rules/laws, shall be initiated against the bidder and EMD/Security Deposits shall be forfeited, besides debarring and blacklisting the bidder concerned for at least three years, for further dealings with NICSI.
- 5.5.8 The bidder should not assign or sublet the empanelment or any part or it to any other vendor in any form. Failure to do so shall result in termination of empanelment and forfeiture of Security deposit,
- 5.5.9 NICSI may, at any time, terminate the empanelment by giving written notice to the empanelled vendor without any compensation, if the empanelled vendor becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to NICSI.

5.6 PRE-DELIVERY INSPECTION AND ACCEPTANCE OF ITEMS

- 5.6.1. The generator set must be offered in full as per ordered configuration for testing and acceptance. No genset with short supply or with different technical specifications shall be accepted for conduct of acceptance testing under any circumstances. The acceptance tests will include the verification of specifications of ordered genset, functional testing and reliability test. The genset must give same performance results as shown during initial demonstration/evaluation tests. The delivered items, in addition to meeting the performance results as per evaluation tests, should also contain the same sub-component (Brand/Manufacturer), design and shape as were given at the time of initial evaluation tests. Failure to fulfill any of the above-mentioned conditions will entail cancellation of the Purchase Order along with forfeiture of the EMD/Security Deposit.
- 5.6.2 The schedule for acceptance testing dates shall be provided at least 25 days before the last date of delivery. This needs to be strictly followed.
- 5.6.3 Normally, testing and acceptance of the generator set will be done at the bidder's premises where it will be tested as per ordered specifications. NICSI/NIC reserves the right to reject any genset, if found unsuitable and / or not conforming to the approved / tender specifications. The rejected genset, if any, shall have to be taken back and replaced by good genset forthwith at the cost of the vendor. No payment will be made for rejected genset. The gensets which are accepted after testing should be packed and then sent along with the packing list giving serial numbers and part numbers of all possible items and copy of the acceptance test report to the actual sites of installation & commissioning. NICSI will have the option to test and accept an item at user's premises in case of emergency situations.

5.7 DELIVERY & PENALTY

5.7.1 The schedule to be given for delivery at site is to be strictly adhered to in view of the strict time schedule for implementation of various Projects. Any unjustified and unacceptable delay in delivery beyond the delivery schedule as per Purchase Order (which shall not be more than 70 (Seventy) days for North-eastern States including Sikkim, J&K, Lahual-Spiti & Kinnaur in HP, Andaman Nicobar and Lakshdweep Islands and 56 (Fifty Six) days for the rest of the locations across India from the date of Purchase Order) will render the vendor liable for liquidated damage at the rate of 0.2% (point two percent) of the purchase order value per day subject to a maximum of 30 days. Proof of Delivery duly signed by the user/NIC/NICSI Project Coordinator, with his name, date of delivery, designation and office seal, legibly recorded, should reach NICSI Head Quarters, New Delhi within 4 weeks of the delivery except for delivery in North-eastern States including Sikkim, J&K, Lahual-Spiti &

Kinnaur in HP, Andaman Nicobar and Lakshdweep Islands locations. Delivery note of these locations should reach within six weeks of delivery date

- 5.7.2 If the delivery, of whole or in part, is delayed beyond 30 days from last date of delivery as given in the purchase order, NICSI will have option to cancel the purchase order to the extent of unfulfilled part of the purchase order. NICSI will be free to procure the remaining items from alternate sources at the cost and risk of the defaulting vendor, by forfeiting the EMD/Security Deposit of the Vendor. In addition, NICSI will impose a cancellation charge of 8.5% of the value of unsupplied items, which will be recovered from the pending bills or EMD/Security Deposit or by raising claims.
- 5.7.3 NICSI will impose penalty on total value of purchase order (as per clause no 5.7.1 of this tender) if the delivery of more than 20% of the total order value is delayed beyond the last date of delivery. If the delivery is delayed for the item(s) whose value is equal or less than 20% of the total order value, the penalty shall be applicable on the delayed equipment only,
- 5.7.4 On the receipt of the purchase orders the vendors within Ten (10) Days shall initiate the process of obtaining all the necessary documents directly from the user for the State Entry Permit in respective States wherever required for complete and safe delivery of the ordered products. However for cases where copy of invoice and GR (Goods Receipt) from the transporter is required for applying for road permit, the process should be so initiated by the vendor that the delivery schedule is met. Proof for the communication sent and duly receipted by the user and/or NICSI/NIC project coordinator with signature, name, designation, telephone number and preferably with office seal should be submitted to NICSI/NIC. If after such proper communication, there is any delay in the issuance of road permit from the user, the vendor will be entitled to get extension for delivery period of two weeks from the date of receipt of the road permit.
- 5.7.5 The vendor shall provide User manual along with each genset, irrespective of the fact that more than one genset may be meant for any location.

5.8 INSTALLATION SCHEDULE & PENALTY

- The Bidder should install & commission (Including preparation of minimum 9 inches height concrete foundation to fix genset, if required) all the genset at specified site without any additional charge. Installation should be completed within 30 Days (Thirty Days) from the scheduled or actual date of delivery whichever is later for all locations. If the scheduled date of delivery / installation falls on holiday / non working day (at the delivery location), the next working day shall be treated as due date of delivery / installation. During installation at site if any item is found to be defective or broken, it will be replaced with new one by the Bidders at their own cost and risk within Four weeks. If the items are not installed at site within the stipulated time after delivery due to the 'non-responsiveness' of the vendor, a penalty at the rate of 0.2% (zero point two percent) of purchase order value per day subject to a maximum of 15 days will be imposed on delayed installed items. Thereafter, NICSI holds the option to complete the installation work through alternate sources at the risk and cost of the defaulting vendor. A metallic plate indicating the service support call centre number of the vendor should be pasted on each supplied item. An installation certificate as per format given in annexure-F must be obtained from user or NIC/NICSI project coordinator as then case may be.
- 5.8.2 For Site Not Ready (SNR) cases, vendor requires to submit SNR certificate as per annexure-G signed by NIC/NICSI Coordinator of the project/ User Department. However, regarding readiness of site, the decision of the User Department/NIC/NICSI Project Coordinator will be final. No penalty will be imposed for SNR cases, however, vendor has to install the genset within 15 days as per clause 5.8.1 of receipt of Site Ready notice from User/NICSI/NIC else it will attract penalty as per above clause- 5.8.1 recoverable from Bill.

5.9 PAYMENT

5.9.1 A pre-receipted bill, along with original excise duty gate pass (if applicable) and acceptance certificate, shall be submitted (Three copies) in the name of user, A/C NICSI, New Delhi-110066 soon after the delivery of the items along with a copy of the duly receipt delivery challan. The Bills/Invoice should be in the format and as per guidelines / instructions given in Rule 52-A, 57GG etc., of the Central Excise Rules, 1944 as amended from time to time for these items for which payment of Excise duty is applicable. 80% (Eighty percent) payment will be made on complete delivery of ordered items at the designated sites and on the submission of proof of delivery and Performance Bank Guarantee (PBG) as given below. Payment will be made after deducting penalty amount, if applicable. PBG will have to be renewed for such further periods till satisfactory free warranty support has been provided by the vendor for all the items supplied and installed, and there after the PBG will be returned to the vendor. If bills, complete in all aspect are submitted with all relevant documents as defined above, NICSI will ensure that the payment are made to bidder within thirty days from the date of bill submission.

Description	Value			
Validity	63 months			
Instrument	One Single deposit in the form of BG			
	No. of Years Amount (As % of PO value			
	1 st 35%			
	$2^{\rm nd}$	28%		
	3 rd	21%		
	4 th 14%			
	5 th 7%			

- 5.9.2 The balance 20% (Fifteen percent) payment would be made after submission of installation and commissioning note / certificate duly signed by user/NIC/NICSI Project Coordinator.
- 5.9.3 If installation is completed within the stipulated period i.e. 30 days from the date of delivery, the vendor must submit one bill for 100% payment rather than submitting two bills (one bill for delivery and one for installation).
- 5.9.4 In case where site for installation is not ready, NICSI will intimate to vender through a communication for site readiness & the installation should be completed with in two weeks time. In case NICSI receives a complaint from the user that the item was not installed within two week of site readiness report sent to the vendor, penalty for installation will be applicable on the vendor as per clause 5.8.1 for delayed period. In case there is delay (more than 3 months from purchase order date or one month from date of delivery, which ever is later) in site readiness, Vendor may claim balance 20% payment on submission of BG equal to 20% of purchase order value of uninstalled items, valid for period of six month. However if NICSI receive any complaint from user that supplied systems/items were not installed within two weeks of site readiness notice, the bidder will be penalized for late installation as per clause 5.8.1.
- 5.9.5 Payments shall be subject to deductions of any amount for which the empanelled vendor is liable under the empanelment. Further, all payments shall be made subject to deduction of TDS (Tax deduction at Source) as per the Income-Tax Act, 1961 and any other taxes.
- 5.9.6 All payments will be made in Indian currency & through RTGS only.

5.10 WARRANTY MAINTENANCE

- 5.10.1 All Gensets shall be under **five years** on-site comprehensive warranty support (including periodic preventive maintenance at every six months period or as per maintenance schedule of diesel engine & Alternator, whichever is earlier) from the date of installation or **63 months** from date of delivery or 5000 hours of running, whichever is earlier at the site. Genset all parts will be covered under warranty. Diesel will be provided by the user.
- 5.10.2 The vendor should fulfill the following conditions during warranty period: -

- a. Any failure in the Genset should be rectified within maximum period of 24 hours of lodging complaint at locations where bidder has their own or authorized service center. In case site happens to be other than location of service center, an additional 24 hrs will be given for travel/response time.
- b. If any of the Genset is down beyond 24 hours / 48 hours as case may be, penalty will be charged or recovered from out of withheld amount towards warranty or payment due per day per genset at the rate of 0.2% of purchase value for maximum period of three months. If vendor failed to repair the faulty genset within three months, NICSI may get that repaired through alternate source. Any cost incurred on this shall be recovered from defaulting vendor.
- c. Any genset failing at sub-component level more than three times in three months, displaying chronic system design or manufacturing defects or Quality Control problem will be replaced by the Vendor at his cost and risk within 30 days, from the date of last failure.
- **5.10.3** On completion of the Warranty period, the Security Deposit without any interest accrued shall be released after satisfying that proper free warranty support has been provided during warranty period of five years for all the items. If considered necessary, suitable amount of penalty shall be recovered from the Vendor out of their due payments or from their Security Deposit or by raising claims, while releasing the Security Deposit.
- **5.10.4** If NICSI/NIC or it user decide to put the procured genset under AMC after warranty as per the rate finalized through this tender, then bidder will have to provide the AMC support as per terms defined under warranty clause. All the clause of warranty support will be applicable during AMC period also.

5.11 PRICE VARIATION CLAUSE

5.11.1 During the validity of the offer, if the Vendor sells same capacity of genset to any other department/organization at a price lower than the price fixed for NICSI, the vendor shall voluntarily pass on the price difference to NICSI. Similarly, in the event of lowering of Government levies subsequent to the finalization of the panel, the Bidder shall automatically pass on the benefits to NICSI, and in the event of increasing of Government levies subsequent to the finalization of the panel, NICSI shall consider the case on merit and the pro-rata benefits to the vendor may be considered if full reference with documentary evidence is submitted. In case NICSI notices that the market rates of genset has come down or there is change in Government Tax structure, NICSI may ask the technically short listed Bidders to requote the prices and the Bidder(s) will be selected on the basis of procedure as per clause 5.4.2. The time difference between such re-quotes will be minimum three months except in case of the union budget.

5.12 REFUND OF EMD & SECURITY DEPOSIT

- 5.12.1 The Earnest Money Deposit (EMD) will be refunded as follows.
 - 1. In the case of those bidders who fail to qualify the eligibility criteria, those bidders whose technical bids do not qualify & those bidders who are not empanelled in this tender the EMD will be refunded without any interest accrued within one month after completion of tender process.
 - 2. In case of those bidders whose tender bids are accepted for the empanelment, EMD will be refunded on receipt of Security Deposit of amount Rs. Two Lakh for each empanelled capacity (i.e. 5KVA, 7.5KVA, 10KVA ect.) Genset. Security Deposit shall be in the form of Bank Guarantee (BG) drawn in the name of National Informatics Centre Services Inc Hall No. 2&3, 6th Floor, NBCC Tower, 15 Bhikaji Cama Place, New Delhi 110 066, valid for a period of 24 (twenty four) months and shall be renewed by the bidder till Empanelment lasts or the orders placed are executed, whichever is later. No interest will be payable for the Security Deposit.

3. On completion of the warranty period of ordered genset, the Security Deposit without any interest accrued shall be released after ascertaining that satisfactory support has been provided during the warranty period. In case, it is found that appropriate satisfactory support has not been provided by the Bidder, NICSI/NIC will ensure that the prescribed penalty for the default in service has been realized or shall be recovered from the Bidder out of already due payments.

5.13 INDEMNITY

The selected vendor shall indemnify the NIC/NICSI/User departments against all third party claims of infringement of patent, trademark/copyright or industrial design rights arising from the use of the supplied items and related services or any part thereof. NIC/NICSI/User department stand indemnified from any claims that the vendor's manpower may opt to have towards the discharge of their duties in the fulfillment of the purchase orders. NIC/NICSI/User department also stand indemnified from any compensation arising out of accidental loss of life or injury sustained by the vendor's manpower while discharging their duty towards fulfillment of the purchase orders.

5.14 FORCE MAJEURE

If at any time, during the continuance of the empanelment, the performance in whole or in part by either party of any obligation under the empanelment is prevented or delayed by reasons of any war, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics quarantine restrictions, strikes, lockouts or acts of God (hereinafter referred to as "events"), provided notice of happenings of any such event is duly endorsed by the appropriate authorities/chamber of commerce in the country of the party giving notice, is given by party seeking concession to the other as soon as practicable, but within 21 days from the date of occurrence and termination thereof and satisfies the party adequately of the measures taken by it, neither party shall, by reason of such event, be entitled to terminate the empanelment, nor shall either party have any claim for damages against the other in respect of such nonperformance or delay in performance, and deliveries under the empanelment shall be resumed as soon as practicable after such event has come to an end or ceased to exist and the decision of the purchaser as to whether the deliveries have so resumed or not, shall be final and conclusive, provided further, that if the performance in whole or in part or any obligation under the empanelment is prevented or delayed by reason of any such event for a period exceeding 60 days, the purchaser may at his option, terminate the empanelment.

5.15 TERMINATION FOR DEFAULT

5.15.1 Default is said to have occurred

- I. If the vendor fails to deliver any or all of the services within the time period(s) specified in the purchase order or any extension thereof granted by NICSI.
- II. If the vendor fails to perform any other obligation(s) under the empanelment
- 5.15.2 If the vendor, in either of the above circumstances, does not take remedial steps within a period of 30 days after receipt of the default notice from NICSI (or takes longer period inspite of what NICSI may authorize in writing), NICSI may terminate the empanelment / purchase order in whole or in part. In addition to above, NICSI may at its discretion also take the following actions:

NICSI may procure, upon such terms and in such manner, as it deems appropriate, goods similar to the undelivered items/products and the defaulting vendor shall be liable to compensate NICSI for any extra expenditure involved towards goods and services to complete the scope of work in totality or 8.5% of the total value of purchase order as cancellation charges whichever is higher.

5.15.3 NICSI may at any time terminate the purchase order / empanelment by giving one month written notice to the Vendor, without any compensation to the Vendor, if the Vendor becomes bankrupt or otherwise insolvent

5.16 ARBITRATION

- **5.16.1** Incase any dispute or difference arises out of or in connection with or the carrying out of works (whether during the progress of the works or after their completion & whether before or after the termination, abandonments or breach of contact) except as any of the accepted matters, provided hereunder, the parties hereto, shall first endeavor to settle such disputes of differences amicably.
- 5.16.2 If both the parties fail to reach such amicable settlement, then either party (The Purchaser or Contractor) may (within 20 days of such failure) give a written notice to the other party requiring that all matter in dispute or difference be arbitrated upon. Such written notice shall specify the matters which are in difference or differences of which such written notice has been given and no other shall be reoffered to the arbitration of a single arbitrator, to be appointed by both the parties or in case of disagreement as to the appointment of a single arbitrator, to that of two arbitrators, one to be appointed by each party or incase of said arbitrators not agreeing then, to the umpire to be appointed by the arbitrators in writing before entering upon the references. Provisions of Indian Arbitration & Conciliations Act, 1996 or any statutory modification or re-enactment thereof and rules framed there under from time to time shall apply to such arbitration.
- 5.16.3 Venue of arbitration shall be New Delhi.
- 5.16.4 The arbitrators or arbitrators appointed under this Article shall have the power to extend the time to make the award with the consent of parties.
- 5.16.5 Pending reference to arbitration, the parties shall make all endeavors to complete the work in all respect. Disputes, if any, will finally be settled in the arbitration.
- 5.16.6 Upon every or any such references to the arbitration, as provided herein the cost of and incidental to the reference and Award respectively shall at the discretion of the arbitrator, or the umpire, as case may be.
- 5.16.7 The award of arbitrator or arbitrators, as the case may be, Shall be final and binding on the parties. It is agreed that the Contractor shall not delay the carrying out of the works by reason of any such matter, question or dispute being referred to arbitration, but shall proceed with the works with all due diligence. The Purchaser and the Contractor hereby also agree that arbitration under this clause shall be the condition precedent to any right of action under the contract except for as provided for in the Tender.

5.17 APPLICABLE LAW

- 5.17.1 The vendor shall be governed by the laws and procedures established by Govt. of India, within the framework of applicable legislation and enactment made from time to time concerning such commercial dealings/processing.
- 5.17.2 NICSI reserves the right to cancel this tender or modify the requirement without assigning any reasons. NICSI will not be under obligation to give clarifications for doing the aforementioned.
- 5.17.3 NICSI reserves the right that the work can be allocated to any of the empanelled vendors.
- 5.17.4 NICSI also reserves the right to modify/relax any of the terms & conditions of the tender.
- 5.17.5 NICSI, without assigning any further reason can reject any tender(s), in which any prescribed condition(s) is/are found incomplete in any respect.
- 5.17.6 NICSI also reserves the right to award works/supply order on quality/technical basis, which depends on quality/capability of the system and infrastructure of the firm. Bidder(s) are,

- therefore, directed to submit the tender carefully along with complete technical features of the products/systems as well as other documents required to access the capability of the firm.
- 5.17.7 All procedure for the purchase of stores laid down in GFR and DFPR shall be adhered-to strictly by the NICSI and subordinates and Bidders are bound to respect the same.

5.18 MISCELLANEOUS

- 5.18.1 The empanelment under this tender is not assignable by the selected vendor. The selected vendor shall not assign its contractual authority to any other third party. As a matter of policy and practice and on the basis of Notification published in Gazette of India dated 14th March, 1998, it is clarified that services and supplies of the vendor selected through this tender can be availed by both National Informatics Center [NIC] and National Informatics Center Services Incorporated [NICSI], as the case may be depending on the project, and the selected vendor shall be obliged to render services / supplies to both or any of these organizations as per the indent placed by the respective organization. In other words, the selection procedure adopted in this tender remains applicable for NIC as well, and in the event of rendering services / supplies to NIC, the selected vendor shall discharge all its obligations under this tender vis-à-vis NIC. Any default or breach in discharging obligations under this tender by the selected vendor while rendering services / supplies to NIC, shall invite all or any actions / sanctions, as the case may be, including forfeiture of EMD, security deposit, invocation of performance guarantee stipulated in this tender document
- 5.18.2 The decision of NICSI/NIC arrived at as above will be final and no representation of any kind will be entertained on the above. Any attempt by any Bidder to bring pressure of any kind, may disqualify the Bidder for the present tender and the Bidder may also be liable to be debarred from bidding for NICSI/NIC tenders in future for a period of at least three years.
- 5.18.3 Any conditions mentioned in their tender bids by the bidders which are not in conformity to the conditions set forth in the tender will not be accepted by NICSI/NIC. All the terms and conditions for the supply, testing and acceptance, payment terms penalty etc. will be as those mentioned herein and no change in the terms and conditions set by the bidders will be acceptable. Alterations, if any, in the tender bid should be attested properly by the bidders, failing which the bid will be rejected.
- 5.18.4 NICSI/NIC may use this tender for executing any projects anywhere in India during the validity of this tender.
- 5.18.5 All empanelled bidders will provide a week training to a batch 2/3 officers of NIC/NICSI/users on every purchase of fifty unit of genset at factory premisses.
- 5.18.6 All terms and conditions governing prices and supply given above, as applicable to NICSI, will be made equally applicable to NIC.
- 5.18.7 NICSI reserves the right to modify and amend any of the above-stipulated condition/criterion depending upon Project priorities vis-à-vis urgent commitments. NICSI also reserves the right to accept /reject any bid, to cancel / abort tender process and / or reject all bids at any time prior to award of empanelment, without thereby incurring any liability to the affected agencies on the grounds of such action taken by the NICSI.
- 5.18.8 Any default by the bidders in respect of tender terms & conditions will lead to rejection of the bid & forfeiture of EMD/Security Deposit.

(Authorized Signatory) NICSI (Tender Process Section)

Annexure-	В

	BIDDER'S PROFILE					
a)	Name of the Vendor:					
b)	Incorporated as	in y	/ear		at	
	(State Sole Proprietor, Partnership, Private Limited or Limited Firm)					
c)	Whether any Legal/Ar Vendor has lodged any details.					
	d) Vendor profile					
	 i) Full Address: ii) Year when set up: iii) Name of the top executive with designation: iv) Telephone Number(s): Mobile: v) Email address: vi) Service Tax No: vii) Sales Tax/VAT No: viii) CST No: ix) PAN No: x) Valid ISO 9000:2001 certificate: Attach zerox copy. Xi) Turnover from sale of diesel generators. 					
	OEM	Т	urnover (in Rs.)		
	Genset OEM	1				
	Engine OEM	1				
	Alternator OEM					
	e)		EMD details			
	Particulars Amount (Rs.) Draft No. Date Bank Br					Branch

Tender fee	500		
EMD			

f) Service centres: The following information for service centres as per eligibility clause 4.4 may be given. For franchisee / OEM centres the vendor shall produce a copy of the valid agreement / undertaking from franchises/OEM. NICSI would verify the information furnished here and if found incorrect the bid is liable to be rejected.

S. No.	Location	Name of Center Full Postal Address with Telephone Nos.	Year of Setup	Own centre Or Franchisee	Whether spares are stocked (Y/N)
1					
2					
-					
-					

- g) Please use additional sheets of paper wherever necessary.
- h) The technical bid must be submitted as a PDF document with each page numbered and carrying an index of page numbers for the above information.

Date:	Signature
Place:	Name:

SEAL

Annexure-C

Compliance sheet

Name of the Bidder:

S. No.	Tender No		Page no. Of the Tender Bid
1	OEM of quoted item (Mention name of Engine & Alternator OEM for each quoted capacity of diesel genset)	Yes/No	
2	Authorization letter from Engine OEM as per annexure-H	Yes/ No	
3	Bidders valid Certificate of ISO 9000:2001	Yes/No	
4	Copies of Audited Balance sheet showing turnover from sale of Diesel Generator for OEM genset, OEM engine, OEM alternator for financial year 2008-09.	Yes/No	
5	List of Service Centers/authorized service centers	Yes/No	
6	Copies of STax/VAT Service Tax PAN	Yes/No	
7	Articles of Association etc.	Yes/No	
8	Not Black listed (Self Certificate)	Yes/No	

9	EMD details, Tender Fee	Yes / No	
10	Certificate of support for 5 years	Yes/No	

Dat	۵۰	Signature
Pla	ce:	Name:
		SEAL
		SLAL

Annexure - D

STATEMENT OF DEVIATIONS FROM TECHNICAL SPECIFICATIONS

S. No.	Component Description	Make & Model of Diesel Genset Quoted	Make & Model of Diesel Engine & Alternator	Technically Compliant (Yes / No)	Deviation if any
	5KVA Diesel Generator (1500 rpm) rated for 0.8 PF power.				
1	5KVA Diesel Generator (3000 rpm) rated for 0.8 PF power.				
2	7.5KVA Diesel Generator (1500 rpm) rated for 0.8 PF power.				
2	7.5KVA Diesel Generator (3000 rpm) rated for 0.8 PF power.				
3	10KVA Diesel Generator (1500 rpm) rated for 0.8 PF power.				
3	10KVA Diesel Generator (3000 rpm) rated for 0.8 PF power.				
4	15KVA Diesel Generator (1500 rpm) rated for 0.8 PF power.				
4	15KVA Diesel Generator (3000 rpm) rated for 0.8 PF power.				
5	20KVA Diesel Generator (1500 rpm) rated for 0.8 PF power.				

	20KVA Diesel Generator (3000 rpm) rated for 0.8 PF power.		
6	30KVA Diesel Generator (1500 rpm) rated for 0.8 PF power.		
6	30KVA Diesel Generator (3000 rpm) rated for 0.8 PF power.		

Note: Deviations on the lower side of technical specs will not be accepted.

Signature of the Bidder

Name Date Place

Company Seal

Annexure-E1

FINANCIAL BID PROFORMA FOR DIESEL GENERATORS

<u>Prices in Financial Bid should be quoted in the following format.</u> All prices should be quoted for five years onsite warranty support.

Bidder's Name:

Description of quoted Diesel Generator	Particulars		With 5 year warranty
(1)	(2)	(3)	(4)
	A	Cost of Basic Generator	
5KVA Diesel	В	Excise Duty	
Generator (1500 rpm)	С	Sales Tax on A (in %)	
rated for 0.8PF	D	Installation & Commissioning Charges of Generator	
P	Е	Service Tax on D (in %)	
	F	Total Cost of Generator (A+B+C+D+E)	
	Α	Cost of Basic Generator	
5KVA Diesel	В	Excise Duty	
Generator (3000 rpm)	С	Sales Tax on A (in %)	
rated for 0.8PF	D	Installation & Commissioning Charges of Generator	
P*****	Е	Service Tax on D (in %)	
	F	Total Cost of Generator (A+B+C+D+E)	
	1	Post Warranty on-site Comprehensive annual maintenance of Generator as % of basic cost of generator	
	2	Supply of 4x10 Sq mm armored aluminum cable per meter	
Additional items for 5KVA capacity of	3	Laying of above cable (Wall supported / open) per meter	
Generator	4	Laying of above cable (Under ground) per meter	
	5	End termination of above Cable (4 Nos. terminations)	
	6	Exhaust piping with aluminimum cladding (where needed) per meter	

	A	Cost of Basic Generator	
	В	Excise Duty	
7.5KVA Diesel	C	Sales Tax on A (in %)	
Generator (1500 rpm)		, ,	
rated for 0.8PF power"	D	Installation & Commissioning Charges of Generator	
	Е	Service Tax on D (in %)	
	F	Total Cost of Generator (A+B+C+D+E)	
	A	Cost of Basic Generator	
7.5KVA Diesel	В	Excise Duty	
Generator (3000 rpm)	С	Sales Tax on A (in %)	
rated for 0.8PF power"	D	Installation & Commissioning Charges of Generator	
power	Е	Service Tax on D (in %)	
	F	Total Cost of Generator (A+B+C+D+E)	
		Post Warranty on-site Comprehensive annual	
	1	maintenance of Generator as % of basic cost of generator	
	2	Supply of 4x16 Sq mm armored aluminum cable per meter	
Additional items for	_	Laying of above cable (Wall supported / open) per	
7.5KVA capacity of	3	meter	
Generator	4	Laying of above cable (Under ground) per meter	
	_	End termination of above Cable (4 Nos. terminations)	
	5		
	6	Exhaust piping with aluminimum cladding (where needed) per meter	
	A	Cost of Basic Generator	
	В	Excise Duty	
10KVA Diesel	C	Sales Tax on A (in %)	
Generator (1500 rpm) rated for 0.8PF	D	Installation & Commissioning Charges of Generator	
power"	Е	Service Tax on D (in %)	
	F	Total Cost of Generator (A+B+C+D+E)	
	A	Cost of Basic Generator	
	В	Excise Duty	
10KVA Diesel	C	Sales Tax on A (in %)	
Generator (3000 rpm)			
rated for 0.8PF power"	D	Installation & Commissioning Charges of Generator	
	Е	Service Tax on D (in %)	
	F	Total Cost of Generator (A+B+C+D+E)	
	1	Post Warranty on-site Comprehensive annual maintenance of Generator as % of basic cost of generator	
	2	Supply of 4x25 Sq mm armored aluminum cable per meter	
Additional items for 10KVA capacity of	3	Laying of above cable (Wall supported / open) per	
Generator		meter	
30110141101	4	Laying of above cable (Under ground) per meter	
	5	End termination of above Cable (4 Nos. terminations)	
	6	Exhaust piping with aluminimum cladding (where needed) per meter	
15KVA Diesel	A	Cost of Basic Generator	
Generator (1500 rpm)	В	Excise Duty	
rated for 0.8PF	C	Sales Tax on A (in %)	
			

power"	D	Installation & Commissioning Charges of Generator	
	Е	Service Tax on D (in %)	
	F	Total Cost of Generator (A+B+C+D+E)	
	A	Cost of Basic Generator	
151/1/A D' 1	В	Excise Duty	
15KVA Diesel Generator (3000 rpm)	С	Sales Tax on A (in %)	
rated for 0.8PF power"	D	Installation & Commissioning Charges of Generator	
P	Е	Service Tax on D (in %)	
	F	Total Cost of Generator (A+B+C+D+E)	
	1	Post Warranty on-site Comprehensive annual maintenance of Generator as % of basic cost of generator	
	2	Supply of 4x35 Sq mm armored aluminum cable per meter	
Additional items for 15KVA capacity of	3	Laying of above cable (Wall supported / open) per meter	
Generator	4	Laying of above cable (Under ground) per meter	
	5	End termination of above Cable (4 Nos. terminations)	
	6	Exhaust piping with aluminimum cladding (where needed) per meter	
	A	Cost of Basic Generator	
201/1/4 D; 1	В	Excise Duty	
20KVA Diesel Generator (1500 rpm)	С	Sales Tax on A (in %)	
rated for 0.8PF power"	D	Installation & Commissioning Charges of Generator	
power	Е	Service Tax on D (in %)	
	F	Total Cost of Generator (A+B+C+D+E)	
	A	Cost of Basic Generator	
20KVA Diesel	В	Excise Duty	
Generator (3000 rpm)	С	Sales Tax on A (in %)	
rated for 0.8PF	D	Installation & Commissioning Charges of Generator	
P	Е	Service Tax on D (in %)	
	F	Total Cost of Generator (A+B+C+D+E)	
	1	Post Warranty on-site Comprehensive annual maintenance of Generator as % of basic cost of generator	
	2	Supply of 4x35 Sq mm armored aluminum cable per meter	
Additional items for 20KVA capacity of	3	Laying of above cable (Wall supported / open) per meter	
Generator	4	Laying of above cable (Under ground) per meter	
	5	End termination of above Cable (4 Nos. terminations)	
	6	Exhaust piping with aluminimum cladding (where needed) per meter	
	A	Cost of Basic Generator	
30KVA Diesel	В	Excise Duty	
Generator (1500 rpm) rated for 0.8PF	C	Sales Tax on A (in %)	
power"			
r - · · · · ·	D	Installation & Commissioning Charges of Generator	

	Е	Service Tax on D (in %)	
	F	Total Cost of Generator (A+B+C+D+E)	
	A	Cost of Basic Generator	
30KVA Diesel	В	Excise Duty	
Generator (3000 rpm)	C	Sales Tax on A (in %)	
rated for 0.8PF power"	D	Installation & Commissioning Charges of Generator	
F	Е	Service Tax on D (in %)	
	F	Total Cost of Generator (A+B+C+D+E)	
	1	Post Warranty on-site Comprehensive annual maintenance of Generator as % of basic cost of generator	
	2	Supply of 4x45 Sq mm armored aluminum cable per meter	
Additional items for 30KVA capacity of	3	Laying of above cable (Wall supported / open) per meter	
Generator	4	Laying of above cable (Under ground) per meter	
	5	End termination of above Cable (4 Nos. terminations)	
	6	Exhaust piping with aluminimum cladding (where needed) per meter	

- 1. LQ-1 for genset for each capacity is the bidder quoting least rates in Col (4) row (F) of respective capacity of genset. Where Col (F) stands for "**Total cost of Generator**".
- 2. LQ1 rate of additional items for each capacity will be vendor independent. LQ-1 rate for additional items will be the lowest rate quoted in col (4) for each item. All empanelled bidder shall match the LQ-1 rates of additional items of their empanelled Generator capacity, failing which their bid for that generator capacity is liable to be rejected. However, for matching the rates, incredibly low or rates quoted by mistake or zero rates wouldn't be considered. Vendors quoting such rates would loose their EMD.
- 3. Financial bid must be submitted in the exact format as given in XLS file. The bid may be rejected if same format is not used.
- 4. Excise Duty & Sales Tax must be indicated in % only explicitly.
- 5. Unit Price should include packing, forwarding, freight, insurance, installation, commissioning, warranty or any other charges for supply at anywhere in India.
- 6. Entry Tax / Octori will be reimbursed as per actual wherever applicable.

	Authorized Signatory
	Name:
Date:	
Place:	<u>SEAL</u>

(ANNEXURE-I)

TECHNICAL SPECIFICATIONS FOR DIESEL GENERATORS 5KVA

S. No	Component Name	Required Specifications
110		
	ENGINE:	
	COOLING SYSTEM REQD.	Air cooled, Water/Coolant cooled
	WATER LEVEL MAINTENANCE	The Water/Coolant cooled system of the engine should be equipped with in built expansion tank so that frequent topping up of water/daily check of water level is not needed. Only a top up at 250 hours should suffice. Engine should have high quality and finish to make it a zero leakage system. Similarly the water system should have seals etc. to ensure no water leakage from the water pump.
	OUTPUT	The ENGINE continuous duty rated, should be capable of developing sufficient output HP under site temperature conditions of 45 degree C to ensure full output from 5 kVA alternator.
	MINIMUM HP	Not less than 10 B.H.P continuous rated.
	SPEED	1500 / 3000 rpm
	FUEL PUMP	The pump should be of MONOBLOCK design of MICO or equivalent make
		to ensure better governing and easy repair in the field.
1.	GOVERNOR	Mechanical / electronic
	NO. OF	Single/Multi cylinder, in accordance with is 10001-1981 with latest
	CYLINDERS	amendments.
	RECOMMONDED MAKES OF	KIRLOSKAR/CUMMINS/MAHINDRA/GREAVES/EICHER/ ESCORTS/ ASHOK LAYLAND/ OR EQUIVALENT.
	ENGINE	ASHOR LATLAND/ OR EQUIVALENT.
	FLYWHEEL	Of suitable diameter and weight (indicate the diameter and the weight).
	OVERLOAD	Engine should be capable of providing 10% overload for 1 hour for every 11
	CAPACITY	hour continuous running at full load
	ENGINE	Naturally Aspirated
	ASPIRATION	
	STANDARD THAT	IS/BS (IS 10000/BS:5514/BS:649).
	THE ENGINE	
	SHOULD MEET	
	RADIATOR	Heavy duty with fan (provide technical details).
	SILENCER	Residential type with exhaust piping with vibration isolators (provide technical details).
	STARTING	Equipment like electric motor, battery, charging alternator etc. for electric

	T	T
	ACCESSORIES	Fuel injection equipment, air cleaner, voltage regulator, anti vibration mounting pads, speed controlling governor, suitable coupling system to the alternator, tachometer, lubricating oil temperature and pressure gauge, rpm indicator and hour meter to indicate number of hrs. of operation, auto trip on low oil pressure, over speed alarm with trip, thermal insulation for exhaust line with glass wool, aluminium sheet, chicken mesh, diesel line of suitable diameter.
	PROTECTION	Against low lubricating oil pressure, high water temperature shall be provided for engine with alarm and fuel shut off.
2.	ACOUSTIC ENCLOSURE	The enclosure supplied should ensure not more than 5-7 degree C temperature rise then the outside temperature with natural air circulation. The noise level should not be more than 75 dBA at 1 meter distance. Enclosure should be duly type approved by CPCB authorized lab. The enclosure must be fitted with sheet steel of 1.2/1.6 mm thickness, seven tank pretreated and powder coated with pure polyester powder to enable outdoor installation.
3.	FUEL TANK	Fuel tank with capacity of 12 hours continuous running at full load with necessary piping, fuel gauge, drain valve, inlet and outlet connectors complete in all respect.
4.	ENVIRONMENTA L CONDITIONS	Shall meet requirement of rules 1986 as laid down by Ministry of Environment & Forest read with GSR No. 371 (E) dated: 17.05.2002, GSR 520 (E) dated: 01.07.2003 and GSR 448 (E) dated: 12.07.2004 in respect to emission norms for the engine and in respect of noise level for the DG sets.
	ALTERNATOR	Self excited and self regulated alternator should be of brushless type with VG-I grade of voltage regulation giving an output of 5 KVA, single phase 230/240 Volts, 50 Hz, 0.8 (lag) power factor, 2 wire close coupled to the Engine. Class of insulation should be Class "H". Alternator should meet IS 13364 (part-I):1992/2003. Alternator should be capable of 10% overload for one hour and 50% overload for 15 seconds in 12 hours. Permissible voltage variation - +/-1.5% of rated voltage.
5.	PROTECTION	Screen protected drip proof with IP 21 degree of protection as per IS: 4691/85.
	FRAME	Engine and alternator shall be coupled and mounted on sturdy, fabricated, welded construction base frame.
	RECOMMONDED MAKES OF ALTERNATOR	KIRLOSKAR ELECTRIC/CROMPTON/LEROY SOMER/ STAMFORD/Elgi/CGL/KEC or equivalent.
6.	AUTO MAINS FAILURE (AMF) CONTROL PANEL	The AMF control panel shall have the following instruments and accessories: (a) Microprocessor based genset controller with composite meter for digital display Of: i) Output voltage/AC Mains voltage. ii) Output Current. iii) Power Factor iv) Frequency. v) kWh vi) Three attempts engine start/engine cranking relay. vii) On-delay timer for load change over. viii) On-delay timer for engine shut off. (b) Mode selector switch for setting the panel on any one position such as OFF/auto/manual/test. (c) Engine ON-OFF switch (Push button type) (d) MCCB of suitable rating shall be provided. (e) Rectangular aluminum bus bars (one number for each phase, neutral and earthing terminal) of adequate ratings duly colour coded with heat shrinkable PVC sleeves. (f) Two contactors of suitable rating (one for DG set & one for AC mains) with over load relay.

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		(g) Under-voltage relay for mains.
		(h) Battery charger complete with voltage regulator, float or booster selector switch, ON-OFF switch,
		voltmeter and ammeter for charging the battery
		from mains. This will be in addition to the
		battery charging alternator fitted on the engine. (i) Instrument & Control Fuses.
		(i) Five number indicating lamps to indicate 'mains
		ON', 'load on mains', 'set running', 'load on set'
		and 'battery charger on'.
		(K) Audio visual alarm for 'Low lubricating oil
		pressure', 'High cylinder head temperature', 'Start
		failure' and 'DG over load'.
		(l) Any other switch, instrument, relay or contactor
		etc. essential for smooth and trouble free
		functioning of DG set with AMF panel is to be
		specified by the tenderers in their offer with
		complete detail of the item.
		The panel should be within the D G set acoustic enclosure.
		The system should have an inbuilt By PASS Change Over switch to ensure
		that in case of AMF / D G Set failure the mains can get directly connected to
		the load.
		Make of Contactors acceptable - ABB/Siemens/Schneider/LG (LS) / L&T
		Make of Microprocessor - Procom / Control & Switchgear / Sun
		Automation/ Minilec and equivalent.
	BATTERY	Battery of very low maintenance - 85 AH or higher lead acid type
7.	DATTERT	Make – Amron / Standard Furukawa/ Exide / Amco / Prestolite /Panasonic.
8.	SIZE AND WEIGHT	Should be minimum (provide details).
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	* Two Nos. of GI plate earthing.
		*RCC / PCC Foundation of size as per DG set and having a height above
		ground of at least 9 inches.
		*Length of input/output cables upto a length of 20 mts. May be included in
		the installation cost and quote additionally for:
9.	INSTALLATION	*4x10 Sq mm armoured aluminium cable (quote as rate per meter)
٦.	DETAILS	*Cable laying - wall supported/open a(quote as rate per meter)
		*Cable laying - under ground (quote as rate per meter)
		*End termination of Cable - 4 terminations(quote as lumpsum)
		*Exhaust piping with aluminimum cladding (where needed) (quote as rate
		per meter)
1.0	ANINITIAT	*Testing of the DG set at the site for 1 hour and handover
10	ANNUAL	
	MAINTENANCE	
	CONTRACT	After expire of five years comprehensive wearenty (including presenting
		After expiry of five years comprehensive warranty (including preventive maintenance) covering all parts except Diesel. AMC shall be awarded to the
		vendor on comprehensive maintenance basis (One year or 1000 Hours
		running whichever is earlier), which includes preventive maintenance at
	Scope	every six months or 250 hours running whichever earlier, breakdown
	Беоре	maintenance and any other required maintenance jobs as per the Terms and
		Conditions and rates specified in the AMC agreement. Should cover cost of
		all scheduled and unscheduled maintenance for 1000 hours running per
		annum including labour charges, servicing and replacement of all types of
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		spares complete as required.

Probable Items to be covered in AMC, this is not an exhaustive list of all the items but indicative only	Mobile Oil, Filters - All types, Belts, Rubber Parts, Gaskets, AVR's, Contactors & their coils, MCB's, Meters, Coolant, Locks, Hinges, Exhaust Bellows, Control Relays, controller.
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(ANNEXURE-II)
TECHNICAL SPECIFICATIONS FOR DIESEL GENERATORS 7.5KVA

S. No	Component Name	Required Specifications
	ENGINE:	
	COOLING SYSTEM REQD.	Air cooled, Water/Coolant cooled
	WATER LEVEL MAINTENANCE	The Water/Coolant cooled system of the engine should be equipped with in built expansion tank so that frequent topping up of water/daily check of water level is not needed. Only a top up at 250 hours should suffice. Engine should have high quality and finish to make it a zero leakage system. Similarly the water system should have seals etc. to ensure no water leakage from the water pump.
	OUTPUT	The ENGINE continuous duty rated, should be capable of developing sufficient output HP under site temperature conditions of 45 degree C to ensure full output from 7.5 kVA alternator.
	MINIMUM HP	Not less than 14 B.H.P continuous rated.
	SPEED	1500/3000 rpm
	FUEL PUMP	The pump should be of MONOBLOCK design of MICO or equivalent make to ensure better governing and easy repair in the field.
1.	GOVERNOR	Mechanical / electronic
	NO. OF CYLINDERS	Single/Multi cylinder, in accordance with is 10001-1981 with latest amendments.
	RECOMMONDED MAKES OF ENGINE	KIRLOSKAR/CUMMINS/MAHINDRA/GREAVES/EICHER/ESCORT /ASHOK LAYLAND/ OR EQUIVALENT.
	FLYWHEEL	Of suitable diameter and weight (indicate the diameter and the weight).
	OVERLOAD CAPACITY	Engine should be capable of providing 10% overload for 1 hour for every 11 hour continuous running at full load
	ENGINE ASPIRATION	Naturally Aspirated
	STANDARD THAT THE ENGINE SHOULD MEET	IS/BS (IS 10000/BS:5514/BS:649).
	RADIATOR	Heavy duty with fan (provide technical details).
	SILENCER	Residential type with exhaust piping with vibration isolators (provide technical details).

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	STARTING	Equipment like electric motor, battery, charging alternator etc. for electric start.
	ACCESSORIES	Fuel injection equipment, air cleaner, voltage regulator, anti vibration mounting pads, speed controlling governor, suitable coupling system to the alternator, tachometer, lubricating oil temperature and pressure gauge, rpm indicator and hour meter to indicate number of hrs. of operation, auto trip on low oil pressure, over speed alarm with trip, thermal insulation for exhaust line with glass wool, aluminium sheet, chicken mesh, diesel line of suitable diameter.
	PROTECTION	Against low lubricating oil pressure, high water temperature shall be provided for engine with alarm and fuel shut off.
2.	ACOUSTIC ENCLOSURE	The enclosure supplied should ensure not more than 5-7 degree C temperature rise then the outside temperature with natural air circulation. The noise level should not be more than 75 dBA at 1 meter distance. Enclosure should be duly type approved by CPCB authorized lab. The enclosure must be fitted with sheet steel of 1.2/1.6 mm thickness, seven tank pretreated and powder coated with pure polyester powder to enable outdoor installation.
3.	FUEL TANK	Fuel tank with capacity of 12 hours continuous running at full load with necessary piping, fuel gauge, drain valve, inlet and outlet connectors complete in all respect.
4.	ENVIRONMENTA L CONDITIONS	Shall meet requirement of rules 1986 as laid down by Ministry of Invironment & Forest read with GSR No. 371 (E) dated: 17.05.2002, GSR 520 (E) dated: 01.07.2003 and GSR 448 (E) dated: 12.07.2004 in respect to emission norms for the engine and in respect of noise level for the DG sets.
	ALTERNATOR	Self excited and self regulated alternator should be of brushless type with VG-I grade of voltage regulation giving an output of 7.5 KVA, single phase 230/240 Volts, 50 Hz, 0.8 (lag) power factor, 2 wire close coupled to the Engine. Class of insulation should be Class "H". Alternator should meet IS 13364 (part-I):1992/2003. Alternator should be capable of 10% overload for one hour and 50% overload for 15 seconds in 12 hours. Permissible voltage variation - +/-1.5% of rated voltage.
5.	PROTECTION	Screen protected drip proof with IP 21 degree of protection as per IS: 4691/85.
	FRAME	Engine and alternator shall be coupled and mounted on sturdy, fabricated, welded construction base frame.
	RECOMMONDED MAKES OF ALTERNATOR	KIRLOSKAR ELECTRIC/CROMPTON/LEROY SOMER/ STAMFORD/Elgi/CGL/KEC or equivalent.
6.	AUTO MAINS FAILURE (AMF) CONTROL PANEL	The AMF control panel shall have the following instruments and accessories: (a) Microprocessor based genset controller with composite meter for digital display Of: i) Output voltage/AC Mains voltage. ii) Output Current. iii) Power Factor iv) Frequency. v) kWh vi) Three attempts engine start/engine cranking relay. vii) On-delay timer for load change over. viii) On-delay timer for engine shut off. (b) Mode selector switch for setting the panel on any one position such as OFF/auto/manual/test. (c) Engine ON-OFF switch (Push button type)

		 (d) MCCB of suitable rating shall be provided. (e) Rectangular aluminum bus bars (one number for each phase, neutral and earthing terminal) of adequate ratings duly colour coded with heat shrinkable PVC sleeves. (f) Two contactors of suitable rating (one for DG set & one for AC mains) with over load relay. (g) Under-voltage relay for mains. (h) Battery charger complete with voltage regulator, float or booster selector switch, ON-OFF switch, voltmeter and ammeter for charging the battery from mains. This will be in addition to the battery charging alternator fitted on the engine. (i) Instrument & Control Fuses. (j) Five number indicating lamps to indicate 'mains ON', 'load on mains', 'set running', 'load on set' and 'battery charger on'. (K) Audio visual alarm for 'Low lubricating oil pressure', 'High cylinder head temperature', 'Start failure' and 'DG over load'. (l) Any other switch, instrument, relay or contactor etc. essential for smooth and trouble free functioning of DG set with AMF panel is to be specified by the tenderers in their offer with complete detail of the item. The panel should be within the D G set acoustic enclosure. The system should have an inbuilt By PASS Change Over switch to ensure that in case of AMF / D G Set failure the mains can get directly connected to the load. Make of Contactors acceptable - ABB/Siemens/Schneider/LG (LS) / L&T
		Make of Microprocessor - Procom / Control & Switchgear / Sun Automation/ Minilec and equivalent. Battery of very low maintenance - 85 AH or higher lead acid type
7.	BATTERY	Make - Amron/ Standard Furukawa/ Exide / Amco / Prestolite/Panasonic.
8.	SIZE AND WEIGHT	Should be minimum (provide details).
9.	INSTALLATION DETAILS	*4 Nos. of GI plate earthing. * RCC / PCC Foundation of size as per DG set and having a height above ground of at least 9 inches. *Length of input/output cables upto a length of 20 mts. May be included in the installation cost and quote additionally for: *4x16 Sq mm armoured aluminium cable (quote as rate per meter) *Cable laying - wall supported/open a(quote as rate per meter) *Cable laying - under ground (quote as rate per meter) *End termination of Cable - 4 terminations(quote as lumpsum) *Exhaust piping with aluminimum cladding (where needed) (quote as rate per meter) *Testing of the DG set at the site for 1 hour and handover.
	ANNUAL MAINTENANCE CONTRACT	
10	Scope	After expiry of five years comprehensive warranty (including preventive maintenance) covering all parts except Diesel. AMC shall be awarded to the vendor on comprehensive maintenance basis (One year or 1000 Hours running whichever is earlier), which includes preventive maintenance at every three months or 250 hours running whichever earlier, breakdown maintenance and any other required maintenance jobs as per the Terms and Conditions and rates specified in the AMC agreement. Should cover cost of all scheduled and unscheduled maintenance for 1000 hours running per

	annum including labour charges, servicing and replacement of all types of spares complete as required.
	spares complete as required.
Probable Items to	Mobile Oil, Filters - All types, Belts, Rubber Parts, Gaskets, AVR's,
be covered in AMC,	Contactors & their coils, MCB's, Meters, Coolant, Locks, Hinges, Exhaust
this is not an	Bellows, Control Relays, controller.
exhaustive list of	
all the items but	
indicative only	

(ANNEXURE-III) TECHNICAL SPECIFICATIONS FOR DIESEL GENERATORS 10KVA

S. No	Component Name	Required Specifications
	ENGINE:	
	COOLING SYSTEM REQD.	Air cooled, Water/Coolant cooled
	WATER LEVEL MAINTENANCE	The Water/Coolant cooled system of the engine should be equipped with in built expansion tank so that frequent topping up of water/daily check of water level is not needed. Only a top up at 250 hours should suffice. Engine should have high quality and finish to make it a zero leakage system. Similarly the water system should have seals etc. to ensure no water leakage from the water pump.
	OUTPUT	The ENGINE continuous duty rated, should be capable of developing sufficient output HP under site temperature conditions of 45 degree C to ensure full output from 10 kVA alternator.
	MINIMUM HP	Not less than 17 B.H.P continuous rated.
	SPEED	1500/3000 rpm
	FUEL PUMP	The pump should be of MONOBLOCK design of MICO or equivalent make to ensure better governing and easy repair in the field.
	GOVERNOR	Mechanical / electronic
1.	NO. OF	Single/Multi cylinder, in accordance with is 10001-1981 with latest
	CYLINDERS	amendments.
	RECOMMONDE	KIRLOSKAR/CUMMINS/MAHINDRA/GREAVES/EICHER/ESCORT
	D MAKES OF	/ASHOK LAYLAND/ OR EQUIVALENT.
	ENGINE	
	FLYWHEEL	Of suitable diameter and weight (indicate the diameter and the weight).
	OVERLOAD	Engine should be capable of providing 10% overload for 1 hour for every 11
	CAPACITY	hour continuous running at full load
	ENGINE	Naturally Aspirated
	ASPIRATION	
	STANDARD	
	THAT THE	IS/BS (IS 10000/BS:5514/BS:649).
	ENGINE SHOULD MEET	
	SHOULD MEET	Heavy distributes the few (married technical details)
	RADIATOR	Heavy duty with fan (provide technical details).
	SILENCER	Residential type with exhaust piping with vibration isolators (provide technical details).
	STARTING	Equipment like electric motor, battery, charging alternator etc. for electric start.

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	ACCESSORIES	Fuel injection equipment, air cleaner, voltage regulator, anti vibration mounting pads, speed controlling governor, suitable coupling system to the alternator, tachometer, lubricating oil temperature and pressure gauge, rpm indicator and hour meter to indicate number of hrs. of operation, auto trip on low oil pressure, over speed alarm with trip, thermal insulation for exhaust line with glass wool, aluminium sheet, chicken mesh, diesel line of suitable diameter.
	PROTECTION	Against low lubricating oil pressure, high water temperature shall be provided for engine with alarm and fuel shut off.
2.	ACOUSTIC ENCLOSURE	The enclosure supplied should ensure not more than 5-7 degree C temperature rise then the outside temperature with natural air circulation. The noise level should not be more than 75 dBA at 1 meter distance. Enclosure should be duly type approved by CPCB authorized lab. The enclosure must be fitted with sheet steel of 1.2/1.6 mm thickness, seven tank pretreated and powder coated with pure polyester powder to enable outdoor installation.
3.	FUEL TANK	Fuel tank with capacity of 12 hours continuous running at full load with necessary piping, fuel gauge, drain valve, inlet and outlet connectors complete in all respect.
4.	ENVIRONMENT AL CONDITIONS	Shall meet requirement of rules1986 as laid down by Ministry of Environment & Forest read with GSR No. 371 (E) dated: 17.05.2002, GSR 520 (E) dated: 01.07.2003 and GSR 448 (E) dated: 12.07.2004 in respect to emission norms for the engine and in respect of noise level for the DG sets.
	ALTERNATOR	Self excited and self regulated alternator should be of brushless type with VG-I grade of voltage regulation giving an output of 10 KVA, single phase 230/240 Volts, 50 Hz, 0.8 (lag) power factor, 2 wire close coupled to the Engine. Class of insulation should be Class "H". Alternator should meet IS 13364 (part-I):1992/2003. Alternator should be capable of 10% overload for one hour and 50% overload for 15 seconds in 12 hours. Permissible voltage
5.	PROTECTION	variation - +/-1.5% of rated voltage. Screen protected drip proof with IP 21 degree of protection as per IS: 4691/85.
	FRAME	Engine and alternator shall be coupled and mounted on sturdy, fabricated, welded construction base frame.
	RECOMMONDE D MAKES OF ALTERNATOR	KIRLOSKAR ELECTRIC/CROMPTON/LEROY SOMER/ STAMFORD/Elgi/CGL/KEC or equivalent.
6.	AUTO MAINS FAILURE (AMF) CONTROL PANEL	The AMF control panel shall have the following instruments and accessories: (a) Microprocessor based genset controller with composite meter for digital display Of: i) Output voltage/AC Mains voltage. ii) Output Current. iii) Power Factor iv) Frequency. v) kWh vi) Three attempts engine start/engine cranking relay. vii) On-delay timer for load change over. viii) On-delay timer for engine shut off. (b) Mode selector switch for setting the panel on any one position such as OFF/auto/manual/test. (c) Engine ON-OFF switch (Push button type) (d) MCCB of suitable rating shall be provided. (e) Rectangular aluminum bus bars (one number for each phase, neutral and earthing terminal) of adequate ratings duly colour coded with heat shrinkable PVC sleeves. (f) Two contactors of suitable rating (one for DG set & one for AC mains) with over load relay. (g) Under-voltage relay for mains. (h) Battery charger complete with voltage regulator, float or booster selector switch, ON-OFF switch,

		voltmeter and ammeter for charging the battery from mains. This will be in addition to the battery charging alternator fitted on the engine. (i) Instrument & Control Fuses. (j) Five number indicating lamps to indicate 'mains ON', 'load on mains', 'set running', 'load on set' and 'battery charger on'. (K) Audio visual alarm for 'Low lubricating oil pressure', 'High cylinder head temperature',' Start failure' and 'DG over load'. (l) Any other switch, instrument, relay or contactor etc. essential for smooth and trouble free functioning of DG set with AMF panel is to be specified by the tenderers in their offer with complete detail of the item. The panel should be within the D G set acoustic enclosure. The system should have an inbuilt By PASS Change Over switch to ensure that in case of AMF / D G Set failure the mains can get directly connected to the load. Make of Contactors acceptable - ABB/Siemens/Schneider/LG (LS) / L&T Make of Microprocessor - Procom / Control & Switchgear / Sun Automation/ Minilec and equivalent.
7.	BATTERY	Battery of very low maintenance - 85 AH or higher lead acid type Make - Amron/ Standard Furukawa/ Exide / Amco / Prestolite/Panasonic.
8.	SIZE AND WEIGHT	Should be minimum (provide details).
9.	INSTALLATION DETAILS	*4 Nos. of GI plate earthing. * RCC / PCC Foundation of size as per DG set and having a height above ground of at least 9 inches. *Length of input/output cables upto a length of 20 mts. May be included in the installation cost and quote additionally for: *4x25 Sq mm armoured aluminium cable (quote as rate per meter) *Cable laying - wall supported/open a(quote as rate per meter) *Cable laying - under ground (quote as rate per meter) *End termination of Cable - 4 terminations(quote as lumpsum) *Exhaust piping with aluminimum cladding (where needed) (quote asrate per meter) *Testing of the DG set at the site for 1 hour and handover (quote as lumpsum).
10	ANNUAL MAINTENANCE CONTRACT	
	Scope	After expiry of five years comprehensive warranty (including preventive maintenance) covering all parts except Diesel. AMC shall be awarded to the vendor on comprehensive maintenance basis (One year or 1000 Hours running whichever is earlier), which includes preventive maintenance at every three months or 250 hours running whichever earlier, breakdown maintenance and any other required maintenance jobs as per the Terms and Conditions and rates specified in the AMC agreement. Should cover cost of all scheduled and unscheduled maintenance for 1000 hours running per annum including labour charges, servicing and replacement of all types of spares complete as required.
	Probable Items to be covered in AMC, this is not an exhaustive list of all the items but indicative only	Mobile Oil, Filters - All types, Belts, Rubber Parts, Gaskets, AVR's, Contactors & their coils, MCB's, Meters, Coolant, Locks, Hinges, Exhaust Bellows, Control Relays, controller.

(ANNEXURE-IV)

TECHNICAL SPECIFICATIONS FOR DIESEL GENERATORS 15 KVA

S.	Component	
	Component	Required Specifications
No	Name	
	ENGINE:	
	COOLING	A' 1 1 W + /C 1 + 1 1
	SYSTEM	Air cooled, Water/Coolant cooled
	REQD.	
		The Water/Coolant cooled system of the engine should be equipped with in
	WATER	built expansion tank so that frequent topping up of water/daily check of water
	LEVEL	level is not needed. Only a top up at 250 hours should suffice.
ı	MAINTENANC	Engine should have high quality and finish to make it a zero leakage system.
	E	Similarly the water system should have seals etc. to ensure no water leakage
		from the water pump.
	OUTPUT	The ENGINE continuous duty rated should be capable of developing
		sufficient output HP under site temperature conditions of 45 degree C to ensure
		full output from 15 kVA alternator. Not less than 22 B.H.P continuous rated.
	MINIMUM HP	Not less than 22 b.H.P continuous rated.
	SPEED	1500/3000 rpm
	FUEL PUMP	The pump should be of MONOBLOCK design of MICO or equivalent make to
	FUEL I UNII	ensure better governing and easy repair in the field.
	GOVERNOR	Mechanical / electronic
	NO. OF	Wechanical / electronic
	CYLINDERS	Multi cylinder, in accordance with is 10002-1981 with latest amendments.
	RECOMMOND	KIRLOSKAR/CUMMINS/MAHINDRA/GREAVES/EICHER/ESCORT /
	ED MAKES OF	ASHOK LAYLAND/ OR EQUIVALENT.
1.	ENGINE	ABHOR ENTERNO OR EQUIVALENT.
	FLYWHEEL	Of suitable diameter and weight (indicate the diameter and the weight).
	OVERLOAD	Engine should be capable of providing 10% overload for 1 hour for every 11
	CAPACITY	hour continuous running at full load
	ENGINE	Naturally Aspirated
	ASPIRATION	- manage appeared
	STANDARD	
	THAT THE	10 DG (10 10000 DG 551 (DG 540)
	ENGINE	IS/BS (IS 10000/BS:5514/BS:649).
	SHOULD	
	MEET	
	RADIATOR	Heavy duty with fan (provide technical details).
	CHENCED	Residential type with exhaust piping with vibration isolators (provide technical
	SILENCER	details).
	STARTING	Equipment like electric motor, battery, charging alternator etc. for electric start.
		Fuel injection equipment, air cleaner, voltage regulator, anti vibration mounting
		pads, speed controlling governor, suitable coupling system to the alternator,
	ACCESSORIES	tachometer, lubricating oil temperature and pressure gauge, rpm indicator and
	ACCESSURIES	hour meter to indicate number of hrs. of operation, auto trip on low oil pressure,
		over speed alarm with trip, thermal insulation for exhaust line with glass wool,
		aluminium sheet, chicken mesh, diesel line of suitable diameter.
	PROTECTION	Against low lubricating oil pressure, high water temperature shall be provided
		for engine with alarm and fuel shut off.
2.	ACOUSTIC	The enclosure supplied should ensure not more than 5-7 degree C temperature

		<i>-</i> .
	ENCLOSURE	rise then the outside temperature with natural air circulation. The noise level should not be more than 75 dBA at 1 meter distance. Enclosure should be duly type approved by CPCB authorized lab. The enclosure must be fitted with sheet steel of 1.2/1.6 mm thickness, seven tank pretreated and powder coated with pure polyester powder to enable outdoor installation.
3.	FUEL TANK	Fuel tank with capacity of 12 hours continuous running at full load with necessary piping, fuel gauge, drain valve, inlet and outlet connectors complete in all respect.
4.	ENVIRONMEN TAL CONDITIONS	Shall meet requirement of rules1986 as laid down by Ministry of Environment & Forest read with GSR No. 371 (E) dated: 17.05.2002, GSR 520 (E) dated: 01.07.2003 and GSR 448 (E) dated: 12.07.2004 in respect to emission norms
5.	ALTERNATOR	for the engine and in respect of noise level for the DG sets. Self excited and self regulated alternator should be of brushless type with VG-I grade of voltage regulation giving an output of 15 KVA, single phase 230/240 Volts, 50 Hz, 0.8 (lag) power factor, 2 wire close coupled to the Engine. Class of insulation should be Class "H". Alternator should meet IS 13364 (part-I):1992/2003. Alternator should be capable of 10% overload for one hour and 50% overload for 15 seconds in 12 hours. Permissible voltage variation - +/-1.5% of rated voltage.
	PROTECTION	Screen protected drip proof with IP 21 degree of protection as per IS: 4691/85.
	FRAME	Engine and alternator shall be coupled and mounted on sturdy, fabricated, welded construction base frame.
	RECOMMOND ED MAKES OF ALTERNATOR	KIRLOSKAR ELECTRIC/CROMPTON/LEROY SOMER/ STAMFORD/ Elgi /CGL / KEC or equivalent.
6.	AUTO MAINS FAILURE (AMF) CONTROL PANEL	The AMF control panel shall have the following instruments and accessories: (a) Microprocessor based genset controller with composite meter for digital display Of: i) Output voltage/AC Mains voltage. ii) Output Current. iii) Power Factor iv) Frequency. v) kWh vi) Three attempts engine start/engine cranking relay. vii) On-delay timer for load change over. viii) On-delay timer for engine shut off. (b) Mode selector switch for setting the panel on any one position such as OFF/auto/manual/test. (c) Engine ON-OFF switch (Push button type) (d) MCCB of suitable rating shall be provided. (e) Rectangular aluminum bus bars (one number for each phase, neutral and earthling terminal) of adequate ratings duly colour coded with heat shrinkable PVC sleeves. (f) Two contactors of suitable rating (one for DG set & one for AC mains) with over load relay. (g) Under-voltage relay for mains. (h) Battery charger complete with voltage regulator, float or booster selector switch, ON-OFF switch, voltmeter and ammeter for charging the battery from mains. This will be in addition to the battery charging alternator fitted on the engine. (i) Instrument & Control Fuses. (j) Five number indicating lamps to indicate 'mains ON', 'load on mains', 'set running', 'load on set' and 'battery charger on'. (K) Audio visual alarm for 'Low lubricating oil pressure', 'High cylinder head temperature', 'Start failure' and 'DG over load'. (l) Any other switch, instrument, relay or contactor

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		functioning of DG set with AMF panel is to be specified by the tenderers in their offer with complete detail of the item. The panel should be within the D G set acoustic enclosure. The system should have an inbuilt By PASS Change Over switch to ensure that in case of AMF / D G Set failure the mains can get directly connected to the load. Make of Contactors acceptable - ABB/Siemens/Schneider/LG (LS) / L&T Make of Microprocessor - Procom / Control & Switchgear / Sun Automation/ Minilec and equivalent.	
7.	BATTERY	Battery of very low maintenance - 85 AH or higher lead acid type Make - Amron/ Standard Furukawa/ Exide / Amco / Prestolite/Panasonic.	
8.	SIZE AND WEIGHT	Should be minimum (provide details).	
9.	INSTALLATIO N DETAILS	*4 Nos. of GI plate earthing. * RCC / PCC Foundation of size as per DG set and having a height above ground of at least 9 inches. *Length of input/output cables upto a length of 20 mts. May be included in the installation cost and quote additionally for: *4x35 Sq mm armoured aluminium cable (quote as rate per meter) *Cable laying - wall supported/open a(quote as rate per meter) *Cable laying - under ground (quote as rate per meter) *End termination of Cable - 4 terminations(quote as lumpsum) *Exhaust piping with aluminimum cladding (where needed) (quote as rate per meter) *Testing of the DG set at the site for 1 hour and handover.	
	ANNUAL MAINTENANC E CONTRACT		
10	Scope	After expiry of five years comprehensive warranty (including preventive maintenance) covering all parts except Diesel. AMC shall be awarded to the vendor on comprehensive maintenance basis (One year or 1000 Hours running whichever is earlier), which includes preventive maintenance at every three months or 250 hours running whichever earlier, breakdown maintenance and any other required maintenance jobs as per the Terms and Conditions and rates specified in the AMC agreement. Should cover cost of all scheduled and unscheduled maintenance for 1000 hours running per annum including labour charges, servicing and replacement of all types of spares complete as required.	
	Probable Items to be covered in AMC, this is not an exhaustive list of all the items but indicative only	Mobile Oil, Filters - All types, Belts, Rubber Parts, Gaskets, AVR's, Contactors & their coils, MCB's, Meters, Coolant, Locks, Hinges, Exhaust Bellows, Control Relays, controller.	

(ANNEXURE-V)

TECHNICAL SPECIFICATIONS FOR DIESEL GENERATORS 20KVA

S. Component Required Specifications
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		,
No	Name	
	ENGINE:	
	COOLING	
	SYSTEM	Air cooled, Water/Coolant cooled
	REQD.	, and the second
		The Water/Coolant cooled system of the engine should be equipped with in
	WATER	built expansion tank so that frequent topping up of water/daily check of water
	LEVEL	level is not needed. Only a top up at 250 hours should suffice.
	MAINTENANC	Engine should have high quality and finish to make it a zero leakage system.
	E	
	E	Similarly the water system should have seals etc. to ensure no water leakage
		from the water pump.
	OUTPUT	The ENGINE continuous duty rated should be capable of developing sufficient
		output HP under site temperature conditions of 45 degree C to ensure full
		output from 20 kVA alternator.
	MINIMUM HP	Not less than 28 B.H.P continuous rated.
	SPEED	1500/3000 rpm
	FUEL PUMP	The pump should be of MONOBLOCK design of MICO or equivalent make to
		ensure better governing and easy repair in the field.
	GOVERNOR	Mechanical / electronic
	NO. OF	W 12 12 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	CYLINDERS	Multi cylinder, in accordance with is 10002-1981 with latest amendments.
	RECOMMOND	KIRLOSKAR/CUMMINS/MAHINDRA/GREAVES/EICHER/ESCORT /
	ED MAKES OF	ASHOK LAYLAND/ OR EQUIVALENT.
1.	ENGINE	ABHOR ENTERNO OR EQUIVALENT.
	FLYWHEEL	Of suitable diameter and weight (indicate the diameter and the weight).
	OVERLOAD	Engine should be capable of providing 10% overload for 1 hour for every 11
	CAPACITY	hour continuous running at full load
	ENGINE	Naturally Aspirated / Turbojet
	ASPIRATION	
	STANDARD	
	THAT THE	IS/BS (IS 10000/BS:5514/BS:649).
	ENGINE	15/15/15 (15/1000/155.55/1/155.07).
	SHOULD	
	MEET	
	RADIATOR	Heavy duty with fan (provide technical details).
	CHENCED	Residential type with exhaust piping with vibration isolators (provide technical
	SILENCER	details).
	STARTING	Equipment like electric motor, battery, charging alternator etc. for electric start.
	, 3	Fuel injection equipment, air cleaner, voltage regulator, anti vibration mounting
		pads, speed controlling governor, suitable coupling system to the alternator,
		tachometer, lubricating oil temperature and pressure gauge, rpm indicator and
	ACCESSORIES	hour meter to indicate number of hrs. of operation, auto trip on low oil pressure,
		over speed alarm with trip, thermal insulation for exhaust line with glass wool,
		aluminium sheet, chicken mesh, diesel line of suitable diameter.
	PROTECTION	Against low lubricating oil pressure, high water temperature shall be provided
		for engine with alarm and fuel shut off.
		The enclosure supplied should be fan less ensuring not more than 5-7 degree C
		temperature rise with natural air circulation. The noise level should not be
2.	ACOUSTIC	more than 75 dBA at 1 meter distance. Enclosure should be duly type approved
2.	ENCLOSURE	by CPCB authorized lab. The enclosure must be fitted with sheet steel of
		1.2/1.6 mm thickness, seven tank pretreated and powder coated with pure
		polyester powder to enable outdoor installation.
		Fuel tank with capacity of 12 hours continuous running at full load with
3.	FUEL TANK	necessary piping, fuel gauge, drain valve, inlet and outlet connectors complete
		in all respect.
	ENVIRONMEN	Shall meet requirement of rules 1986 as laid down by Ministry of Invironment
4.	TAL	& Forest read with GSR No. 371 (E) dated: 17.05.2002, GSR 520 (E) dated:
'.	CONDITIONS	01.07.2003 and GSR 448 (E) dated: 12.07.2004 in respect to emission norms
	COMBINIONS	01.07.2005 and OSE 110 (2) dated. 12.07.2004 in respect to emission norms

5.	PROTECTION FRAME RECOMMOND ED MAKES OF ALTERNATOR	for the engine and in respect of noise level for the DG sets. Self excited and self regulated alternator should be of brushless type with VG-I grade of voltage regulation giving an output of 20 KVA, single phase 230/240 Volts, 50 Hz, 0.8 (lag) power factor, 2 wire close coupled to the Engine. Class of insulation should be Class "H". Alternator should meet IS 13364 (part-I):1992/2003. Alternator should be capable of 10% overload for one hour and 50% overload for 15 seconds in 12 hours. Permissible voltage variation - +/-1.5% of rated voltage. Screen protected drip proof with IP 21 degree of protection as per IS: 4691/85. Engine and alternator shall be coupled and mounted on sturdy, fabricated, welded construction base frame. KIRLOSKAR ELECTRIC/CROMPTON/LEROY SOMER/ STAMFORD/Elgi/CGL/KEC or equivalent.
6.	AUTO MAINS FAILURE (AMF) CONTROL PANEL	The AMF control panel shall have the following instruments and accessories: (a) Microprocessor based genset controller with composite meter for digital display Of; i) Output voltage/AC Mains voltage. ii) Output Current. iii) Power Factor iv) Frequency. v) kWh vi) Three attempts engine start/engine cranking relay. vii) On-delay timer for load change over. viii) On-delay timer for engine shut off. (b) Mode selector switch for setting the panel on any one position such as OFF/auto/manual/test. c) Engine ON-OFF switch (Push button type) (d) MCCB of suitable rating shall be provided. (e) Rectangular aluminum bus bars (one number for each phase, neutral and earthing terminal) of adequate ratings duly colour coded with heat shrinkable PVC sleeves. (f) Two contactors of suitable rating (one for DG set & one for AC mains)with over load relay. (g) Under-voltage relay for mains. (h) Battery charger complete with voltage regulator, float or booster selector switch, ON-OFF switch, voltmeter and ammeter for charging the battery from mains. This will be in addition to the battery charging alternator fitted on the engine. (i) Instrument & Control Fuses. (j) Five number indicating lamps to indicate 'mains ON', 'load on mains', 'set running', 'load on set' and 'battery charger on'. (K) Audio visual alarm for Low lubricating oil pressure', 'High cylinder head temperature', 'Start Failure' and 'DG over load'. (l) Any other switch, instrument, relay or contactor etc. essential for smooth and trouble free functioning of DG set with AMF panel is to be specified by the tenderers in their offer with complete detail of the item. The panel should be within the D G set acoustic enclosure. The system should have an inbuilt By PASS Change Over switch to ensure that in case of AMF / D G Set failure the mains can get directly connected to the load. Make of Contactors acceptable - ABB/Siemens/Schneider/LG (LS) / L&T Make of Microprocessor - Procom / Control & Switchgear / Sun Automation/ Minilec and equivalent.
7.	BATTERY	Battery of very low maintenance - 85 AH or higher lead acid type

		Make - Amron/ Standard Furukawa/ Exide / Amco / Prestolite/Panasonic.
8.	SIZE AND WEIGHT	Should be minimum (provide details).
9.	INSTALLATIO N DETAILS	 4 Nos. of GI plate earthing. RCC/PCC Foundation of size as per DG set and having a height above ground of at least 9 inches. 4x35 Sq mm armoured aluminium cable (quote as rate per meter) Cable laying - wall supported/open a(quote as rate per meter) Cable laying - under ground (quote as rate per meter) End termination of Cable - 4 terminations(quote as lumpsum) Exhaust piping with aluminimum cladding (where needed) (quote as rate per meter) Testing of the DG set at the site for 1 hour and handover
	ANNUAL MAINTENANC E CONTRACT	
10	Scope	After expiry of five years comprehensive warranty (including preventive maintenance) covering all parts except Diesel. AMC shall be awarded to the vendor on comprehensive maintenance basis (One year or 1000 Hours running whichever is earlier), which includes preventive maintenance at every three months or 250 hours running whichever earlier, breakdown maintenance and any other required maintenance jobs as per the Terms and Conditions and rates specified in the AMC agreement. Should cover cost of all scheduled and unscheduled maintenance for 1000 hours running per annum including labour charges, servicing and replacement of all types of spares complete as required.
	Probable Items to be covered in AMC, this is not an exhaustive list of all the items but indicative only	Mobile Oil, Filters - All types, Belts, Rubber Parts, Gaskets, AVR's, Contactors & their coils, MCB's, Meters, Coolant, Locks, Hinges, Exhaust Bellows, Control Relays, controller.

(ANNEXURE-VI)

TECHNICAL SPECIFICATIONS FOR DIESEL GENERATORS 30KVA

S. No	Component Name	Required Specifications	
	ENGINE:		
	COOLING		
	SYSTEM	Air cooled, Water/Coolant cooled	
REQD.			
		The Water/Coolant cooled system of the engine should be equipped with in	
1.	WATER	built expansion tank so that frequent topping up of water/daily check of water	
	LEVEL	level is not needed. Only a top up at 250 hours should suffice.	
	MAINTENANC	Engine should have high quality and finish to make it a zero leakage system.	
	E	Similarly the water system should have seals etc. to ensure no water leakage	
		from the water pump.	
	OUTPUT	The ENGINE continuous duty rated should be capable of developing sufficient	

	output HP under site temperature conditions of 45 degree C to ensure full output from 30 kVA alternator.	
	MINIMUM HP	Not less than 42 B.H.P continuous rated.
	SPEED	1500/3000 rpm
	FUEL PUMP	The pump should be of MONOBLOCK design of MICO or equivalent make to ensure better governing and easy repair in the field.
GOVERNOR NO. OF CYLINDERS		Mechanical / electronic
		Multi cylinder, in accordance with is 10002-1981 with latest amendments.
	RECOMMOND ED MAKES OF ENGINE	KIRLOSKAR/CUMMINS/MAHINDRA/GREAVES/EICHER/ESCORT / ASHOK LAYLAND/ OR EQUIVALENT.
		Of suitable diameter and weight (indicate the diameter and the weight).
	OVERLOAD	Engine should be capable of providing 10% overload for 1 hour for every 11
	CAPACITY	hour continuous running at full load
	ENGINE ASPIRATION	Naturally Aspirated / Turbojet
	STANDARD	
	THAT THE	IS/BS (IS 10000/BS:5514/BS:649).
	ENGINE SHOULD	
MEET PADIATOR Heavy duty with for (provide technical details)		Heavy duty with fan (provide technical details)
RADIATOR Heavy duty with fan (provide technical details). Residential type with exhaust piping with vibration iso		Residential type with exhaust piping with vibration isolators (provide technical
	SILENCER	details).
		Equipment like electric motor, battery, charging alternator etc. for electric start.
	ACCESSORIES	Fuel injection equipment, air cleaner, voltage regulator, anti vibration mounting pads, speed controlling governor, suitable coupling system to the alternator, tachometer, lubricating oil temperature and pressure gauge, rpm indicator and hour meter to indicate number of hrs. of operation, auto trip on low oil pressure, over speed alarm with trip, thermal insulation for exhaust line with glass wool, aluminium sheet, chicken mesh, diesel line of suitable diameter.
	PROTECTION	Against low lubricating oil pressure, high water temperature shall be provided for engine with alarm and fuel shut off.
2.	ACOUSTIC ENCLOSURE	The enclosure supplied should be fan less ensuring not more than 5-7 degree C temperature rise with natural air circulation. The noise level should not be more than 75 dBA at 1 meter distance. Enclosure should be duly type approved by CPCB authorized lab. The enclosure must be fitted with sheet steel of 1.2/1.6 mm thickness, seven tank pretreated and powder coated with pure polyester powder to enable outdoor installation.
3.	FUEL TANK	Fuel tank with capacity of 12 hours continuous running at full load with necessary piping, fuel gauge, drain valve, inlet and outlet connectors complete in all respect.
4.	ENVIRONMEN TAL	Shall meet requirement of rules1986 as laid down by Ministry of Invironment & Forest read with GSR No. 371 (E) dated: 17.05.2002, GSR 520 (E) dated: 01.07.2003 and GSR 448 (E) dated: 12.07.2004 in respect to emission norms
	CONDITIONS	for the engine and in respect of noise level for the DG sets.
5.	ALTERNATOR	Self excited and self regulated alternator should be of brushless type with VG-I grade of voltage regulation giving an output of 20 KVA, single phase 230/240 Volts, 50 Hz, 0.8 (lag) power factor, 2 wire close coupled to the Engine. Class of insulation should be Class "H". Alternator should meet IS 13364 (part-I):1992/2003. Alternator should be capable of 10% overload for one hour and 50% overload for 15 seconds in 12 hours. Permissible voltage variation - +/-1.5% of rated voltage.
	PROTECTION	Screen protected drip proof with IP 21 degree of protection as per IS: 4691/85.
	FRAME	Engine and alternator shall be coupled and mounted on sturdy, fabricated, welded construction base frame.
	RECOMMOND	KIRLOSKAR ELECTRIC/CROMPTON/LEROY SOMER/

	ED MAKES OF	STAMFORD/Elgi/CGL/KEC or equivalent.	
6.	AUTO MAINS FAILURE (AMF) CONTROL PANEL	The AMF control panel shall have the following instruments and accessories: (a) Microprocessor based genset controller with composite meter for digital display Of: i) Output voltage/AC Mains voltage. ii) Output Current. iii) Power Factor iv) Frequency. v) kWh vi) Three attempts engine start/engine cranking relay. vii) On-delay timer for load change over. viii) On-delay timer for engine shut off. (b) Mode selector switch for setting the panel on any one position such as OFF/auto/manual/test. (c) Engine ON-OFF switch (Push button type) (d) MCCB of suitable rating shall be provided. (e) Rectangular aluminum bus bars (one number for each phase, neutral and earthing terminal) of adequate ratings duly colour coded with heat shrinkable PVC sleeves. (f) Two contactors of suitable rating (one for DG set & one for AC mains) with over load relay. (g) Under-voltage relay for mains. (h) Battery charger complete with voltage regulator, float or booster selector switch, ON-OFF switch, voltmeter and ammeter for charging the battery from mains. This will be in addition to the battery charging alternator fitted on the engine. (i) Instrument & Control Fuses. (j) Five number indicating lamps to indicate 'mains ON', 'load on mains', 'set running', 'load on set' and 'battery charger on'. (K) Audio visual alarm for Low lubricating oil pressure', 'High cylinder head temperature', 'Start Failure' and 'DG over load'. (l) Any other switch, instrument, relay or contactor etc. essential for smooth and trouble free functioning of DG set with AMF panel is to be specified by the tenderers in their offer with complete detail of the item. The panel should be within the D G set acoustic enclosure. The apnel should be within the D G set acoustic enclosure. The system should have an inbuilt By PASS Change Over switch to ensure that in case of AMF / D G Set failure the mains can get directly connected to the load. Make of Contactors acceptable - ABB/Siemens/Schneider/LG (LS) / L&T Make of Microprocessor - Procom / Control &	
7.	BATTERY	Minilec and equivalent. Battery of very low maintenance - 85 AH or higher lead acid type Make - Amron/ Standard Furukawa/ Exide / Amco / Prestolite/Panasonic.	
8.	SIZE AND WEIGHT	Should be minimum (provide details).	
9.	INSTALLATIO N DETAILS	 4 Nos. of GI plate earthing. RCC/PCC Foundation of size as per DG set and having a height above ground of at least 9 inches. 4x35 Sq mm armoured aluminium cable (quote as rate per meter) Cable laying - wall supported/open a(quote as rate per meter) Cable laying - under ground (quote as rate per meter) End termination of Cable - 4 terminations(quote as lumpsum) Exhaust piping with aluminimum cladding (where needed) (quote as 	

		a mata man maatan)	
		• rate per meter)	
		 Testing of the DG set at the site for 1 hour and handover 	
	ANNUAL		
	MAINTENANC		
	E CONTRACT		
10	Scope	After expiry of five years comprehensive warranty (including preventive maintenance) covering all parts except Diesel. AMC shall be awarded to the vendor on comprehensive maintenance basis (One year or 1000 Hours running whichever is earlier), which includes preventive maintenance at every three months or 250 hours running whichever earlier, breakdown maintenance and any other required maintenance jobs as per the Terms and Conditions and rates specified in the AMC agreement. Should cover cost of all scheduled and unscheduled maintenance for 1000 hours running per annum including labour charges, servicing and replacement of all types of spares complete as required.	
	Probable Items		
to be covered in AMC, this is not an Mobile Oil, Filters - All types, Belts, Rubber Parts, Gaskets & their coils, MCB's, Meters, Coolant, Locks, Hinges, Exhat Control Belows, control long.		Mobile Oil Filters All types Polts Dubber Dorts Cookets AVD's Contactors	
		▼ ▲ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
		· · · · · · · · · · · · · · · · · · ·	
	exhaustive list of	Control Relays, controller.	
	all the items but		
	indicative only		

GENERAL REQUIREMENT & DETAILS TO BE SUBMITTED FOR ALL QUOTED DIESEL GENSET

Bidders shall furnish the given below details for each quoted capacity separately along with their technical bid.

- 1. Bidders shall furnish valid BIS license for all engines models up to 19 KW rating along with their offer and must Indicate that the DG sets shall also meet all other statutory requirements as notified by Govt. from time to time.
- 2. Bidders shall furnish with their offers, copy of Type approval certificate from an Authorized agency in prescribed format for compliance to emission norms and noise level norms for each model of DG sets offered, giving details of model No. of the engine model(s) and alternator model(s) for which such approval is applicable. In case those bidders have just applied for above certificate, should submit the receipt of such submission along with the offer, however should submit all above asked certificate before opening of financial bid. In case bidder fail to submit the above certificate before opening of financial bid, the bid shall be summarily rejected even if bidder technically qualify for the quoted product.
- 3. Bidders shall confirm that they are in possession of complete & satisfactory TTC for engines, alternators complete with enclosure to be used by them for each rating of DG sets quoted, clearly identifying make, model and ratings of the DG sets tested. The TTC shall be from any Govt. Lab. All the rating falling between the ratings tested for Type test and Endurance Test shall be deemed to have been tested for this purpose. However, all the engines models/ratings will need other relevant certifications as per norms.
- **4.** Guaranteed Technical Particulars (GTP) of DG sets to be furnished by the bidders for each quoted capacity separately.
- 5. Name of the manufacturers with model number of engine, alternator, oil pump, controller and all other accessories (BOM) fitted in the generator.

- **6.** Rated power output and duty cycle of each component.
- 7. Maximum temperatures rise above ambient (for engine).
- **8.** Class of insulation.
- **9.** Efficiency of the alternator.
- **10.** Speed of revolution (RPM) at no load and rated voltage.
- 11. Type of excitation and excitation voltage.
- 12. Ambient conditions for which the DG set is suitable.
- **13.** Type of enclosure.
- 14. Type of loads for which the DG set is suitable
- 15. Maximum load that can be switched ON or OFF and voltage drop/rise permitted.
- 16. Type of cooling
- 17. Fuel tank capacity (it shall be suitable for 12 hours minimum at rated load and at continuous operation).
- 18. Total fuel consumption in liters / KWh
- 19. Rated engine power and the ambient conditions at which it is defined
- 20. Dry weight of the DG set with canopy.
- 21. Vibration level maximum.
- 22. Deviation in the generator specification from IS specification, if any.
- 23. Scope of supply shall include testing, supply, transport, safe delivery at user's site across the country, installation, erection and commissioning of the complete DG sets.

Annexure-F

Installation Certificate

1	Vendor Name	
2	Project No.	
3	Purchase order No. & date	
4	Invoice No. with date	
5	Equipment Name & Description	
6	Equipment serial nos.	
7	Date of delivery	
8	Date of intimation of call for installation / site readiness information (in case of SNR)	
9	Installation Date	
10	Certificate	Equipment (as per ordered configuration) has been installed successfully

Name of user / NIC Project Coordinator / NICSI Project in charge:	
	•
Designation:	-
Signature:	
(with official seal)	
Date:	

Annexure-G

Site Not Ready Certificate

1	Vendor Name	
2	Project No.	
3	Purchase order No. & date	
4	Equipment Name	
5	Date of delivery	
6	Date of Ist Visit for installation	
7	Site not ready reason	
8	Tentative date of site being ready for installation	
9	Contact detail of vendor for getting equipment installed, if site get ready.	
10	Certificate	There is no delay on the part of vendor in getting the equipment installed

Name of user / NIC Project Coordinator / NICSI Project in charge:	
Designation:	
Signature:(with official seal)	
Date:	

Annexure-H

Annexure-Manufacturer Authorization Format

Ref:

Date:

To,
Deputy Manager
Tender Division,
National Informatics Centre Services Inc.,
Hall No. 2 & 3, 6th Floor, NBCC Tower
15, Bhikaiji Cama Place, New delhi-66

Sub: Manufacturer Authorization for Tender No. NICSI/GENSET/2009/43

Sir,

We, <OEM/ Manufacturer name> manufacturer, having our registered office at

We authorize them solely to quote diesel gensets in the above mentioned tender havening our diesel engine / Alternator. Our full support is extended to him in all respects for supply, warranty and maintenance of our products. We also ensure to provide the service support for the supplied equipments for a period of 7 years from date of installation of the equipments. We also undertake that in case of default in execution of this tender by the **<Bidder Name>**,

the **<OEM/Company Name>** will take all necessary steps for successful execution of empanelment against this tender.

Thanking You

For <OEM/ Manufacturer name>

<(Authorized Signatory)>

Name

Designation: Country Head/Legal Head

List of enclosure against eligibility criteria.

- 1. A letter in the name of MD NICSI clearly indicating which capacity of diesel genset has been quoted by the bidders. Bidders should also mention engine & alternator make for each quoted capacity of diesel genset in the letter.
- 2. In case the bidder is authorised partner of engine OEM then submit authorisation letter as per format given in tender from engine manufacturer.
- 3. Profit & loss account (From audited balance sheet) of bidder clearly indicating turn over from sales of diesel genset.
- 4. Profit & loss account (From audited balance sheet) of Engine OEM clearly indicating the turnover from sales of diesel engines.
- 5. Profit & loss account (From audited balance sheet) of Alternator OEM clearly indicating the turnover from sales of alternators.
- 6. Copy of valid ISO 9001:2000 certification of bidder.
- 7. List of direct & authorised service provider for quoted diesel genset as per eligibility clause 4.4. Bidders must clearly mention the type of agreement with authorised service provider.
- 8. Copy of valid VAT/ST/CST number.
- 9. Copy of valid service Tax number
- 10. Copy of bidder PAN number. PAN number should be in company name, not in individual name.
- 11. First few pages (Attested) of Articles of Association (in case of registered firm), Byelaws and certificates for registration (in case of registered co-operative Societies), partnership deed (in case of partnership firm).

- 12. Signed copy of tender document and corrigendum if any or self declaration letter that he/she has read and understood all tender terms & conditions and all tender conditions are acceptable to him/her, as token of acceptance of all tender terms & conditions.
- 13. Copy of minimum three purchase orders / invoices clearly mentioning the sale of diesel genset of value Rs. 50 lacks or more in each PO/invoice.
- 14. Bidder profile as per annexure-B
- 15. Compliance sheet as per annexure-C.
- 16. Technical compliance sheet as per annexure-D.