

Tender for

**Supply, Installation, Testing & Commissioning (SITC) of
250 KVA PNG (Piped Natural Gas) Generator Set with
AMF Panel**

AT

NIBSCOM, Noida

National Institute Of Banking Studies and Corporate Management

A-30, Sector 62, Institutional Area

NOIDA – 201 307, U.P.

Contents

NOTICE INVITING TENDER	6
I. OVERVIEW OF SCOPE OF WORK	6
II. BUY-BACK ARRANGEMENT	7
III. ELIGIBILITY CRITERIA	7
INSTRUCTIONS TO BIDDERS	7
IV. TWO-BID SYSTEM	7
V. EARNEST MONEY DEPOSIT (EMD) AND TENDER FEE	8
VI. VALIDITY OF BIDS	8
VII. INSTRUCTIONS TO THE BIDDERS	8
VIII. FURNISHING INDIVIDUAL DETAILS IN PRESCRIBED PERFORMA	10
IX. DETAILED SCOPE OF WORK	11
X. GENERAL INSTRUCTIONS	12
XI. INSURANCE REQUIREMENTS AND CONTRACTOR'S LIABILITY	14
XII. STATUTORY COMPLIANCE AND CONTRACTOR'S LEGAL OBLIGATIONS	15
XIII. CONDITIONS RELATED TO EXECUTION OF WORK, MATERIALS & EQUIPMENT	16
XIV. CERTIFICATE OF VIRTUAL COMPLETION OF WORKS	18
XV. DEFECTS LIABILITY PERIOD / WARRANTY/RETENTION MONEY DEPOSIT (RMD)/ SECURITY DEPOSIT (SD)	18
XVI. COMPLETION PERIOD	19
XVII. DELAY AND EXTENSION OF TIME	19
XVIII. BUY-BACK ARRANGEMENT	20
XIX. PAYMENT OF CONTRACTOR'S BILL	20
XX. DISPUTES AND ARBITRATION	21
SPECIFICATIONS FOR PNG GENERATOR	23
1. GENERAL	23
2. SUPERVISION	23
3. TESTING AND COMMISSIONING	23
4. WORKMANSHIP	24
5. MATERIALS AND MAKES	24
6. TECHNICAL SPECIFICATIONS FOR AMF PANELS / CONTROL PANELS	24
7. TECHNICAL SPECIFICATION FOR PNG GENERATOR SET & APPLICABLE STANDARDS	24
8. PNG ENGINE	25
9. DE-RATING OF THE SET	26
10. COMMON BED PLATE	26

11. EXHAUST SYSTEM.....	26
12. AIR SYSTEM	27
13. COOLING SYSTEM	27
14. CONNECTION AND GENSET INTEGRATION	27
16. ALTERNATOR	27
17. TYPE OF BEARING AND LUBRICATION.....	28
18. PROTECTION	28
19. PERFORMANCE.....	28
20. TERMINAL BOX	28
21. EARTH TERMINALS	28
22. MANUAL CONTROL PANEL.....	28
23. STARTING BATTERY	29
24. PLATFORM FOR MOUNTING OF PNG GENERATOR SET	29
25. ACOUSTIC ENCLOSURE (SOUND PROOF CANOPY)	29
26. PNG GENERATOR SET TESTING	30
27. TESTING SHALL BE CARRIED OUT AS UNDER	30
28. SAFETY MEASURES:.....	31
29. STATUTORY CLEARANCES:	31
30. GUARANTEE.....	31
31. TENDER DRAWINGS, DRAWINGS FOR APPROVAL & COMPLETION DRAWINGS	31
32. DRAWINGS/DOCUMENTS TO BE FURNISHED ON COMPLETION OF INSTALLATION	32
33. EARTHING.....	32
34. GI STRIPS OF SUITABLE SIZE SHALL BE USED FOR EARTHING AS DETAILED HEREUNDER: 32	
35. MAKE OF MATERIALS	33
36. SAFETY CODE	34
37. FIRE SAFETY	34
ANNEXURE-I.....	36
ANNEXURE-II	37
ANNEXURE-III	39
BANK ACCOUNT DETAILS	41
CHECK LIST FOR SUBMISSION OF BID	42

VOLUME I

Conditions Applicable to Invitation of Tender

For Supply, Installation, Testing & Commissioning (SITC) of
250 KVA PNG (Piped Natural Gas) Generator Set with AMF Panel
for its premises at Sector 62, Noida.

National Institute Of Banking Studies and Corporate Management

A-30, Sector 62, Institutional Area

NOIDA – 201307, U.P.

NOTICE INVITING TENDER

NIBSCOM, Noida, invites tender for 01 No. of 250 KVA Supply, Installation, Testing & Commissioning (SITC) of 250 KVA PNG (Piped Natural Gas) Generator Set with AMF Panel for its premises at Sector 62, Noida.

Interested parties are requested to submit the Bids in sealed envelope for the aforesaid work as per detailed specifications and other requirements as mentioned more specifically elsewhere in this tender document.

Tender Ref. No.	NIBSCOM/2025-26/GEN-02
Floating Date	13-03-2026
Bids to be submitted to	Senior Manager (Accounts), National Institute of Banking Studies & Corporate Management, A-30, Sector 62, Institutional Area, Noida - UP-201307.
Due Date for Submission	04-04-2026, up to 15:00 hrs
Opening of Technical Bids	04-04-2026, at 15:30 hrs

I. OVERVIEW OF SCOPE OF WORK

Supply, installation, testing, and commissioning of one number 250 KVA PNG (Piped Natural Gas) Generator Set complete with AMF panel, civil and electrical interfacing, exhaust system, anti-vibration pads, PCC cabling, earthing, foundations, load testing, and all required accessories at NIBSCOM premises.

The work shall include:

- **Design & Construct Foundation** for the generator set, including vibration isolation systems.
- **Supply & Deliver** PNG Generator Set (with acoustic enclosure, AMF panels, safety items) including transportation, loading/unloading, and handling up to installation site.
- **Install, Test & Commission** generator set as per specifications, obtain operating approval from Electrical Inspectorate, and handover to NIBSCOM.
- **Provide Warranty Services** including all spares during the warranty period.
- **Execute** all related engineering, equipment, labour, permits, and ancillary works needed for completion.
- Obtain all required **statutory permissions and licences**.
- Carry out the following ancillary works without extra claim:
 - Making good any damages post-installation.
 - Necessary minor civil work.
 - All supports for exhaust, electrical cabling, and earthing as per BIS.
 - Complete earthing and control wiring works.

II. BUY-BACK ARRANGEMENT

- Quote buy-back value for the old diesel generator 250 KVA (complete with engine, alternator, radiator, accessories).
- Arrange dismantling and removal without damaging foundation or electrical systems.
- NIBSCOM reserves the right to include/exclude buy-back value from evaluation.

III. ELIGIBILITY CRITERIA

The bidder must:

- Be an OEM or authorised dealer/service partner for the offered PNG generator make.
- Have at least 5 years' experience in SITC of industrial gas generator sets of capacity \geq 200 KVA.
- Have successfully completed S/I/T/C of GENERATOR sets for government buildings, Banks/FIs premises/Institutes, reputed private organisations etc. in last 04 Year.
- Have valid PAN, GST registration, and all relevant statutory certifications.
- Not be blacklisted by any Govt./semi-Govt./public sector/banking organisation.
- Purchase orders and Completion certificates issued by the client should be enclosed and need to be produced before NIBSCOM, whenever called for verification purposes.
- Have average annual turnover of at least Rs. 4 Cr. in last three years.
- Should have submitted audited balance sheets / P&L account and Income Tax Return certificates for the last 03 financial years.

Have completed:

- Three similar works whose value is not less than Rs.15 Lakh each of the estimated cost or
- Two similar works whose individual value is not less than Rs.20 Lakh each or
- One similar work whose value is not less than Rs.40 Lakh.

INSTRUCTIONS TO BIDDERS

IV. TWO-BID SYSTEM

Envelope 1 – Technical Bid:

- i). Duly filled technical bid form with supporting documents for eligibility.
- ii). Bid Securing Declaration (BSD)
- iii). Tender fee deposit proof.
- iv). No price details to be included in Technical Bid.

Envelope 2 – Financial Bid:

- i). Duly filled financial bid format with all-inclusive prices.
- ii). Both envelopes must be sealed, superscribed, and placed in a single outer cover clearly marked:

“Tender – For Supply, Installation, Testing & Commissioning (SITC) of 250 KVA PNG (Piped Natural Gas) Generator Set with AMF Panel”

Addressed to: Sr. Manager (Accounts), NIBSCOM, A-30, Sector 62, Noida – 201 307

V. EARNEST MONEY DEPOSIT (EMD) AND TENDER FEE

- i). **EMD:** In accordance with the Manual for Procurement of Works (Ed. 2025), EMD is not required to be submitted. In lieu of EMD, all bidders shall submit a Bid Securing Declaration (BSD) in the prescribed format (Annexure-IV), duly signed by the authorized signatory of the bidder and submitted along with the bid.
- ii). **Tender Fee:** ₹ 1,000/- via DD (non-refundable), inclusive of GST.
- iii). Tender without BSD and Tender Fee will be summarily rejected.

VI. VALIDITY OF BIDS

Bids shall remain valid for 90 days from the date of opening of Technical Bids.

VII. INSTRUCTIONS TO THE BIDDERS

1. If the last date of receipt or opening of the tenders happens to be a holiday for NIBSCOM, then the receipt and opening of the tenders shall be shifted to next working day without change of time and venue.
2. The prospective bidders may send their queries for clarification on any issues pertaining to the tender at nibscm@nibscm.in or call.
3. The bidder should quote the rates in figures as well as in the words. The rate for each item should be worked out and the requisite total amount shall be calculated accordingly. Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates, figures and words. However, if a discrepancy is found in the rates in words and figures, then the rates quoted in words shall be taken as correct.
4. The tenderers must include in their tender prices quoted for all duties royalties, GST, cess, works contract tax or any other taxes or local charges, transportation charges, installation charges, labour charges etc. if applicable. No extra claim on this account will in any case be entertained.
5. The tender document must be filled in English. If any of the documents are missing or un-signed in price bid, the tender shall be considered invalid. In case of technical bid, the details of incomplete or missing documents will be intimated to the tenderer and the tenderer has to submit all those documents within one week after communicating the same, otherwise the tender will be rejected.

6. NIBSCOM reserves the right to accept or reject any /all tender/s in part or whole of any firm / firms without assigning any reasons for doing so.
7. Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the tenderer who resort to canvassing will be liable to rejection.
8. Before quoting, the tenderer shall inspect the site, to fully acquaint himself about the condition in regard to accessibility of the site, working condition of site, locality including installations of tools and plants (T&P) and local authority regulations / restrictions if any, conditions affecting accommodations and movement of personnel etc. required for the satisfactory execution of the work contract. No claim whatsoever on such account shall be entertained by the NIBSCOM in any circumstances.
9. NIBSCOM does not bind itself to accept the lowest or any tender at all. NIBSCOM also reserves the right to negotiate or partly accept any tender or all tenders received without assigning any reasons thereof.
10. Any discrepancies, omissions, ambiguities in the tender documents, if any, or any doubt as to their meaning should be reported in writing to Senior Manager (Accounts), NIBSCOM who will review the questions and if information sought is not clearly indicated or specified, NIBSCOM will issue clarifications to all the tenderers which will become part of the Tender Document. NIBSCOM will not be responsible, if the discrepancies, omissions, ambiguities in the tender documents or any doubts as to their meaning are not brought to the notice of NIBSCOM before three working days prior to the last date of submission of the tender.
11. NIBSCOM also reserves the right to divide and distribute the work to more than one tenderer at its sole discretion.
12. The successful bidder shall execute an agreement on non-judicial stamp paper with NIBSCOM in accordance with the standard format enclosed (Articles of Agreement) within 07 days from date of issue of work order failing which the appropriate actions against the bidder as stipulated in BSD shall be enforced.
13. The Tender is strictly on Item Rate basis.
14. Bidders are advised to visit the site at their cost, conduct survey of existing conditions so as to familiarize themselves with the site conditions, nature of works etc. and get all clarifications as may be necessary from NIBSCOM before quoting the rates.
15. Rates should include for removal of debris out of premises to the safe Municipal limits, removing stains, cleaning the site thoroughly and unless the same is done to the satisfaction of NIBSCOM, the bill will not be accepted.
16. Quantities mentioned in the schedule of quantities may vary to any extent or may be deleted without assigning any reasons and as such, the rates quoted should be firm, workable, reasonable and should include all kinds of Taxes, Duties, Work Contract Tax, Octroi, GST etc. as applicable, overheads etc. No separate charges for carriage or labour would be made. There is no question of extra payment above the quoted rate under any circumstance. In case of any variation in quantity or value, the same will not be made as a subject matter for dispute by the bidder.

17. The bidders should quote their rates strictly adhering to Terms and Conditions stipulated in the Tender Document. Unsolicited correspondence after opening of the Tender shall not be entertained.
18. No bidder will be allowed to withdraw his Tender during the validity period.
19. Rates should be filled in the Bidders Schedule of Quantity in the Price –Bid neatly and no correction shall be made. Corrections, if any should be duly authenticated by the signing authority. The rates quoted should be written legibly in words and figures. If on check, differences are observed between the rates given by the Contractor in words and figures or in the amount worked out by him, the following procedure shall be followed.
 - a) When there is a difference between the rates in figures and in words, the rates, which corresponds to the amounts worked out by the Contractor shall be taken as correct.
 - b) When the amount of an item is not worked out by the Contractor or it does not correspond with the rate written either in figures or in words, then the rate quoted by the Contractor in words shall be taken as correct.
 - c) When the rates quoted by the Contractor in figures and in words tallies, but the amount is not worked out correctly, the rate quoted by the Contractor shall be taken as correct and not the amount.
20. Notwithstanding anything stated above, NIBSCOM reserves the right to assess the bidder's capability and capacity to perform the contract, should the circumstances warrant such assessment in the overall interest of NIBSCOM.
21. The decision of NIBSCOM in awarding the work shall be final and cannot be subjected to arbitration.
22. NIBSCOM reserves the right to accept / negotiate / reject any Quotation either in whole or in part without assigning any reasons therefore whatsoever and without entering into any further correspondence and hence, NIBSCOM shall be under no obligation to accept the lowest or any other Quotations received in response to this Quotation. The decision of NIBSCOM in this regard shall be final and indisputable.
23. NIBSCOM also reserves the right of supersession of any of the conditions stipulated in the Quotation Document.

VIII. FURNISHING INDIVIDUAL DETAILS IN PRESCRIBED PERFORMA

1. The contractors are required to submit full details about their organization, experience, technical expertise, no. of personnel employed in their organization, space capacity, competence and adequate evidence of their financial standing, etc. in the enclosed form (Proforma-1, 2, 3 & 4) which will be kept confidential.
 - Proforma-1:** General Details about the contractor
 - Proforma-2:** Construction capability and previous experience
 - Proforma-3:** Technical personnel and special experience.
 - Proforma-4:** Details of GSTIN of the contractor.

2. If the space in the Performa is insufficient for furnishing full details, such information may be supplemented on separate sheets of paper stating therein the part of the Performa and serial number. Separate sheets shall be used for each part.
3. Any letter or document accompanying the Performa shall be submitted in duplicate.
4. Tenders containing false and/or inadequate information are liable for rejection.
5. While filling up the Performa with regard to the list of important projects completed or on hand, the applicants shall only include those works as mentioned in pre-qualification criteria.
6. Clarifications if any required may be obtained from Senior Manager (Accounts). NIBSCOM, A-30, Sector 62, Institutional Area, Noida – 201307.
7. While deciding upon the selection of contractors for participating in the Price bid, emphasis will be given on the ability and competence of applicants to do good quality works within the specified time schedule and in close co-ordination with other agencies, besides the rate structure of the items. Also, emphasis will be given to the applicants who have executed majority of the similar works.
8. Decision of the Institute in regard to selection of contractors for selecting them for price bidding will be final. The Institute is not bound to assign any reason therefor.
9. Each page of the tender document shall be signed. The application shall be signed by person/persons on behalf of the organization having necessary authorization/Power of Attorney to do so.

IX. DETAILED SCOPE OF WORK

The scope of above work shall include the following:

1. Designing of details of PNG Generator set foundation and its construction, placement of PNG Generator set with acoustic enclosure, Manual Control panel etc. along with all accessories/ components.
2. Supply and Delivery of PNG Generator set with Acoustic enclosure, AMF Panels associated cabling, earthing, safety items including packing, handling, transporting, clearing, loading/unloading etc. to NIBSCOM's site.
3. Erection, testing & commissioning of PNG Generator set as per technical specifications, obtaining operating approval from Electrical inspectorate and handing over the PNG Generator set to NIBSCOM for use.
4. Providing all-inclusive service including all spares, etc. during warranty period of new PNG Generator set.
5. All engineering, equipment, labour, and permits required for satisfactorily completion of PNG Generator set installation work as per Specification.
6. Any other ancillary work, related to but not mentioned above, required for satisfactory completion of the job.
7. Obtaining all statutory permissions/licenses from appropriate authorities.

8. Unless otherwise mentioned in the tender documents, the following work shall be done by the contractor and therefore, their cost shall be deemed to be included in their tendered cost, whether specifically indicated in the schedule of work or not:
 - a) Foundations for equipment including vibration isolation springs/pads.
 - b) Making good all damages caused to the structure during installation and restoring the same to their original finish.
 - c) Minor building work necessary for installation of equipment, foundation.
 - d) All supports for exhaust pipe line, (if included in scope of contract), cables, anti-vibration pads etc. as are necessary.
 - e) All electricity work and neutral earthing, body earthing, required for engine and alternator, main board/control panels and control wiring including loop earthing, if specified in schedule of work. The work shall be done confirming to relevant BIS.

X. GENERAL INSTRUCTIONS

1. Though mentioned above, the scope of the work is not limited strictly to the areas/units mentioned, but is required to be carried out at any other locations other than those mentioned above as directed by the NIBSCOM.
2. Supply of manpower with tools and tackles etc., along with supervision to carry out the miscellaneous jobs as directed by the NIBSCOM.
3. All the jobs given to the agency shall be taken up on priority basis without any delay by mobilizing all the resources immediately at site.
4. There may be other contractor working inside the campus simultaneously for carrying out other works. Cooperation and coordination between the contractors shall be maintained including permitting them to use the Scaffoldings.
5. All Sundry equipments/fittings, assemblies, accessories, hardware items, foundation bolts, supports, termination lugs for electrical connections, cable glands, cable trays, junction boxes and all other sundry items for proper assembly and installation of the various equipments and components of the work shall be deemed to have been included in the tender, irrespective of the fact that whether such items are specifically mentioned in tender document or not.
6. Quantities indicated in the BOQ are only tentative and shall be executed only at the sole discretion of NIBSCOM.
7. Quoted rates should be workable and reasonable and should include incidental and all overheads and profits. The contractor should furnish Rate Analysis for scrutiny of the rates by NIBSCOM, if required.
8. Rates should include all Taxes, Duties, Octroi, Levies, Transportation charges, installation charges, Wages as per Act, GST and all other charges etc. and should be firm for the entire Contract period. No escalation of rates will be allowed for the entire contract period on any account. Rates for all items of work are deemed to include costs for all operations involved in adhering to the specifications (including the IEE

Rules/Regulations of the local licensing Authority CEA of the Fire Insurance/Explosives Authorities, the I.S.S.) Unless there is a provision to the contrary in the schedule of quantities.

9. Materials used should conform to relevant BIS Codes. BIS and CPWD Specifications and Method of Measurements shall be followed as applicable. However, in the absence of the same and / or in case of any discrepancy, the decision of NIBSCOM shall be final.
10. Income Tax (TDS), GST TDS and other applicable taxes as per statutory provisions will be deducted from total payment due to the Contractors.
11. The Contractor shall indemnify the NIBSCOM against any losses as per format given at Annexure C.
12. Any act of indiscipline / misconduct / theft / pilferage on the part of any employee engaged by the Contractor resulting in any loss to NIBSCOM in kind or cash will be viewed seriously and NIBSCOM will have the right to claim damages or levy fine and / or terminate the Contract forthwith, if necessary.
13. In case of any default or failure on Contractor's part to comply with all/any one of the Terms / Conditions, NIBSCOM reserves to itself the right to take necessary steps to remedy the situation including, inter-alia, the deduction of appropriate amount/s from dues otherwise payable to Contractor and / or by taking recourse to appropriate recovery proceedings.
14. If any dispute arises on any matter concerning this Contract, the decision of NIBSCOM shall be final and binding.
15. The Contractor should not at any time do, cause or permit any nuisance on the site / do anything which shall cause unnecessary disturbances or inconvenience to the occupants/visitors at site or near the site of work.
16. The work should be carried out with least inconvenience to the residents. The workmen employed by the Contractor should abide by the Rules and Regulations maintained by NIBSCOM in the premises, especially in respect of working hours, entry of the workers to the premises, interpersonal relation with the occupants etc.
17. On site storage space will be provided to the Contractor subject to availability. However, the Contractor may erect temporary sheds for storage purposes at his cost with the permission of NIBSCOM. NIBSCOM will not be responsible for Contractor's materials. The Contractor may be required to vacate the storage space and sheds as per exigency without any extra cost to NIBSCOM. If any statutory charges are required to be paid for erection of sheds, the same should be borne by the Contractor.
18. The Contractor shall provide everything necessary for the proper execution of the works. NIBSCOM will not supply any Tools and Plants (T&P) Materials or any other equipment, materials, labour, etc. and no payment in this respect will be made by NIBSCOM. The Contractor shall supply, fix and maintain all the scaffoldings, jhulla, T&P etc. at his cost during the execution of any work and remove them as soon as the work is completed.

19. The Contractor shall not directly or indirectly transfer, assign or sublet the Contract or any part of it, without written permission of NIBSCOM.
20. No escalation shall be allowed on the rates of this contract.

XI. INSURANCE REQUIREMENTS AND CONTRACTOR'S LIABILITY

1. **Insurance:** The contractor, is required to keep the works duly insured in the joint names of NIBSCOM and the Contractor (NIBSCOM's name being first) until the completion of defect liability period of the works. From commencement to completion of the works, the Contractor shall take full responsibility for the care of the work and for taking precautions to prevent loss or damage to the works and to minimize the loss or damage to the greatest extent possible and shall be liable for any damage or loss that may happen to the works or any part thereof from any cause whatsoever, inherent defects and failures due to poor workmanship and causes such as fire, lightening, explosion, earthquake, storm, hurricane, short circuits, floods, inundation, subsidence, landslides, rock slides, riots (excluding civil war, rebellion, revolution and insurrection) and shall at his own cost repair and make good the same so that at all times the work shall be in good order and condition and in conformity in every respect with the requirements of the Contract. Explanation: For the purpose of this condition, the expression "from the commencement to completion of defect liability period of the works " shall mean the time commencing from the issue of the work order to the contractor and ending with successful completion of work. The following insurance policies are required to be taken by the contractor;
2. **Contractor all risk policy:** Without limiting the obligations and responsibilities under this condition, the Contractor shall insure and keep insured the works from commencement to completion, as aforesaid, for their full value provided under this Contract, increased by 25% against the risk of loss or damage from any cause whatsoever including the causes enumerated in the Clause (a) above. In the event of there being a variation in the nature and extent of the work, the Contractor shall from time to time increase or decrease the value of the insurance correspondingly. The entire premium shall be borne and paid by the Contractor. The said insurance shall also provide for the removal of debris of the lost or damaged works.
3. **Workmen Compensation Policy:** The Contractor shall at all times indemnify NIBSCOM against all losses, claims or damages or compensation under the provisions of the payment of Wages Act 1936, Minimum Wages Act 1948, Employees Liability Act 1938, Workmen's Compensation Act 1923, The Maternity Benefit Act 1961, Industrial Disputes Act 1947 and Contract Labour and Regulation and Abolition Act 1970, State Insurance Act 1948 or any modification thereof or any other law relating thereto and rules made there under from time to time or as a consequence of any accident or injury to any workman or other persons in or around the work whether in the Employment of the NIBSCOM, or Contractor or not and also against all costs,

charges and expenses of any suit, action or proceedings whatsoever out of such accident or injury or combination of any such claims.

4. **Third party liability policy** for a total of Rs. 5 lakhs.
5. Before commencing the work, the Contractor shall without limiting his obligations and responsibilities under this condition, insure against any loss of life or injury to any personnel in the employment of Contractor / Subcontractor / Nominated Sub-Contractor. For this purpose, insurance shall be taken by the Contractor/Sub-Contractor. Such insurance shall be taken to include both employees/workmen covered by the Workmen's Compensation Act 1923, as well those employees/workmen not covered by the said Act. Separate insurance policies may be taken for employees/workmen covered by Workmen's Compensation Act 1923, and employees workmen not covered by the said Act. All the premiums shall be paid by the Contractor.
6. The Contractor shall ensure that similar insurance policies are taken out by his sub-contractor or nominated contractor, if any, and shall be responsible for any claim or loss resulting from their failure to obtain adequate insurance protection in connection thereof. While taking the insurance policies, contractor should indicate clearly to the insurance companies that policies issued shall cover their sub-contractor and nominated subcontractors also.
7. No work shall be commenced by the Contractors unless and until he has obtained the insurance or insurance required to be obtained by him under or by the foregoing clauses and no work shall be carried out or continued by the Contractors unless and until each insurance is current and valid at that time.
8. In the event of any claim for insurance becoming due on account of any eventuality covered by the respective insurance policy/policies, the Contractor shall reinstate the installation, replace the materials or equipments or pay compensating to the affected personnel/Employees without waiting for settlement of the claim from insurance company.
9. The Contractor shall be fully responsible and shall compensate NIBSCOM with suitable Insurance cover in the event of any damage to men or material, injury / damage or death as the case may be, caused directly or indirectly due to the negligence of the Contractor or his agents and / or his employees or workmen. The decision of NIBSCOM in this regard shall be final and binding.

XII. STATUTORY COMPLIANCE AND CONTRACTOR'S LEGAL OBLIGATIONS

1. All the Standard Conditions of the Contract shall be binding on the parties as per Indian Contract Act and prevailing Rules.
2. The Contractor shall comply with all the applicable Acts, Rules, Regulations and Law (s) for entering into Construction / Maintenance Contract and NIBSCOM will not in any way be liable or responsible for any default / irregularities / penalties on the Contractor's part.

3. The Contractor shall comply with the provisions of Contract, Labour (Regulation & Abolition) Act, 1970, Minimum Wages Act, EPF and NP Act, 1952 and all other Labour Laws and other Statutory Regulations (both Central and State) that may be enforced from time to time by the appropriate authorities. NIBSCOM shall not be held responsible for any penalty or failure of any Labour Regulations. NIBSCOM shall have the power to inspect the Wage Register, PF Register and for physical verification of salary paid to the staff and PF deduction with reference to any records of the Contractor and to insist the Contractor to comply with Laws.
4. In case of any discrepancy in deduction of PF and payment of minimum wages by the contractor, NIBSCOM is compelled to deduct the amount and pay to PF authorities towards contract employees' a/c on behalf of the Contractor.
5. The Contractor should be responsible to fulfill all the obligations in connection with the workers employed by the Contractor for the purpose of the Contract and all the Statutory and other liabilities, if any, including minimum wages, leave salary, uniform, ex-gratia, gratuity, ESI, Provident Fund, Workmen Compensation, if any, etc. in connection therewith shall be on the Contractor's account and payable by the Contractor.
6. The Contractor should obtain necessary permission that may be required for the purpose of this Contract from such authorities as may be prescribed by Law from time to time. , The Contractor should obtain approvals, if any, necessary for the work from the statutory bodies on behalf of NIBSCOM. The Contractor shall assist NIBSCOM fully in respect of any liaison with LESA / Municipal or any other authority for necessary approval/permission with regard to the construction / maintenance works. The fees and other statutory charges, if any, will be reimbursed to the Contractor based on the original receipts produced to NIBSCOM.
7. The Contractor should have necessary Contract License and comply with the Labour Laws as applicable.

XIII. CONDITIONS RELATED TO EXECUTION OF WORK, MATERIALS & EQUIPMENT

1. As all the buildings are old, NIBSCOM may not be able to provide all DATA, Drawings & Documents related to the buildings. However relevant available information with us shall be shared with the contractor. All the necessary works related to the Job component like preparation of preliminary and as built drawings, liaisoning with the local authorities, govt. bodies for any type of NOC, clearance etc.; shall be under the scope of the party.
2. **Defect Liability Period:** The Defects Liability Period shall be for a period of one year and shall commence from the date of completion of work/project. Any defect that may appear within the Defects Liability Period, shall be rectified by the Contractors without any extra cost to NIBSCOM. In case of failure to do so within 10 days from such notice from the NIBSCOM may get such rectification works carried out through any other firm and expenditure incurred by the Institute shall be recovered from any money due to the Contractor at the cost and risk of the contractor. Only, after all the defects pointed out

during the Defects Liability Period have been rectified by the Contractor to the satisfaction of the Institute, thereafter, the Security Deposit will be refunded to the contractor.

3. Any error in description, quantity or rate in Schedule of Quantities or any omission there from shall not vitiate the Contract or release the Consultant from the execution of the whole or any part of the works.
4. Power should be used only for welding, cutting, drilling purposes and no major fabrication work shall be done at site.
5. Electric power and water supply shall be provided to the contractor by NIBSCOM at single point at both the sites, free of charge. Contractor shall not use power/water for other purpose than that it is intended for.
6. The BIS / CPWD specifications shall be followed as applicable and in the absence of the same the decision of NIBSCOM shall be final. The work has to be carried out only by OEMs or Electrical contractors who are possessing valid authorization from the OEMs.
7. The contractor shall at the instructions of the NIBSCOM within such time as notified, open up for inspection any work and should the contractor refuse or neglect to comply with such instructions, the NIBSCOM may employ other workman to open of the same. Such work if it is found not in accordance with approved specifications, or the instructions, expenses of opening up and redoing if required shall be borne by and recoverable from the Contractor from any money due or which may become due to the contractor.
8. The successful tenderer is bound to carry out any or all items of work necessary for the completion of the job even though such items are not included in the quantities and rates
9. The Contractor shall make necessary arrangement for watch and ward.
10. No advance shall be paid towards mobilization and cost of materials.
11. No compensation shall be admissible for any loss suffered by the Contractor during the execution of the work. It shall be the Contractor's sole responsibility to protect NIBSCOM's staff, his employees and property against accidents from any cause and he shall indemnify NIBSCOM against any claims for damage for injury to person or property, resulting from any such accidents with necessary Insurance cover.
12. Any damages caused to the building / premises during the execution of the work shall be made good by the Contractor at his risk and cost and if necessary, through suitable Insurance cover.
13. The work is to be undertaken only during working days and during the office timings. The work cannot be undertaken on Saturday, Sunday and any declared holidays except with the written approval of the NIBSCOM/ Bank.
14. The contractor has to make his own arrangement of stay for his employees outside NIBSCOM premises.
15. The Contractor shall use necessary safety equipment and maintain all safety measures during the execution of works and ensure compliance of Safety Code as per Rules and Regulations in force.

16. The Contractor shall engage necessary qualified and experienced supervisory staff at his cost during the execution of the work for attending to day to day affairs.
17. The contractor shall require shifting some of the furniture, electrical items, etc., to some other places within the office premises during the time of work and may also be required to place them in the appropriate place after completing the work. This may be factored while quoting the bid, no extra payment shall be made for those works, beyond bid price.
18. There will be other works being carried out by various contractors in the said office premises. Hence Care should be taken not to damage any other works and also to coordinate with the other work contractors.
19. **Testing of Materials:** The contractors are required to submit samples of various materials, items, fittings, etc for the approval of the NIBSCOM. The materials of brand names, if any, given in the contract shall only be selected.
20. **Co-ordination and Monitoring:** The contractor's site supervisor/ engineer will be coordinating and monitoring the project and report the progress to NIBSCOM on weekly basis.
21. **Site order book:** Site order book shall be maintained on the site for issuing instructions to the contractor in the course of day to day supervision of the work.
22. **Hindrance register:** A hindrance register shall be maintained at the site to have a record of hindrances in the progress of work which may result in delays.
23. **Idle Labour Clause:** In case the proposed work is held up for any site conditions not attributable to the contractor or for any decisions/ instructions/ want of details from NIBSCOM or for any of the untoward situation, the contractor shall be allowed reasonable extension of time by NIBSCOM but any additional/ extra claim for payment to idle labour/ tools/ establishment/ plant etc, during this period shall not be the liability of NIBSCOM. The quoted rates should include for all such contingencies.
24. Whatever the reasons be, no claim for idle labour, additional establishment, cost of labour charges of tools and plants would be entertained under any circumstances.

XIV. CERTIFICATE OF VIRTUAL COMPLETION OF WORKS

The Contractor shall report in writing to the NIBSCOM in the form of a Certificate as per the format given at [Annexure-I](#), as and when the works are completed in all respects. NIBSCOM shall, after due verification of the works, issue to the Contractor a certificate to be called "Virtual Completion Certificate"(VCC). The defects liability period shall commence only from the date of virtual completion of the work i.e. actual possession of the work.

XV. DEFECTS LIABILITY PERIOD / WARRANTY/RETENTION MONEY DEPOSIT (RMD)/ SECURITY DEPOSIT (SD)

1. Defects Liability / Warranty Period

The Contractor shall guarantee the Genset supplied under this contract, including all components, accessories and the works relating to installation, testing and

commissioning, against any defects in design, materials, workmanship or installation for a period of twelve (12) months from the date of successful commissioning and acceptance by the Institute, hereinafter referred to as the Defects Liability Period (DLP).

2. Retention Money / Security Deposit

An amount equivalent to five percent (5%) of the gross value of the work executed shall be deducted from the running/interim bills of the Contractor and retained by the Institute as Retention Money Deposit (RMD) forming part of the Security Deposit. The said amount shall be retained during the Defects Liability Period and shall not carry any interest.

3. Contractor's Responsibility During DLP

During the Defects Liability Period, the Contractor shall remain fully responsible for the proper performance, reliability and satisfactory operation of the DG Set and associated works. The Contractor shall, at his own cost and without any delay, repair, replace or rectify any defect, fault or deficiency arising out of defective design, materials, workmanship or improper installation.

4. Rectification of Defects

Any defect, deficiency or shortcoming noticed during execution of the work or within the Defects Liability Period shall be promptly attended to and rectified by the Contractor at no additional cost to the Institute. Upon receipt of written notice from the Institute, the Contractor shall take immediate steps to rectify such defects and complete the rectification within ten (10) days or within such time as may be specified by the Institute depending upon the nature of the defect.

5. Failure to Rectify Defects

In the event the Contractor fails to rectify the defects within the stipulated period, the Institute shall be at liberty to carry out such rectification work through any other agency at the risk and cost of the Contractor, and the expenditure so incurred shall be recovered from the Retention Money (Performance Security Deposit) or any other amount due or becoming due to the Contractor under this or any other contract with the Institute.

XVI. COMPLETION PERIOD

The work should be completed within 02 months starting from 01 week from the date of issue of work order or the date on which contractor takes the possession of site, whichever is earlier.

XVII. DELAY AND EXTENSION OF TIME

If, in the opinion of NIBSCOM the works be delayed (a) by force majeure or (b) by reason of any exceptionally inclement weather or (c) by reason of proceedings taken or threatened by the dispute with adjoining or neighboring owners or public authorities arising otherwise than through the Contractor's own default or (d) by the works or delays of other

Contractors or tradesmen engaged or nominated by NIBSCOM and not referred to in the Schedule of Quantities and/or Specifications or (e) by reason of NIBSCOM's instructions, or (f) by reason of civil commotion, local commotion of workmen or strike or lockout affecting any of the building trades or (g) in consequence of the Contractor not having in due time necessary instructions from NIBSCOM for which he shall have specifically applied in writing, ahead of time, giving NIBSCOM reasonable time to prepare such instructions, NIBSCOM shall make a fair and reasonable extension of time for completion of the Contracted works. In case of such strike or lockout, the Contractor shall, as soon as may be, given written notice thereof to NIBSCOM, but the Contractor shall nevertheless constantly use his endeavors to prevent delay and shall do all that may reasonably be required to the satisfaction of NIBSCOM to proceed with the work. The Contractor shall take all practicable steps to avoid or reduce any delay in the execution and completion of the works arising out of:

- a. Force Majeure
- b. Exceptionally inclement weather
- c. Loss or damage by fire and earthquake
- d. Civil commotion, lockout, strike etc.
- e. NIBSCOM's Instructions, as the case may be
- f. Delay on the part of the nominated Sub-Contractor or nominated supplier
- g. Delay on the part of the other Contractor employed by NIBSCOM

XVIII. BUY-BACK ARRANGEMENT

1. Bidders shall quote the buy-back price for 285 KVA Diesel Generator including engine, Alternator, radiator and other accessories, which is in working condition, installed at NIBSCOM, Noida.
2. Bidders shall arrange for dismantling and taking away the old Diesel GENERATOR set under buy-back arrangement.
3. Successful bidder shall be careful while taking away old Diesel Generator set and set damage done to the foundation or electrical system, if any, during the process of dismantling.
4. NIBSCOM reserves the right to include/exclude buy-back value from the bidding and therefore, L1 may be decided including/excluding price quoted for the buy-back of the old Diesel Generator set.

XIX. PAYMENT OF CONTRACTOR'S BILL

1. The Contractor shall be entitled under the Interim Certificates issued by the consultant, payment against the checked bills for the work done not prior to 20 days from the date of issue of the work order subject to the actual work being executed in accordance with the contract, and reasonable scrutiny by NIBSCOM. The Contractor shall submit interim bills only after working out the appropriate measurements jointly recorded with NIBSCOM at site in the measurement book (MB). This is not only to

- regulate the correctness of the quantity but also to facilitate expeditious clearing of the bills. The Minimum value of Interim Bill shall not be less than 5.00 lakhs
2. Interim Bills submitted by the Contractor will be paid by NIBSCOM after all the statutory deductions viz. RMD @ 5%, TDS and other statutory deductions etc., as applicable.
 3. The Contractor shall submit the bills along with the accepted and jointly recorded measurement sheets duly certified by NIBSCOM's Engineer.
 4. **Measurement Book:** The payment for all works done and for all materials supplied shall be made on the basis of detailed measurements recorded in MBs vetted by the consultant.
 5. **Final bill:** The final bill has to be submitted by the contractors as early as possible after the completion of the work along with completion of recording the final measurements.

XX. DISPUTES AND ARBITRATION

1. All disputes or differences of any kind whatsoever which shall at any time arise between the parties hereto touching or concerning the works or the execution or maintenance thereof this contract or effect thereof or to the rights or liabilities of the parties or arising out of or in relation thereto whether during or after determination foreclosure or breach of the contract (other than those in respect of which the decision of any person is by the contract expressed to be final and binding) shall after written notice by either party to the contract to the other of them and to the Employer hereinafter mentioned be referred for adjudication to a sole Arbitrator to be appointed as hereinafter provided.
2. For the purpose of appointing the sole Arbitrator referred to above, the Employer will send within thirty days of receipt of the notice, to the consultant a panel of three names of persons who shall be presently unconnected with the organization for which the work is executed from the following categories of Arbitrators”:-
 - i). Retired High Court/Supreme Court Judge who have experienced in handling Arbitration Cases.
 - ii). Member of Council of Arbitrators
 - iii). Fellow of the Institution of Engineers
 - iv). Eminent Retired Chief Engineer from State/Central PWD/Public sector undertaking of good reputation and integrity
 - v). Fellow of Indian Institute of Consultants.
3. The consultant shall on receipt of the names as aforesaid, select any one of the person's name to be appointed as a sole Arbitrator and communicate his name to the Employer within thirty days of receipt of the names. The Employer shall thereupon without any delay appoint the said person as the Sole Arbitrator. If the consultant fails to communicate such selection as provided above within the period specified, the

Employs should make the selection and appoint the selected person as the Sole Arbitrator.

4. If the Employer fails to send to the consultant the panel of three names as aforesaid within the period specified, the consultant shall send to the Employer a panel of three names of persons who shall all be unconnected with either party.
5. The Employer shall on receipt appoint him as the Sole Arbitrator. If the Employer fails to select the person and appoint him as the Sole Arbitrator within 30 days of receipt of the panel and inform the consultant accordingly, the consultant shall be entitled to appoint one of the persons from panel as the Sole Arbitrator and communicate his name to the Employer.
6. If the Arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another Sole Arbitrator shall be appointed as aforesaid.
7. The work under the Contract shall, however, continue during the arbitration proceedings and no payment due or payable to the consultant shall be withheld on account of such proceedings.
8. The Arbitrator shall be deemed to have entered on the reference on the date he issued notice to both the parties fixing date of the first hearing.
9. The Arbitrator may from time to time, with the consent of the parties, enlarge the time for making and publishing the award.
10. The arbitrator shall give a separate award in respect of each dispute or difference referred to him. The Arbitrator shall decide each dispute in accordance with the terms of the contract and give a reasoned award. The venue of arbitration shall be such place as may be fixed by the Arbitrator in his Sole discretion.
11. The award of the Arbitrator shall be final and binding on the both the parties. Subject to aforesaid the provisions to the Arbitration Act. 1992 or any statutory modification or re-enactment thereof and the rules made there under, and for the time being in force, shall apply to the arbitration proceeding under this clause.
12. The Employer and the contractor hereby also agree that arbitration under clause shall be condition precedent to any right to action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration.

I/we accept all the above Terms and Conditions in all respects without any reservation.

Signature of the Contractor

Place: Name :

Date: Address :

Seal :

SPECIFICATIONS FOR PNG GENERATOR

Note 1: These specifications are not meant to be exhaustive and prescribe the minimum acceptable standards. Where these do not cover certain items and aspects, the best engineering practice instructions shall be followed.

Note 2: All codes and standards means the latest. Necessary I.S. Codes are mentioned alongwith these specifications and all relevant codes with divisions published on date shall be applicable.

1. GENERAL

- i). The entire electrical installation work shall be carried out in accordance with approved Drawings and in general conformity with the requirements of the Indian Electricity rules, 2003, the relevant I.S. Codes of practice, as amended to date, wherever applicable and the regulations of the local licensing bodies, CEA, CPB, Electrical safety inspector etc., and where such installations are subject to inspection and approval of fire insurance, the installation shall be planned and executed also confirming to their regulations/rules.
- ii). The specifications herein and the IEE Rules/Regulations of the local licensing Authority CEA and of the Fire Insurance/Explosives Authorities, the latter shall prevail.

2. SUPERVISION

From the contractor's side supervision shall be carried out by person/persons holding certificates of competency of appropriate class issued by the respective State Government bodies authorized to issue such certificates under statutory rules and regulations in force.

3. TESTING AND COMMISSIONING

- i). On completion of the work and/or at the appropriate stages of the works as necessary, the contractor shall arrange for all necessary tests for proper operation, continuity, etc. of the necessary installation /equipment/plant etc., in accordance with the provisions in the IE rules, relevant IS codes of practice and commission the completed installation. Contractor shall furnish a certificate and guarantee in the prescribed form (attached to the tender document), countersigned by the licensed and qualified supervisor under whose direct supervision the installation will be taken over by NIBSCOM, only on its being so commissioned, the test results being thoroughly satisfactory.
- ii). Provided that the work shall not be deemed to be complete and the installation will not be taken over, if the test results are not within satisfactory limits. In case the results are unsatisfactory the contractor is required to carry out all necessary rectifications/modifications at his level on his own cost to bring the installation/equipment to the level of acceptability within a period of 4(four) weeks from the date of test and the defects liability period of 12 months will stand extended by period of delay in such rectification/modification that is in excess of said period of 4 weeks.

iii). On completion of work, four sets of As built drawings of general arrangement and SLD of the distribution cabling of the electrical control panels shall be submitted for client's records.

4. WORKMANSHIP

First class workmanship and neat appearance are essential requisites for compliance with these specifications.

5. MATERIALS AND MAKES

All materials, equipment, fittings fixtures, appliances, accessories, etc., to be used in installation shall comply in all respects with the requirements of the BIS, relevant Indian Standard codes and regulations of the local electricity supply authorities and the Central Electrical Authority. The electrical fixtures shall be of the best quality obtainable in the makes/manufacture specified in the make list, samples being approved by NIBSCOM.

6. TECHNICAL SPECIFICATIONS FOR AMF PANELS / CONTROL PANELS

The fabricated panels used for this project shall be generally wall mounted, fabricated out of 16 SWG CRCA and powder coated after undergoing 7-tank treatment process. The panel shall be cubicle type with Neoprene gasketed and hinged outer door with locking facility. All the components like contactors, MCBs etc shall be mounted on an MS mounting plate fixed inside the panel which can be removed in case of any defects which needs rectification or replacements of components. The components shall be fully wired and tested for correct sequence of operation. The MCB shall be mounted in such a way that their operating knobs shall be accessible after opening the outer door. The panel shall be designated with a label at the top of the panel in a permanent manner. The outer door shall be earthed to the main body through a flexible copper wire. All the panels will be equipped with Suitable size of TPN/MCCB/Contactors with copper bus bars supported with DMC. PVC insulated and color-coded copper wire of required size shall be used for tapping's from bus bars and inter wiring of components. Removable gland plates shall be provided at the top and bottom of the panel for external cable terminations. The Single Line Diagram enclosed along with the tender should be referred.

7. TECHNICAL SPECIFICATION FOR PNG GENERATOR SET & APPLICABLE STANDARDS

- i). ISO-8528- Part-1 to 10, applicable for generating sets
- ii). IS- 1000- Part-1 to 13, 1980 applicable naturally aspired engines
- iii). BS-5514-Part-5-1979, IS-13018 & BS-649 Reciprocating internal combustion engines, Performance, torsional vibrations
- iv). ISO-3046-Part-5-2001, Part-1-2002, Part-3-1989, Part-4-1997, Part-6-1990, IS 60034
- v). IS-4889/BS-269, IS-4722-1992, IS-13364-part-1&2-19992, IEC-34-1-1983, BS 2613/1970, IS 4889, IP-21 as per IS-4691/85 applicable to Alternator
- vi). IS-8183, ISO-3744-1988 (E), ISO-8528- Part-10-1998 (E), ISO-9614-1993-Part-1, 2 applicable for acoustic enclosure
- vii). IS-2147-1962 and IS-4722 applicable for control panels.
- viii). IS-1460: Automative Gas

- ix). IS/IEC 60034-1: Rotating electrical machines.
- x). ISO 9001
- xi). IS 13018: Internal Combustion Engine.

8. PNG ENGINE

1. The engine shall be the CPCB4+ standard design of the original manufacturers. It should be 4-stroke, water cooled, naturally aspirated/ turbo charged as per manufacturer standard, PNG engine developing about minimum 310 BHP for giving a power rating in kVA at the load terminals of alternator at 1500RPM at actual site conditions as above. The engine shall be capable of delivering specified prime power rating at variable loads for PF of 0.8 lag with 10% overload available in excess of specified output for one hour in every 12 hours. The average load factor of the engine over a period of 24 Hours shall be 0.80 (80 %) for prime power output.
2. The engine shall be fitted with the following accessories subject to the design of the manufacturer.
 - a) Dynamically balanced flywheel.
 - b) Necessary flexible coupling and guard for alternator and engine.
 - c) Air cleaner (dry/oil bath type) as per manufacturer standard.
 - d) Governor of class G3 and shall be self-contained unit capable of monitoring speed.
 - e) PNG Connection with 2 Bar Pressure.
 - f) Dry exhaust manifold with suitable exhaust residential grade silencer to reduce noise level.
 - g) Suitable self-starter for 12V/24 V DC.
 - h) Battery charging alternator unit and voltage regulator, suitable for starting batteries, battery racks, interconnecting leads and terminals.
 - i) Battery charger.
 - j) Necessary gear driven oil pump for lubricating oil, priming of engine bearing as well as PNG Connection as per manufacturer's recommendations.
 - k) Naturally aspirated/ turbo charger (as per manufacturer standard).
 - l) Lubrication oil cooler.
 - m) Lubrication oil filters with replaceable elements.
 - n) Crank case heater as per standards.
 - o) Solenoid Control.
 - p) Electronic engine management control panel: fitted and having digital display for following:
 - Start/stop key switch
 - Lube oil pressure indication
 - Water temperature indication
 - RPM indication
 - Engine hours indication
 - Battery charging indication

- Low Lube oil trip indication
 - High water temperature indication
 - Over speed indication
 - Over Load trip indication
3. All moving parts of the engine shall be mechanically guarded with M.S. mesh guard in such a manner that a human finger cannot touch any moving part.
 4. Radiator
 5. Any other item not mentioned/ specified but is a standard design of the manufacturer.

9. DE-RATING OF THE SET

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

- a) Outside maximum temperature: 45-degree C
- b) Height above MSL: 123 Mt
- c) RH: 59%

PNG Generator set should be type tested for noise and emission norms/ standards as per latest CPCB norms.

10. COMMON BED PLATE

Engine and alternator shall be coupled by means of flexible coupling and both the units shall be mounted on a common bed plate (6"x4"x4" MS channel) together with all auxiliaries to ensure perfect alignment of engine and alternator with minimum vibrations. The bed plate shall be suitable for installation on suitable anti vibration mounting system.

11. EXHAUST SYSTEM

- i). The entire MS pipe used for exhaust piping shall conform to IS. The runs forming part of factory assembly on the engine flexible connections up to exhaust silencer shall be exclusive of exhaust piping item. The work includes necessary cladding of exhaust pipe work using 50mm thick glass wool/ mineral wool/ rock wool, density not less than 120 Kg per meter cube and aluminum cladding of 0.6mm thick for the complete portion. The exhaust pipe work includes necessary supports, foundations etc to avoid any load and stress on turbo charger/ exhaust piping. Exhaust pipe with extension up to 20mtr shall run along the existing wall of the building duly clamped/supported on independent structure for which the design and drawing for such structure shall be got approved from NIBSCOM.
- ii). The exhaust system should create minimum back pressure.
- iii). No of bends should be kept minimum and smooth bends should be used to minimize the back pressure.
- iv). Exhaust piping inside the acoustic enclosure shall be lagged with asbestos rope along with aluminum sheet cladding to avoid heat input to the room
- v). Exhaust flexible shall have its free length when it is installed.
- vi). Class B MS pipes and long bends to be used.

- vii). The exhaust outlets shall be in the direction of the prevailing winds and should not allow exhaust gases to enter air inlet/ windows etc
- viii). When tail end is horizontal, 45-degree downward cut should be given at the end of the pipe to avoid rain water entry into the exhaust piping

12. AIR SYSTEM

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

13. COOLING SYSTEM

- i). System should be designed for ambient temperature of 50-degree C.
- ii). Coolant should be mixed with additive in suitable proportion as per recommendation of engine vendor.
- iii). Radiator fan flow should be free from any obstructions

14. CONNECTION AND GENSET INTEGRATION

15. The installation of the PNG (Piped Natural Gas) connection, inclusive of the supply and laying of the MS (Mild Steel) pipeline up to the generator point, shall be in the scope of the Institute. However, the contractor shall be responsible for ensuring a suitable, code-compliant connection between the PNG pipeline and the PNG Genset. The contractor shall also arrange, provide, and install all requisite accessories, fittings, and peripherals necessary for the seamless and safe integration and operation of the genset with the PNG supply. All works by the contractor must adhere to statutory norms, manufacturer guidelines, and applicable safety regulations.

16. ALTERNATOR

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

1.	Rated PF	0.8 Lag
2.	Rated voltage	415V
3.	Rated frequency	50 Hz
4.	No of phases	3
5.	Enclosure	SPDP
6.	Degree of protection	IP-23
7.	Ventilation	Self ventilated, air cooled
8.	Ambient temperature	50-degree C (Max)
9.	Insulation class	F/H
10.	Temperature rise	within limits of class F/H insulation
11.	Voltage regulation	+/-1%

12.	Voltage variation	+/- 5%
13.	Overload duration/capacity	10% for 1 hour in every 12 hours of continuous Use
14.	Frequency	+/-1% (As defined by engine governor)
15.	Variation Excitation	Self excited
16.	Type of AVR	Electronic (soft)

17. TYPE OF BEARING AND LUBRICATION

- i). Arrangement
- ii). Anti friction bearing with grease lubrication Standard
- iii). IS 4722 & IEC :34 as amended up to date

18. PROTECTION

In the event of any fault due to over voltage/ high bearing temperature/ high winding temperature, or an external fault, the AVR shall remove the excitation voltage to the alternator. An emergency trip PB shall also be provided which is located outside the acoustic enclosure.

19. PERFORMANCE

Voltage dip shall not exceed 20% of the rated voltage for any step load or transient load. The winding shall not develop hot spots exceeding safe limits due to imbalance of 20% between any two phases from no load to full load. The generator shall preferably be capable of withstanding a current equal to 1.5 times the rated current for a period of not more than 15 seconds.

The performance characteristics of the alternator shall be as below:

Efficiency at full load 0.8 PF	Not less than 90%
Total distortion factor	Less than 3%
10% over load	1 hour in every 12 Hours of continuous use
50% over load	15 seconds

20. TERMINAL BOX

Suitable for terminating suitable size and runs Of Aluminum/ copper armored XLPE cables (12 terminals).

21. EARTH TERMINALS

4 no's of earth terminals on opposite sides with vibration proof connections, non-ferrous hardware etc. with galvanized plate and passivated washer of minimum size 12 mm dia. Hole shall be provided.

22. MANUAL CONTROL PANEL

- i). Engine Control panel will be provided inside the acoustic enclosure.
- ii). Panel will be fabricated out of 16 SWG CRCA MS sheet and powder coated after seven tank treatment process with IP 23.

The same shall be equipped with following.

- i). Composite meter of digital display of:
 - a. Voltage
 - b. Current
 - c. Power Factor
 - d. Frequency
 - e. Energy Meter
- ii). HRC fuses of suitable rating
- iii). 1 no MCCB of suitable rating with suitable rating and CT along with bus bars and cables.
- iv). Push Button switch or ON-OFF Switch for On and Off operation
- v). Canopy lamps ON/OFF
- vi). Instrument fuses
- vii). Battery charger complete with voltage regulator, voltmeter and ammeter for charging the battery from external mains. This will be in addition to the battery charging alternator fitted on engine.

23. STARTING BATTERY

2 Nos. of 180 Amh battery shall be as required at 24/12V DC and cable size of 70sq mm. Batteries supplied with PNG Generator set shall be dry and uncharged. The same shall be charged by authorized people before same is connected to PNG Generator set. Initial charging shall be done for 72-80 hrs. The batteries shall be placed on stands and relatively cool place inside the acoustic enclosure.

24. PLATFORM FOR MOUNTING OF PNG GENERATOR SET

A PCC foundation platform (1:2:4, M-20 grade) of approximate depth 150mm above the finished Genset Room floor level is required so as to provide leveled surface for placement of the acoustics enclosure. The length and breadth of foundation should be at least 250mm more on all sides than the size of the enclosure. Genset should be mounted on AVM's inside the enclosure. Such platform shall be constructed by the vendor in accordance with standards at the location selected by NIBSCOM. Quoted rate shall be inclusive of the work.

25. ACOUSTIC ENCLOSURE (SOUND PROOF CANOPY)

- i). The acoustic enclosure shall be designed and manufactured conforming to relevant BIS suitable for outdoor installation exposed to weather conditions, and to limit overall noise level to 75dB at a distance of 1 Mt from the enclosure as per CPCB norms under free field conditions, at 75% load.
- ii). The construction should be such that it prevents entry of rain water splashing into the enclosure and allows free and quick flow of rain water to the ground in the event of heavy rain. The detailed construction shall conform to details as under.
- iii). The enclosure shall be fabricated out of CRCA sheet of thickness not less than 1.6mm on the outside cover with inside cover having not less than 0.6mm thick perforated powder coated CRCA sheet.

- iv). The hinged doors shall be made from not less than 16 SWG (1.6mm) thick CRCA sheet and will be made airtight with neoprene gasket and heavy-duty locks.
- v). All sheet metal parts should be processed through 7-tank process. The enclosure should be powder coated Green color The gauge should be calibrated. The batteries should be accommodated in the enclosure in the rack.
- vi). The canopy should be provided with high enclosure temperature safety device. The acoustic lining shall be made of high-quality insulation material like glass wool/ mineral wool/ rock wool with minimum of 50mm thick and 75 Kg/cubic mt for sound absorption as per standard design of manufacturers to reduce the sound level as per CPCB norms. The insulation material shall be covered with fine glass fiber cloth and would be supported by perforated MS sheet duly powder coated.

The enclosure shall be provided with suitable size and no of hinged type doors along the length of the enclosure on each side for easy access inside the acoustic enclosure for inspection, operation and maintenance purpose. Sufficient space will be provided inside the enclosure on all sides of the PNG Generator set for inspection, easy maintenance and repairs.

The MS base frame shall be provided having lifting facility & predrilled foundation holes for installation on anti-vibration mounting (AVM pads).

26. PNG GENERATOR SET TESTING

- i). All major equipment/items i.e. engine & alternator in assembled condition, electrical control panel etc. shall be offered for initial inspection at factory/ manufacturers work, before dispatch at site of work at the discretion of NIBSCOM. After inspection of these items shall be cleared for dispatch at site.
- ii). Copies of all documents of routine and type test certificates of the equipment, carried out at the manufacturer's premises shall be furnished to NIBSCOM.
- iii). After completion of the installation work in all respects, the contractor shall offer the

27. TESTING SHALL BE CARRIED OUT AS UNDER

The PNG Generator set shall be tested on load of Unity Power Factor for the rated KW rating. During testing, the each of the PNG Generator sets shall be operated for 12 hours for PNG Generator set's KW rating including one hour on 10% overload after continuous run of the 12 hours. During testing, all control and safety operations shall be checked and proper record will be maintained. Any defect/ abnormality noticed during the testing shall be rectified. The testing will be declared successful only when no abnormality/ failure is noticed during the testing. The PNG Generator set will be cleared for dispatch to site only when the testing is declared successful by authorized representative.

28. SAFETY MEASURES:

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

29. STATUTORY CLEARANCES:

Approval/ clearance of the complete installation shall be obtained by the contractor from CPCB/State pollution control board/ Local bodies/ CEA/ other licensing authorities like LESA etc., wherever required. However, the application shall be made by the NIBSCOM in consultation with contractor and necessary fee shall be paid by NIBSCOM.

30. GUARANTEE

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

31. TENDER DRAWINGS, DRAWINGS FOR APPROVAL & COMPLETION DRAWINGS

Drawings for approval on Award of the work: The contractor shall prepare and submit three sets of following drawings and get them approved from NIBSCOM before the start of the work. The approval of drawings however does not absolve the contractor not to supply the equipment/materials as per the agreement, if there is any contradiction between the approved drawings and agreement.

- i). Layout drawings of the equipment to be installed including control cables, / lube oil pipes and supports/structure for exhaust piping, chimney and bus ducts/cable trays.
- ii). Drawings including section, showing the details of erection of entire equipment.
- iii). Electrical wiring diagrams from engine alternator set to electrical control panel, electrical control panel to essential to LT board including the sizes and capacity of the various electrical /control cables and equipment.
- iv). Dimensioned drawings of Acoustic enclosure/engine alternator set and electrical control panel.
- v). Drawings showing details of supports for pipes, chimney cable trays, ducts etc. Any other drawings relevant to the work.

32. DRAWINGS/DOCUMENTS TO BE FURNISHED ON COMPLETION OF INSTALLATION

- i). Two sets of the following laminated drawings shall be submitted by the contractor while handing over the installation to NIBSCOM. One set shall be laminated on the hard base for display in the PNG Generator set room/room where Manual Control panel is installed and another set shall be kept with NIBSCOM. In addition, drawings shall be given in DVD.
 - a) PNG Generator set installation drawings giving complete details of all the equipment, including their foundations.
 - b) Line diagram and layout of all electrical control/panels giving switchgear ratings and their disconnection, cable feeder sizes and their layout.
 - c) Control wiring drawings with all control components and sequence of operations to explain the operation of control circuits in Control Panel/PCC.
- ii). Manufacturer's technical catalogues of all equipments and accessories.
- iii). Operation and maintenance manual of all major equipments, detailing all adjustments, operations and maintenance procedure.

33. EARTHING

G I plate earthing / GI pipe chemical earthing (Neutral Grounding) shall be provided for the PNG Generator set. The body earthing shall be of GI. The generating set and all associated equipment control and switchgear panels must be earthed before the set is put into operation. Four number earths are provided as under:

- i). 2 earthing sets for Genset / control panel body
- ii). 2 earthing sets for neutral Earthing job should be carried out as per General Specifications for Electrical Works, 2013.

34. GI STRIPS OF SUITABLE SIZE SHALL BE USED FOR EARTHING AS DETAILED HEREUNDER:

- i). For Gensets with AVM's between engine/alternator and base rail, the body earthing must be provided at the engine/alternator and not at the base rail.
- ii). Genset should be earthed at two distinct points through a conductor strip having cross-section suitable to carry the short circuit (three phase dead short circuit with ground) current without burning out in conformity to General Specifications for Electrical Works, 2013 in vogue.
- iii). For body earthing, an earth-bus shall be provided. Earth-bus used for sub-station shall be used for body earthing, as PNG Generator set is placed at sub-station.

- iv). Test joints shall be provided for testing the earthing as and when required.
- v). Size of plate, depth of earthing and methods for earthing works shall be as per the CPWD General Specifications for Electrical Works, 2013 in vogue.

35. MAKE OF MATERIALS

Sr No	Description	Make-1	Make-2	Make-3	Make-4
1.	MCB	Legrand	L&K	Schneider	ABB
2.	MCB DB	Legrand	L&K	Schneider	ABB
3.	MCCB	L&K	Crompton	Siemens	Legrand
4.	LED indication lamps	Technique	Schneider	Siemens	L&K
5. 6.	Electrical and control Panel	Reputed make approved by NIBSCOM			
7.	Resin cast CTs	Kappa	A.E.	L&K	
8.	Power cables	Polycab	CCI	GEMSCAB	
9.	PVC Insulated copper Wire	Finolex	Grandlay	Polycab	
10.	Contactor	Legrand	L&K	Crompton	Siemens
11.	GAS (PNG) GENERATOR set	Kirloskar	Any other Reputed make Approved by NIBSCOM	Any other Reputed make Approved by NIBSCOM	Any other Reputed make Approved by NIBSCOM
12.	Engine	Kirloskar	Any other Reputed make Approved by NIBSCOM	Any other Reputed make Approved by NIBSCOM	NIBSCOM
13.	Alternator	Kirloskar	Kirloskar	Any other Reputed make Approved by NIBSCOM	
14.	Cable Glands	Comet	Bracco		
15.	Cable lugs	Dowell			
16.	Meters	Rishabh	Trinity	Schneider	AVE

NOTE: Makes mentioned above are only tentative and prior approval of all equipment/items shall be taken from NIBSCOM before supply at site. Contractor may supply equipment of any other make not mentioned above with the prior approval of NIBSCOM.

36. SAFETY CODE

- i). The contractor shall follow the safety codes as per IS-5216-1982 while carrying out the electrical work.
- ii). First-aid appliances, including adequate supply of sterilized dressings and cotton wool, shall be maintained in a readily accessible place.
- iii). The injured person shall be taken to a public hospital without loss of time, in cases where the injury necessitates hospitalization.
- iv). Suitable and strong scaffolds should be provided for workmen for all works that cannot safely be done from ground.
- v). No portable single ladder shall be over 8 meters in length, the width between the side rails not less than 30 cm (clear) and the distance between two adjacent rungs shall not be more than 30 cm. When a ladder is used, an extra labour shall be engaged for holding the ladder.
- vi). The excavated material shall not be placed within 1.5 meters of the PNG Generator of the trench or half of the depth of the trench, whichever is more. All trenches and excavations shall be provided with necessary protection of minimum height of one meter.
- vii). Every opening in the floor of a building or a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one meter.
- viii). No floor, roof or other part of the structure shall be as over-loaded with debris or materials as to render it unsafe.
- ix). Workers employed on mixing and handling material such as asphalt, cement, mortar or concrete and lime mortar shall be provided with protective footwear and rubber hand gloves.
- x). Those engaged in welding works shall be provided with welder's protective eye-shields and gloves.
- xi). No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
- xii). Suitable face masks should be supplied for use by the workers when the paint is applied in the form of spray or surface having lead paint dry rubbed and scrapped.
- xiii). Hoisting machines and tackles used in the work, including their attachments, anchorage and supports shall be in perfect condition.
- xiv). The ropes used in hoisting or lowering material or as a means of suspension shall be of durable quality and adequate strength and free from defects.

37. FIRE SAFETY

- i). Cutting / drilling machine and other electrically operated equipment used at site shall be plugged into correctly rated electrical outlets.
- ii). Only ISI marked 3 pin plug and other appliances and equipment shall be used.
- iii). Electrical power cables/wires used shall not have any joints and shall be properly rated.

- iv). All electrical appliances i.e. welding, drilling, cutting machine etc. shall be safely and securely earthed to prevent leakage current while in operation.
- v). Before commencing the welding work required precautions should be taken.
- vi). Two buckets of water/ sand and a fire cloth of suitable size shall be kept in an easily accessible area on the site.
- vii). Fire extinguishers recommended by fire officers shall be kept on the site.
- viii). Used paint drums shall be stored in specified store only after closing them properly.
- ix). Personal protective equipment such as safety shoes, hand gloves, welder's mask, ear plug etc. depending upon the requirement of the work shall be provided by the contractor to the workmen to prevent occupational health hazards.
- x). The safety belt shall be provided by the contractor and used by the workmen while working from height for more than 10' from Ground level.
- xi). None of the passages near lift lobby and staircases shall be used for stacking / dumping any kind of materials/waste.
- xii). Any debris/ waste generated from the work shall be collected on daily basis, removed from site and stored at the designated place in proper manner.
- xiii). Battery operated emergency light/torches shall be provided by the contractor to the workmen while working beyond office hours.

VIRTUAL COMPLETION CERTIFICATE

(On Duly Notarized Stamp Paper of Rs.100)

We, M/s _____
having office address _____, do
hereby solemnly declare and confirm that we have virtually completed the contracted works.

We hereby certify that the work has been executed wholly to our satisfaction and with materials and workmanship in accordance with the contract. Thus we ensure that there will not be any defect in the functioning of PNG GENERATOR .

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

Signature of the Contractor

Place:

Name :

Date:

Address :

Seal :

General details about the Contractor with supporting documents

S. No.	Description	Information to be filled up by the Contractors
1	Organization and address of the Registered Office	
2	Year of establishment	
3	Type of the Organization (whether Sole Proprietorship, Partnership, Private Limited or Co-operative body, etc.)	
4	Name of the Proprietor/ Partner/Directors of the Organization/Firm: a) b) c) d)	
5	<u>Details of Registration</u> - Whether Partnership firm, Company, etc. Name of Registering Authority, Date and Registration Number	
6	Whether registered with Government/Semi-Government/Municipal Authorities or any other Public Organisation and if so, in which class and since when?	
7	Experience in the Relevant field	
8	Areas of business activities other than this work	
9	Address of business activities other than this work, if any and place of business	

10	Address of office through which the proposed work of the Bank will be handled and the name and designation of the Officer-in-charge	
11	Adequate and satisfactory evidence to indicate financial capacity of the Organisation to undertake the said construction work with names of Bankers and their full addresses (Income-tax clearance certificate and Audited Balance Sheet and Profit and Loss Account for past three years should be attached)	
12	Yearly turn-over of the Organisation during last three years (Rs.)	
13	Whether any Civil Suit/litigation arisen in the contracts executed during the last ten years/being executed now. If yes, please executed now. If yes, please furnish the details. in the table given below:	

Note: Income -tax clearance certificate and Audited Balance Sheet and Profit and Loss Account for past three years should be attached separately.

Electrical works and previous experiences

a) List of important Projects executed by the contractor (only those projects that meets the requirements of ELIGIBILITY CRITERIA in Clause-III of NOTICE INVITING TENDER above)

Sr. No.	Name & Location of work	Cost of work	Name of owner	Full address	Name of the contact person from owner's side for whom work was executed	Contact no. of the contact person of the owner (Mandatory)	Email id of the contact person (Mandatory)	Completion period		Whether the work was left incomplete (reasons if any for delay in completion of work) or contract was terminated from either side (give full details)	Any other relevant information
								As per work order	Actual		
1	2	3	4	5	6	7	8	9	10	11	12

NOTE: Contractor shall submit the completion certificates of all the above-mentioned work issued by the respective clients and shall produce before NIBSCOM whenever called for.

b) List of important projects ON HAND costing Rs. 50 lakh and above. (Electrical works to office complex/ residential complex/ industrial)

Sr.No.	Name of work	Location of work	Name of owner	Full address	Name of the contact person from owner's side for whom work was executed	Phone no. of the contact person (Mandatory)	Email id of the contact person (Mandatory)	Completion period		Whether the work was left incomplete (reasons if any for delay in completion of work) or contract was terminated from either side (give full details)	Any other relevant information
								Stipulated	Actual		
1	2	3	4	5	6	7	8	9	10	11	12

BANK ACCOUNT DETAILS
for ECS Payments

(Details to be furnished by the Tenderers/contractors/Service)

Provider/Firm

1. Name of Contractor/Firm/Co./
Service Provider with Address :
2. Name of the Bank of the Contractor/
Service Provider :
3. Bank Branch and Address :
4. Title of Account where payment is
Required, Exact wording of the account :
5. Account No. :
6. Savings/Current
7. MICR No. of the Bank branch
(along with a cancelled copy of the
cheque) :
8. IFSC / RTGS / NEFT No. :

Note: Enclose a copy of PAN & Cancelled Cheque

Place:

Date:

Yours faithfully
Name and Address of the
Tenderer/Contractor/Firm/Co.
/Service Provider

(Signature of the Tenderer/
Contractor/Firm/ Co.
/Service Provider)

Address and Seal

CHECK LIST FOR SUBMISSION OF BID

Bidder is requested to fill this check list and ensure that all details/documents have been furnished as called for in the Bidding Document along with duly filled in, signed stamped checklist **with this tender document.**

Please tick (✓) the box and ensure compliance:

1	Bid Securing Document is submitted as per given format			
2	Validity of offer is up to 90 days from the date of opening of Price Bid.			
3	Power of Attorney in favour of person who has signed the offer, in stamp paper of appropriate value.			
	For Proprietary Organisation, declaration for proprietorship submitted			
4	Partnership Deed is case of Partnership firm and Articles of Association in case of limited company			
	Submitted	<input type="checkbox"/>	Not applicable	<input type="checkbox"/>
5	Original Bidding Document along with blank (un-priced) copy of price Bid/ Schedule of Rates and addendum, if any. Price is not filled up in this document			
6	All pages/documents are stamped and signed by the authorised signatory of the bidder.			
7	Price Part in original, duly filled in, signed and sealed in each page, submitted in separately sealed envelope.			
8	Duly filled in Details of Specific Experience as per the format attached in the Bidding Document along with Documentary evidences comprising Work order and Completion certificate in support of meeting Experience criteria as per the NIT.			
9	Completion certificate submitted			
10	Financial statement along with the Annual Audited balance sheets and P&L Accounts for the last three years			
11	PAN NO. With documentary proof. Submitted			
12	ESI No. with documentary proof. Submitted			
13	Goods and Service Tax identification Number (GSTIN) applicable			

NOTE: Documents, which are required to be submitted for the subject job, which are specifically mentioned in the Bidding Document.

SIGNATURE OF BIDDER: _____
NAME OF BIDDER : _____
COMPANY SEAL : _____

PART-2 (PRICE BID)

BILL OF QUANTITIES

Tender for Supply, Installation, Testing and Commissioning of 01 No. of 250KVA PNG GENERATOR Set with AMF Panels and Installation for NIBSCOM, Noida

Sl. No.	Particulars	Qty	Price (Rs.)	GST	Amount (Rs.)
1	Dismantling of 285 KVA (Cummins make) old Diesel Generator set and Supply of 250 KVA, Three Phase, Silent PNG GENERATOR Set comprising of engine 335 BHP or suitable, designed & tested on 50°C ambient temp. and 250 KVA, 415 V alternator mounted on a common base, complete with IGL connection for PNG with 2 Bar pressure, Batteries and leads, Residential grade Silencer, Standard Panel, First fill of lube oil, AVM Pads, Acoustic Enclosure as per CPCB norms. Engine Make: Cummins/ Kirloskar/Stamford. Alternator Make: Stamford/ Jyoti /Kirloskar /Crompton	01 No			
2a	Foundation suitable for 250 KVA PNG GENERATOR set, complete with cement, Morang, concrete ratio 1:2:4 & Bricks (Size L=5100mm, W=2000mm,H=600mm above from ground level) as per norms	01 Job			
b	Unloading Shifting PNG GENERATOR set on Foundation	1 Job			
c	GI Pipe Chemical earthing electrode size 50 mm x3000mm with back filled compound & CPRI tested	04No			
d	Extension of Exhaust pipe with aluminum cladding with steel structure as per specification.	20Mtr			
e	Supply & Laying of Cable Aluminum Armored 185x3.5C (2 run)make Havel's/Grandlay /Finolex/Polycap	50Mtr			
f	AMF Panel suitable for 250 kva as per OEM specifications.	01No			
g	End termination of cable with Glands, Lugs & PVC tape	1 Job			
h	Earthing connection with 25x5 GI strip	20Mtr			
i	Testing commissioning with PNG as required	1 Job			
j	Electrical safety approval from Director, Electrical Safety.	1 Job			
	Grand Total:				
	In Words:				
k	Buy Back of 285 KVA (Cummins Make Model NTC-495-G) or equivalent old Diesel GENERATOR set in working condition which is installed at NIBSCOM, Noida with all	01No			

	accessories.				
	Net Amount Rs.				
	In Words:				

Note:

- 1. Above rates shall include GST, all applicable taxes, fees, duties, levies, transportation charges, insurance charges, installation charges, material charges, labour charges and all other charges required for the successful completion of work.**
- 2. Price Bid shall not contain any condition whatsoever and any conditional bids shall be rejected.**