E-TENDER FOR SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF 82.5 KVA DG SET AT SUB – REGIONAL SCIENCE CENTRE, HOLTA, PALAMPUR – 176062, HIMACHAL PRADESH



NATIONAL SCIENCE CENTRE (NATIONAL COUNCIL OF SCIENCE MUSEUMS) BHAIRON ROAD, NEAR GATE NO – 2, PRAGATI MAIDAN NEW DELHI – 110 001

NATIONAL SCIENCE CENTRE

(National Council of Science Museums) Bhairon Road, Near Gate No. 2, Pragati Maidan,

New Delhi - 110001

NOTICE INVITING E-TENDER

TENDER No. NSCD/18011/E-Tender – 30 / 2019 – 20

Online digitally signed E-Tenders are invited from Registered Contractors, OEMs for **Supply**, **Installation**, **Testing & Commissioning of 82.5 KVA DG Set at Sub – Regional Science Centre**, **Holta**, **Palampur – 176062**, **Himachal Pradesh.** as per the Centre's Technical specification. Agencies may download the Tender Documents from Central Public Procurement Portal (CPPP): http://eprocure.gov.in/eprocure/app or from Centre's website www.nscdelhi.org or www.nscd.gov.in as per the following schedule:-

Bid Document Published Date	12 th December, 2019 (18:00)
Bid Document Download Start Date	12 th December, 2019 (18:00)
Bid Clarification Start Date	12 th December, 2019 (18:00)
Bid Submission Start Date	12 th December, 2019 (18:00)
Bid Clarification End Date	27 th December, 2019 (16:00)
Bid Submission End Date	30 th December, 2019 (14:00)
Technical Bid Opening Date	31 st December, 2019 (15:00)
Estimated Cost	₹9.44 Lakh
Earnest Money Deposit	₹23,700/-
Period of Completion of Work	30 days

Online bid both Technical Bid and Financial Bid, should be uploaded by the due date and time as per the above schedule. The responsibility to ensure the same lies with the bidders. Off-line tenders shall not be accepted and no request in this regard will be entertained whatsoever. Online Technical Bid will be opened at the first instance in National Science Centre, Delhi at 15:00 on 31st December, 2019 for Technical Evaluation as well as selection of technically acceptable offers. In the second stage, the Financial Bids of only the selected and technocommercially acceptable offers / system / equipment will be opened. Decision of the Centre, regarding selection of eligible and qualified vendors / firms for opening the Financial Bid shall be final and binding on the bidders. Bidders may be present during opening of tenders.

NSC, Delhi reserves the right to accept or reject any or all tenders in full or part without assigning any reason whatsoever. NSCD shall also not be bound to accept merely the lowest tender but the technical suitability, capability and superiority of the equipment / system as well as after sales service including infrastructure to render such service, etc. shall be of prime consideration for selection of the equipment /system.

CHECK LIST

Check list of Tender No. NSCD/18011/E-Tender -30 / 2019 -20 for Supply, Installation, Testing & Commissioning of 82.5 KVA DG Set at Sub - Regional Science Centre, Holta, Palampur - 176062, Himachal Pradesh.

Sl.	Description	Yes	No
No.			
01.	Whether E-Tender uploaded in Two parts		
	(i.e. Technical & Commercial) separately. Please note		
	that one set of original signed bid must be delivered at		
	NSC, Delhi before the time of opening Technical Bid.		
02	Whether Tender documents carefully studied &		
	understood.		
03	Whether Tender documents duly signed and stamped on		
	all pages is scanned and uploaded as Part – I of the		
	Tender in Central Public Procurement Portal.		
04	Weather Earnest Money of ₹23,700/- submitted by		
	Online / Demand Draft Nodated		
	and Scanned copy of DD uploaded as Part - I of the		
	Tender. Please note that the original DD should be		
	couriered /hand delivered to NSC Delhi / online payment		
	details shall be sent to NSCD before the opening time of		
	Technical Bid.		
05	Whether Declaration regarding Non-relation, duly signed		
	and stamped, and scanned copy of the same uploaded as		
	Part – I of the Tender in Central Public Procurement		
	Portal. Annexure C		
06	Whether Declaration certifying that there is no extra		
	conditions quoted in the Offer Form duly signed and		
	stamped, and scanned copy of the same uploaded as Part		
	– I of the Tender in Central Public Procurement Portal.		
	Annexure C		
07	Did you visit the actual site for execution of the work?		

Date:	Signature of the Tenderer

Place:

Official Seal

General Information and Instructions

- 1. The instructions given herein will be strictly binding on the bidders and deviation, if any will make the tender or tenders liable to be considered invalid. Tenders incorporating additional conditions by the bidder are liable for rejection.
- **2.** Bids shall be submitted online only at CPPP website: https://eprocure.gov.in/eprocure/app Manual bids shall not be accepted.
- **3.** The instructions given in "Annexure-A" for "Instruction for Online Bid Submission" should be strictly followed during submission of the Bid.
- **4.** Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- **5.** An agent of foreign OEM, for submitting the offer on behalf of OEM, would be required to produce a copy of their legal bid agreement with their principal as an Indian agent failing which their bid would be disqualified.
- 6. Bid should be submitted along with the Earnest Money of ₹23,700/- (Rupees Twenty Three Thousand Seven Hundred only) by way of crossed Demand Draft / Pay Order on any of the commercial banks or payment online by NEFT / RTGS payable in favour of "NATIONAL SCIENCE CENTRE", payable at Delhi. Earnest Money deposit in the form of Bank Guarantee /Bond or any other instrument shall not be accepted and shall be rejected straightway. Earnest Money deposits in respect of such offers which are not accepted will be returned to the bidders within 30 working days from the date on which the final decision is taken about the source from which the items under tender are to be procured or within 2 (two) months from the date of the opening of the tenders, whichever is earlier. No interest will be paid on the Earnest Money deposited with the Council. Earnest Money deposit in respect of the successful bidders will be retained with the NSCD until entire execution of the order as per terms of the tender. If the successful bidder fails to execute the order strictly as per the NSCD's drawing & specification in full or part within the stipulated delivery period of the purchase order, the Earnest Money deposit retained with the NSCD shall be forfeited forthwith after cancellation of the concerned order.
- 7. Validity of Bids: The Bids should remain valid for 90 days from the date of opening of Financial Bid.
- **8. Rejection of Bids:** Canvassing by the Bidder(s) in any form, unsolicited letter and post-tender correction may invoke summary rejection. Conditional tenders will be rejected. Non-compliance of applicable General Information and Instructions will disqualify the Bid.
- **9.** The Bidders should have Digital Signature Certificate (DSC) for filling up the Bids. The person signing the tender documents should be authorized for submitting the on line e-tender.
- 10. The Bidders shall fill up the Prescribed Format for submission of **Technical Bid as per** "Annexure F" format duly signed by the authorized signatory. The person signing the tender document should be authorised for submitting the online e-tender.
- **11.** The Financial Bid (BOQ) shall be filled in and signed by the authorized signatory online as per Proforma "Annexure H" available at Central Public Procurement Portal e-tender system website http://eprocure.gov.in/eprocure/app. off line Financial Bid shall not be accepted.

12. DOCUMENTS COMPRISING THE BID:

The bids prepared by the bidder shall comprise of

- (1) The Technical Bid and Technical Presentation (if available)
- (2) Financial Bid (BOQ)

BID: -

Tender must be uploaded in two separate sets- namely set-1 (Technical Bid) and set-2 (Financial Bid). The set-1 will comprise of

Set - 1

- i) "Technical Bid" (as per **Annexure F** format) duly filled in and digitally signed with official stamp. Upload scanned copy.
- ii) All relevant documents related to "Technical Bid" as per "Annexure F". Upload scanned copy.
- iii) The Technical Brochures of each equipment with technical explanation for every feature of the product offered by the bidders. Upload scanned copy.
- iv) The scanned copy of the Demand Draft for ₹23,700/- (Rupees Twenty Three Thousand Seven Hundred only) as Earnest Money Deposit.
- v) The scanned copy of "General Terms & Conditions" (**Annexure-B**) duly signed by the Authorized Signatory with official stamp as a token of acceptance of the bidders.
- vi) The scanned copy of "Technical specifications and Scope of Work" (Annexure-D) duly signed by the Authorized Signatory with official stamp as a token of acceptance of the bidders.
- vii) Scanned copy of Declarations at Annexure C
- viii) Tenderers are required to submit along with the tender in Part-I envelope, details of complete technical specifications, procurement strategy, flow chart of the work, erection strategy and a bar chart on how the work shall be completed within the stipulated time as per Clauses of the General terms and conditions.

Set-2

i) The "Financial Bid (BOQ)" (as per **Annexure** – **H** format) i.e. Schedule of Price Bid in the form of attached Proforma duly filled in and digitally signed

N.B.: -

The bidders shall consider the prevailing tax rates while quoting the rates. However, in the event of any changes in the statutory taxes and duties, the rates applicable at the time of payment shall be made by the competent authority of the NSC, Delhi against submission of supporting documentary evidence.

The Cover-1, i.e. Technical Bid shall be opened by the Centre at the first instance and evaluated by the competent authority of the Centre. At the second stage, the Set-2 containing Financial Bid of only techno-commercially acceptable offers shall be opened for further evaluation and ranking before awarding the contract. Date of opening of the financial (Price) bid shall be intimated to only such vendors who will be finally qualified at technical stage.

- **13.** Authorities of National Science Centre, Delhi do not bind themselves to accept mere lowest tender and reserves the right to reject or accept any or all tenders wholly or partially without assigning any reason whatsoever.
- **14.** Order shall be placed in favour of a single agency considering the total cost arrived based upon **CONSOLIDATED** BOQ as per **Annexure H**.

NATIONAL SCIENCE CENTRE, NEAR GATE NO – 2, PRAGATI MAIDAN BHAIRON MARG, NEW DELHI-110001

TENDER No. NSCD/18011/E-Tender – 30 / 2019 – 20

Instructions for Online Bid Submission

- 1. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.
- 2. More information useful for submitting online bids on the CPP Portal may be obtained at https://eprocure.gov.in/eprocure/app

REGISTRATION

- 1. Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link "Online Bidders Enrolment" on the CPP Portal which is free of charge.
- 2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.) with their profile.
- 5. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC"s to others which may lead to misuse.
- 6. Bidders may then log-in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

- 1. There are various search options built in the CPP Portal to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords, etc. to search for a tender published on the CPP Portal.
- 2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective "My Tenders" folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3. The bidders should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

- 1. Bidders should take into account any corrigendum published on CPPP in connection with the tender document before submitting their bids.
- 2. Please go through the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of sets in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3. Bidders, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF / JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates, etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

- 1. Bidders should log-in to the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidders will be responsible for any delay due to other issues.
- 2. The bidders have to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3. Bidders have to select the payment option as "offline" to pay the requisite Earnest Money Deposit (EMD) and enter detail of the instrument.
- 4. Bidders should submit the EMD as per the instructions specified in the tender document. The original instrument should be posted/couriered/given in person to the Tender Processing Section at the above address, latest by the last date of bid submission. The detail of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5. A standard Price Schedule format (BOQ) has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidders). No other cells should be changed. In case no rate value is required to be quoted in any particular cell, that cell may be kept blank, figure "0" (zero) shall not be entered in such cell(s). Once the details have been completed, the bidders should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidders, the bid will be rejected.

- 6. The server time (which is displayed on the bidders" dashboard) will be considered as the standard time for referring the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 9. Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message and a bid summary will be displayed with the bid number and the date & time of submission of the bid with all other relevant details.
- 10. The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

- 1. Any enquiries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority or the relevant contact person indicated in the tender.
- 2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal helpdesk. The contact number for the helpdesk is 1800 233 7315.

NATIONAL SCIENCE CENTRE, NEAR GATE NO- 2, PRAGATI MAIDAN BHAIRON MARG, NEW DELHI-110001

GENERAL TERMS AND CONDITIONS FOR SUBMISSION OF TENDER for Supply, Installation, Testing & Commissioning of 82.5 KVA DG Set at Sub – Regional Science Centre, Holta, Palampur – 176062, Himachal Pradesh. Tenderers are required to submit along with the tender in Part-I envelope, Details with complete technical specifications, procurement strategy and a bar chart on how the work shall be completed within the stipulated time as per Clauses of the General terms and conditions.

1. Price: The rates quoted/indicated shall include cost of all Equipment, labour supervision and all working accessories, tools and tackles, reliable standard testing equipment, etc. and including all handling charges for Supply, Installation, Testing and Commissioning of the system as specified in Annexure-D "Technical specification and Scope of Work", in the tender document along with warranty (12 Months) of the complete system. The rates of GST and other taxes/levies to be imposed on the cost of the system shall have to be clearly and separately mentioned. Price and rate quoted shall be firm and fixed for the entire period of execution of the work and no escalation of rate on any ground whatsoever shall be allowed. The overall lowest bidder shall be awarded the tender.

The bidders shall consider the prevailing tax rates while quoting the rates. However, in the event of any changes in the statutory taxes and duties, the rates applicable at the time of payment shall be made by the competent authority of the NSC Delhi against submission of supporting documentary evidence.

- 2. The successful tenderer shall submit the following documents within 07 (Seven) days from the date of placement of Letter of Intent.
 - i) Duplicate copy of Letter of Intent duly signed and stamped as a token of acceptance of the work order.
 - ii) Non-judicial stamp paper of appropriate value for preparing the Agreement governing the terms and conditions of the Contract.
 - iii) Security Deposit as detailed in Clause No. 06 of General Terms & Conditions.
- **3. TIME OF COMPLETION:** Time is the essence of the tender. The entire work viz. Supply, Installation, Testing & Commissioning of the system shall be completed in time bound manner. The entire work shall be completed within **30** (**Thirty**) **days** from the date of placement of Letter of Intent.

For non-compliance of any of the above terms and non-delivery of the tendered item complete in all respects within the above stipulated period, the Centre shall either cancel the order or impose penalty as detailed in Clause 4 below. The Centre reserves the right to cancel the order and no payment will be made under such condition. Decision of the Centre in this regard shall be final and binding on the successful tenderers.

4. PENALTY CLAUSE: The successful Tenderer shall strictly observe the time allowed for carrying out the job as detailed in Clause No. 3. The job shall, throughout the stipulated period of the order be proceeded with all the diligence (time being deemed to be the essence of the order) and the successful Tenderer shall pay to the Centre, an amount equal to 1% of the amount of the order value for every week that the delivery may remain incomplete as per delivery schedule as stipulated in Clause no. 3, subject to a maximum compensation of 10% of the order value and after that period appropriate action will be taken by the Centre, as it will deem fit.

The Centre may extend the time of delivery of the tendered job at its discretion on the application of the successful tenderer for such purpose provided that it considers the reasons for such extension as good, sufficient and acceptable.

5. TECHNICAL SPECIFICATIONS AND SCOPE OF WORK: As per Annexure "D"

Before bidding the bidder should strictly gone through the technical specifications and there shall be no deviation in technical specifications contained in the technical bid.

6. SECURITY DEPOSIT: The successful tenderer shall deposit 10% of the gross value of the work awarded, as refundable security deposit after adjusting the EMD already deposited with this NIT, which is to be paid Online or in the form of Bank Draft / Banker's cheque by the tenderer in favour of 'National Science Centre, Delhi' as per Bank Details given in the Tender document. The Security Deposit of the successful tenderer shall be released as mentioned below (**Warranty period shall be 12 Months from the date of final completion of the work / job**). In case the total value of order exceeds the assessed value of the work order, security deposit for the excess amount will also be deducted. No interest shall be paid on the security deposit retained with National Science Centre, Delhi. The Security Deposit of the successful tenderer shall be released after expiry of warranty period.

7. PAYMENT TERMS:

- a) No advance payment shall be made by the Centre under any circumstances. However, interim payment shall be released at the discretion of the Centre on the following:
 - i) Up to 50% payment may be released after supply of the entire equipment / materials at site.
 - ii) Balance 50% (Final) payment shall be released within 30 days from the date of receipt of Tax-Invoice duly supported by receipted challan and satisfactory inspection / work completion certificate from NSCD authority for the entire job.
- b) Payment shall be released through NEFT/RTGS for which details of bank account shall be mentioned in their bill.
- 8. In case, the successful Tenderer refuses to accept the offer after finalization or does not comply with the Clause No. 2 within 07 (Seven) days from the date of placement of the order as per the finalized and accepted terms and conditions, the order shall be cancelled forthwith without any further reference and the EMD will be forfeited.

- 9. **DEFECT LIABILITY PERIOD / WARRANTY PERIOD:** The Warranty/ Defect Liability period shall be **12 Months** from the date of certification of the completion of satisfactory installation and commissioning of the system. The successful tenderer shall be responsible for all defects of the installed equipment or other defects of equipment supplied, etc. for a period of One year from the date of satisfactory completion of the installation and commissioning of the system. The successful tenderer, shall at their own cost, rectify the defects and or replace the defective parts/equipment, up to the complete satisfaction of the competent authority of the Centre.
- **10.** Clauses of the conditions of contract will be part of agreement between Museum / Centre and the successful tenderer.
- 11. The contractor must visit the site before quoting his rates in the tender and acquaint himself with site conditions thoroughly. No claims for additional payments would be entertained arising out of contractor's ignorance of site conditions.
- **12.** The rate quoted by the contractor shall include all labour, materials, etc. for executing and completing the work. He should also include in his rate all taxes, duties, freight, etc.
- 13. The contractor should quote balanced rate. Quantities given in the schedule are tentative and may vary up to any extent. The Museum/Centre reserves the right to execute or to delete any item or increase or decrease any quantity or quantities of the bill of quantities. Rates quoted in the tender shall be binding for all such variation in quantities.
- **14.** Materials to be used in the work shall conform to I.S. specification, if otherwise, not stated specifically.
- 15. Any deviation from the tender specification, coming as extra or substituted item which are not covered in the tender items need approval of the competent authority of the Museum/Centre. The rates for extra/new/substituted items of work shall be derived from the contract items as far as practicable and rates which cannot be derived from the contract will be fixed on the basis of actual cost of materials and labour plus 10% as contractor's overhead and profit.
- **16.** If the work is suspended by the contractor or unduly delayed without obtaining extension of time, the museum/Centre will serve a notice giving 30 days of time and thereafter the incomplete work will be carried out by engaging other agency and in such cases the difference in cost has to be borne by the contractor.
- 17. The contract can be terminated by both parties after giving one month written notice to the other. In case of contractor serving the notice, his entire retention money including earnest money will be forfeited and his payment will be determined on actual measurement basis on the date of termination of contractor.
- **18.** In case of any dispute arising between the contractor and the Museum/Centre, the matter shall be referred to the sole arbitration of a person nominated by the Director General, National Council of Science Museums, whose decision in this regard shall be final and binding on both the contractor and the Museum/Centre.

- 19. Without prejudice to anything contained herein the contractor shall indemnify the Museum/Centre against all claims for compensation under the provision of the Workmen's Compensation Act, 1923 (VIII of 1923) by or in respect of any workmen employed by the contractor in carrying out his contract and against all cost and expenses incurred by the Museum/Centre in connection with any such claims and without prejudice to any other means of recovery, the Museum/Centre shall be entitled to deduct from any money due or to become due to the contractor (whether under this contract or under any other contract) all money paid or payable by the Museum/Centre by way of compensation aforesaid or incurred for costs or expenses in connection with any claim as aforesaid and the contractor agrees that the decision of the Museum/Centre as to the amount payable by the contractor under the provisions of the clause shall be final and conclusive.
- **20.** The Contractor shall also strictly comply with all the provisions of Contract Labour (Regulation and Abolition) Act 1970 and the contract labour (Regulation and Abolition) Central rules 1971 in respect of this contract.
- 21. Every effort should be made to complete the work by the successful Tenderer within the specified time schedule. In case the successful tenderer fails to comply with Clause No. 3 i.e., the specified time schedule as per the finalized and accepted terms and conditions the Centre shall have the rights to either impose Penalty Clause or cancel the order forfeiting the EMD. The decision of the Centre in this regard shall be final and binding on the successful Tenderer.
- 22. The successful Tenderer shall submit necessary trade / work and other licenses as may be required to carry on the specifically tendered job and shall also be responsible for compliance at his/her own cost of all rules and regulations, enforced from time to time by the appropriate authorities. Failing to submit necessary trade / work & other licenses, leads to reject the tender without any prior information.
- **23.** The successful Tenderer shall not under any circumstances whatsoever transfer wholly or partly the contract/agreement/Purchase Order to any other person(s)/firm/company or assign the agreement or benefits of this agreement to any other party for any reason whatsoever. Otherwise the order/agreement will automatically stand cancelled.
- **24.** The authorities of NSC Delhi do not bind themselves to accept the lowest tender and reserves the right to accept or reject any or all tenders wholly or partially without assigning any reason whatsoever.
- **25.** The authorities of the Centre, reserve the right to amend, alter or modify the terms and conditions mentioned above, if necessary, from time to time.
- **26.** Income Tax and Work Contract Tax shall be deducted at source, if applicable, from each bill/claim of firm as per prevailing Government rules.
- **27.** Incomplete offers, i.e. offers received without prescribed "General Terms & Conditions" & Technical Specifications" shall be rejected straightway without reference to the tenderer.

- **28.** The agency must have valid GST/TIN/WCT/PAN number and attach documentary proof with the Tender. Bidders are requested to enclose a copy of their valid certificate of PAN/ TAN/GST or any other document as requested by the Centre with their tender.
- **29.** The agency shall take care of all statutory obligations as are required under the Contract Labour Regulation Act, etc.
- **30.** The agencies participating in the tender and bidding, may obtain on specific request, details about the outcome of the tender and other related details, if any.
- **31.** National Science Centre will not be liable for any injury or death of an employee who is deployed by the successful bidder within/outside the work site during the time of execution of the work order.
- **32.** All disputes and differences between the successful tenderer and the Centre of any kind, except quality of workmanship and materials, whatever arising out of or in connection with the order on carrying out of the work (whether during the progress of the work or after their completion and whether before or after the determination, abandonment or breach of the terms and conditions of the order) shall be referred to the sole arbitration of a person nominated by the Director General, National Council of Science Museums, whose decision in this regard will be final and binding on both the parties the successful Tenderer and the Centre.

The provisions of the Arbitration and Conciliation Act 1996 or any statutory modification or reenactment thereof and of the rules made there under for the time being in force shall apply to arbitration's proceedings under this Clause.

NATIONAL SCIENCE CENTRE

(National Council of Science Museums) Bhairon Road, Near Gate No.2, Pragati Maidan, New Delhi - 110 001

DECLARATION – I

This is to certify that I/We have no close relative as an employee of the National Council of Science Museums (close relatives means: Father, Mother, Brother, Sister, Son, Daughter and Spouse) nor any such close relatives are associated with us as proprietor/partner/share holder/director and like.

Address:	Signature of the tenderer
	Official seal with date

DECLARATION – II

We, do hereby accept the General Terms and Conditions as provided by the National Science Centre, Delhi along with tender documents for **Supply, Installation, Testing & Commissioning of 82.5 KVA DG Set at Sub – Regional Science Centre, Holta, Palampur – 176062, Himachal Pradesh,** and also undertake to execute the job strictly as per the specifications of NSC, Delhi as provided along with the tender documents. National Science Centre, Delhi shall be at liberty to cancel the order in full or in part and forfeit the Earnest Money Deposit or Security Deposit retained with them in the event of failure of any of the declaration made by us.

Signature of the tenderer / Constituted Attorney

(With date and Official Seal)

SCOPE OF WORK UNDER THE CONTRACT

Design, Manufacture, Supply, Installation, Testing and Commissioning of 1 no. of 82.5 KVA, 415V,3 phase, 50 Hz silent type (having acoustic enclosure) Diesel Engine Driven Generating Set at Sub Regional Science Centre, Holta, Palampur, Himachal Pradesh in conformity with specifications, terms and conditions of contract & local regulations.

The scope shall cover the following: DG set will comprise of the following:-

The scop	pe shall cover the following: DG set will comprise of the following	g:-
1	Diesel Engine as per specifications	1 No.
2	82.5 KV A Alternator as per specifications	1 No.
3	Common base frame for engine and alternator as per specifications	1 No.
4	Lead acid batteries.	1 Set
5	fuel tank as per specifications	1 No
6	Fuel oil piping, etc	As required
7	All power and control wiring between DG set, control panel, batteries, safety controls, Distribution panel etc.	As required
8	Acoustic enclosure as per specifications	1 No.
9	Power distribution panel as per specifications	1 No.
10	Earthing pits for body earth as per specifications	1 Nos
11	Earthing pits for neutral as per specifications	1 Nos
12	Earthing tape for body earthing of DG set.	As required
13	Earthing tape for neutral from pits to Alternator	As required
14	Vibration pads etc	As per requirement
15	Connections and jointing of cabling from power distrubution panel to existing panels where cables of building are connected. To provide supply to user point	As per requirement
16	Civil work (foundation etc) for DG set.	As required
17	1	
18	The contractor shall furnish operation & maintenance manuals in triplicate along with the schematic drawings of all the panels and controls protections etc. etc. after installation of the DG sets. One set of special tools required for each DG set shall be supplied at the time of handing over of the set to the Sub Regional Science Centre, Holta, Palampur, Himachal Pradesh.	
19	Operation of the Set After Installation. The contractor shall arrange to depute a senior operator to the site of works to operate the DG set for a minimum period of 3 working days at location of installation after successful installation & approval of the installation by the local authorities. The operator shall impart training to the Sub Regional Science Centre, Palampur	
	operator/technicians in proper operation & up-keep of the DG se	et

20 Completion Drawings

On successful completion of the installation & before issuance of certificate of virtual completion, the contractor shall prepare & submit to the Sub Regional Science Centre, Holta, Palampur, Himachal Pradesh. as "built completion" drawings of the entire installation. The completion drawing shall include:

- 20.1 Layout of DG set and accessories.
- 20.2 Exhaust arrangements.
- 20.3 Fuel oil tank and piping.
- 20.4 | Electrical Schematic, control Schematic, cable layout, panel GA drawings etc. Location
- 20.5 of earth pits and details of earthings including neutral earthing
- Painting of all the materials/equipment etc., shall be painted with two coats of approved quality paint over a coat of primer after the installation is completed
- 22 Testing

22.1 DIESEL GENERATOR SET:

The following test shall be conducted on alternator and DG set:

Factory test:

The factory test shall incorporate the following:

- a. Routine tests.
- b. High voltage tests.
- c. Short circuit current tests.
- d. Instantaneous short circuit withstand test.
- e. Insulation resistance test.

These tests shall be conducted as per the requirement of BS: 2613 or IS: 4722 and the original test certificates shall be furnished.

Site tests:

After the erection, wiring and earthing of DG set, the following Tests shall be conducted:

- a) Insulation resistance of the generator.
- b) Speed, no load voltage & full load voltage regulation.
- c) Frequency at no load, half load & full load.

The readings shall be observed with calibrated meters in presence of authorized representative of Sub Regional Science Centre, Holta, Palampur, Himachal Pradesh. Only one meter shall be used for the test. The readings should be properly tabulated submitted in triplicate.

TESTING OF CONTROLS

All the safety controls and protective devices of the DG set shall be tested for correct calibration and operation. The results of the tests shall be tabulated & submitted in triplicate.

LOAD TESTS

Complete DG set is to be tested for no load, 25% load, 50% load, 100% load and for over loading, load is to be provided by contractor and test report of oil consumption, fuel consumption etc. along with per unit consumption of fuel at different loads is to be submitted in triplicate. First fill of fuel, oil, lubricating oil etc. including cleaning and flushing out the system is to be carried out by the contractor. Fuel and oil for testing and trial run for at least 10 hours is to be arranged by the contractor till the final commissioning.

Any other item of work necessary to achieve the desired functionality of equipment and systems as per CPWD General specifications for electrical works, part VII (D.G. Sets) 2013.

TECHNICAL SPECIFICATIONS

DIESEL GENERATING SET COMPRISES OF:

A. DIESEL ENGINE: (noiseless with salient feature)

Developing 105 BHP 82.5 KVA, Liquid cooled, vertical, totally enclosed, electric start, compression ignition, 4 cylinder, 4 stroke designed to run continuously at 1500 RPM complete with:

- i) Radiator cooling with fan and fan guard.
- ii) Flywheel with starter, ring etc.
- iii) Dry type Air cleaner
- iv) Vacuum indicator
- v) Electronic governor
- vi) In line fuel pump
- vii) Water pump
- viii) Lube oil pump
- ix) Exhaust gas driven turbo charger
- x) Fuel filter
- xi) Centrifugal oil filter
- xii) Lube oil cooler
- xiii) Lube oil filter
- xiv) 12 V electric start system complete with battery charging alternator. An electronic engine control panel consisting of ON/OFF key with start, stop switch and other safety parameters such as:
 - a) High water temperature
 - b) Low lube oil pressure
 - c) High lube oil pressure
 - d) Low speed
 - e) High speed
 - f) High Cylinder head temperature.

B. INSTRUMENT PANEL FOR ENGINE:

Integral mounted complete with wiring & connections & comprising of:

- i) Starting switch with key.
- ii) Lube oil temperature gauge.
- iii) Lube oil pressure gauge.
- iv) Water temperature gauge. .
- v) Battery charging ammeter.
- vi) Over speed stop.
- vii) Electronic hour counter.
- viii) RPM indicator.
- ix) Visual Alarm to pin point the fault on tripping.

C. ALTERNATOR:

82.5 KVA Alternator brush less type, 3 phase 4-wire system delivering full load at 1500 RPM 0.8 lagging power factor at 415V, 50 hz. The Alternator shall be in SPDP enclosure. The Alternator shall be of synchronous type self-excited self-regulated foot mounted with self-lubricated high-grade ball and roller bearings at end shields. Alternator and Engine shall be rated as per CPWD norms. The alternator shall conform to IS: 4722/BS-5000 and will be suitable for tropical conditions:

D. BASE FRAME:

Skid mounting type base frame fabricated from suitable size M.S. channel providing common bed for engine and alternator directly coupled together as per manufacturer design. The base frame shall have provision for grouting on foundation bolts as well as fixing on Anti- vibration mounts. Provision is made in base frame for lifting arrangement of DG set including suitable nos. of AVM pads.

E. FUEL TANK:

As per supplied by the Manufacturer.

F. BATTERIES:

As per supplied by the Manufacturer.

G. COUPLING WITH COUPLING GUARDS:

Flexible coupling as per manufacturer's recommendations to directly couple alternator to engine. The coupling is designed to transmit power with minimum losses and absorb jerks. Coupling guard is also to be provided for protection.

H. CIVIL WORKS

PCC / RCC foundation suitable for DG set will be as per BOQ specification. PCC foundation, trenching work for cables shall be in the scope of the tender.

I. ACOUSTIC ENCLOSURE:

The enclosure should be fabricated using high-grade cold rolled annealed (CRCA) sheet having 2mm thickness & steel members. High-density sound absorption material is used to reduce the sound level minimum 75 DBA at a distance of 1 meters away from the set. The enclosure is surface treated and painted with high quality polyurethane epoxy paints with prior Zink Oxide primer base, which makes it weather proof and suitable for out door application. The enclosure is provided with durable industrial locking system with doors duly gasketed. The acoustic enclosure consists of following.

a) Acoustic Insulation:

High-density resin bonded 96kg/m3 density Rock Lioyed fibre glass should be provided on all five sides including door, roof and base to absorb noise. The insulation is covered with fibreglass cloth and is supported by perforated sheet. Sound attenuates/down stream silencers are provided at all openings for air inlet/outlet to facilitate free air flow but to absorb sound resulting in extremely low noise level. Detachable partitions are provided inside the enclosure to attain further noise attenuation of engine.

b) Noise Suppressor:

A suitably designed residential type noise suppressor should be provided which minimizes the exhaust noise of the engine.

c) Exhaust System:

The exhaust gas should be out through a specially designed flexible pipe, which prevents any back pressure on the engine and shall be covered with glass wool and cladded with aluminum sheets to avoid heating of DG set chamber.

d) Thermal Insulation:

The exhaust system and noise suppressor should be provided with thermal insulation by using glass wool & cladding it with aluminium sheet. Residential type of silencer is to be provided which is to be isolated from main DG chamber to avoid excess heat in generator set operational area.

e) Air Circulation and Ventilation System:

A suitable forced air circulation and ventilation system should be designed to maintain safe operating temperatures inside the enclosure. Requisite air circulation should be provided by means of exhaust fans and or tube axial flow blower(s) as per requirements.

f) There should be a high temperature safety device to be installed inside the canopy to prevent any damages to the DG set due to rise in temperature.

g) Internal Lighting:

The DG set chamber shall be fitted with internal lighting system for easy maintenance, for which cabling etc. is to be provided by the contractor.

J. EARTHING PITS FOR NEUTRAL EARTHING:

Providing earth station as per BOQ.

K. EARTHING PITS FOR BODY EARTHING:

Providing earth station as per BOQ.

L. POWER CABLING END BOX AND TERMINA TIONS:-

Distance from building to DG set is approximately 50 mtrs. Accordingly rates may therefore be quoted for supplying and laying of 1 nos. of 3-1/2 core 185 mm2 aluminum conductor PVC insulated, PVC sheathed steel armored cable up to 25 mtrs. in suitable trench, including providing end box, terminations and making terminations at both side. However tenderer may also quote per mtr. rate for extra cable. Extra cable supplied by tenderer may be billed.

Supplying installation and connection of suitable changeover switch (minimum 400 Amp) in appropriate enclosure for further feeding to existing main panel ACB is in the scope of work.

M. CONTROL PANEL:-

The control panel is manufactured with 14/16 gauge CRCA sheet and is powder coated foe a weather proof and long lasting finish. The control panel consists of the following common parts.

- Aluminium bus bar for suitable capacity with incoming and outgoing termination.
- Current transformer
- Indicating lamps for "load on" and " set running".
- Instrument fuses duly wired and ferruled.
- MCCB of suitable rating with overload and short circuit protection.
- Power command gen set controller: for true power system reliability, flexibility, and ease of use.

N. PERFORMANCE OF DG SET:

Voltage regulation:

Plus or Minus 2%. Rheostat shall provided by the party for regulating plus or minus 5% voltage adjustment.

O. LIST OF ACCEPTABLE EQUIPMENTS & MATERIALS:

APPROVED MAKES FOR E/A SET

- 1 **ENGINE** Cummins/ KEOL / Ashok Leyland / Volvo
- **2 ALTERNATOR** Kirloskar / Stamford/ Crompton Greaves
- **4 MCCB** L&T / Siemens / Control & Switchgear / Crompton / GE Power Controls/Schneider
- **5 LEAD ACID BATTERY** Exide *I* Stanford *I* Furukawa *I* AMCO *I* Pacesetter *I* NICCO / Prestolite *I* Standard/Crompton/ Greaves/Hitachi
- 6 Cables Havells/Polycab
- P. Any other technical specifications necessary to achieve the desired functionality of equipment's shall be referred to CPWD General specifications for electrical works Part VII (DG Set) 2013.

SPECIAL TERMS AND CONDITIONS (STC)

1.0 During Manufacture

The contractor shall arrange for inspection of his equipment/machinery by the Sub Regional Science Centre, Holta, Palampur, Himachal Pradesh at his work, if such inspection is desired by the National Science Centre, Delhi specifically called for in writing before or after the work is awarded.

2.0 Transportation/Insurance:-

The prices shall include all packing, forwarding, transportation & insurance charges from the contractor's works to the site at Sub Regional Science Centre, Holta, Palampur, Himachal Pradesh. The charges for loading unloading handling etc. shall also be included in the prices.

3.0 Site Engineer/Supervisor

The contractor shall depute a site engineer & supervisor to site of erection to direct & supervise the work as per drawings & specifications. The site engineer shall be available at all times for receiving instructions from the Sub Regional Science Centre, Holta, Palampur, Himachal Pradesh. The site engineer shall also attend all site meetings & co-ordination meetings & arrange to carry out work smoothly as per the agreed time schedule. Any instruction given to the site engineer/supervisor shall be construed as if the same is given to the contractor.

4.0 GUARANTEE/DEFECTS LIABILITY/WARRANTY

The contractor shall guarantee that all equipment shall be brand new & shall be free of any defects due to defective materials and bad workmanship and that the performance and efficiencies of the equipment shall not be less than the guaranteed values. The guarantee shall be valid for a period of 12 months after handing over and any parts found defective shall be replaced free of all costs by the contractor. If the performance during guarantee period is not satisfactory, the guarantee will be extended, till satisfactory performance is established for a period of 12 months during which the performance should be found absolutely satisfactory.

National Science Centre (National Council of Science Museums) Near Gate No- 1 Pragati Maidan New Delhi -110001

Bill of Quantities

Name of work : SITC of 82.5 KVA Gen. set at Sub – Regional Science Centre, Holta, Palampur – 176062, Himachal Pradesh.

S.No	Description	Unit	Qty.	Rate	Amount
1	Design ,manufacture, supply, installation,testing, commissioning of 82.5KVA 4wires,3 phase, 50 Hz silent type(having acousite enclosure) Disel Engine Driven generating set including fuel tanks, control panel including gen set controller and suitable MCCB switch as per specifications/scope of work given in tender at Sub Regional Science Centre, Holta Palampur	1 set	1	750000.00	750000.00
2	Supplying and laying LT PVC insulated armoured/XLPE cable 1100 V.grade Stranded Aluminium conductor with I.S.I. Mark of following sizes in underground trenches or pipe provided in an approved manner incl. required glands & lugs as per specifications given in tender (cost of gland and lugs will be paid separately).				
a	3&1/2 core 185 Sq.mm.	RMT.	60	1376.00	82560.00
b	Making trenches in ordinary soil with required width and 0.9 mtr depth for laying already provided L.T cable & embedding the same with screened sand bed of 20 cms. Thick, Bricks placed length wise on top of the cable all lover the run and back filling the excavated earth in layers of 20 cm depth without stones or hard material and making the surface proper with 15 cms. crown on the top as per IS 1255.	RMT.	30	223.00	6690.00
3	Termination of above cables by supplying &				
	erecting heavy duty Siemens type brass cable glands with brass washers rubber rings complete erected with cable ends & leads connected and Supplying and erecting crimping type aluminium lugs of required capacity conforming to I.S. specification as given below:-				
a	3&1/2 core 185Sq. mm. PVC'A'/XLPE				
	armoured cable	No	2	850.00	1700.00

4	EARTHING				
a	Supplying, erecting, testing & commissioning copper plate earthing station with copper plate of size 60 x 60 x 0.6 cms. buried in specifically prepared earth pit so as to keep top of earth plate 1.5 mtr. below ground with 30 kg. each of charcoal and salt with alternate layers of charcoal and salt with 25 mm.dia. G.I. pipe & funnel with a wire mesh for watering and brick masonary chamber and C.I. cover complete with necessary length of copper strip of 25mm x 5mm size brazed/bolted with lugs to the plate and covered in suitable dia. G.I. pipe 2.5 mtr. long complete connected to the nearest switchgear with end socket as per directions and duly tested by earth tester and recording the results.				
	For alternator Neutral	Each	1	14854.00	14854.00
b	Supplying, erecting, testing & commissioning GI plate earthing station with galvanised iron earth plate of size 60 x 60 x 0.6 cms. buried in specifically prepared earth pit so as to keep top of earth plate 1.5 mtr. Below ground with 30 kg. each charcoal and salt with alternate layers of charcoal and salt with 25 mm.dia. G.I. pipe & funnel with a wire mesh for watering and brick masonary chanmber and C.I. cover complete with necessary length of G.I. earthing strp of 25X5 mm bolted with lug to the plate and covered in suitable dia. G.I. pipe 2.5 mtr. long complete connected to the nearest switchgear with end socket as per directions and duly tested by earth tester and recording the results. for D.G. set body earthing.	Each	1	7423.00	7423.00
С	Supplying at site copper strip of 25x5mm size used for earthing	RMT	10	853.00	8530.00
d	Supplying at site G.I.strip of 25x5mm size				
	used for earthing	RMT	10	131.00	1310.00
5	Supplying of rotary type manual pump with suitable G.I pipe on suction side and 5metre nylon braided hose pipe on discharge side	Each	1	2500.00	2500.00
6	Supplying at site 200 litre capacity of HSD filled barrels (including cost of barrels)	Each	2	15000.00	30000.00
7	D.G. set foundation				
a	excavation for foundation in ordinary soil including back filling the excavated earth as required and levelling excess	Cum	3.8	252.30	958.74

b	Providing and laying PCC 1:4:8 (1cement, 5 coarse sand, and 10 stone chips 40 mm size)				
	for base concrete of foundation	Cum	0.5	5789.60	2894.80
С	Providing and laying RCC 1:2:4 (one cement, two coarse sand, and four stone chips 20mm size) with cost of necessary shuttering, excluding cost of re-inforcement for				
	foundation of D.G. set	Cum	3.8	6838	25984.4
d	Providing reinforcement including cutting, bending, binding and placing in position for RCC foundation with tore steel / TMT bars	Kg	110	83.5	9185
			Tot	al Cost (Rs)	944589.94
				Say Rs	944590.00

(Rupees Nine Lakhs Forty Four Thousand Five Hundred Ninety) only

Signature with date and stamp

NATIONAL SCIENCE CENTRE

(National Council of Science Museums) Bharion Road, Near Gate No. 2, Pragati Maidan,

New Delhi-110001

TENDER No.: NSCD/18011/E-Tender – 30 / 2019 – 20

TECHNICAL (Techno-Commercial) BID

Notes: ALL PARTICULARS / INFORMATIONS SHOULD BE GIVEN IN THE FOLLOWING FORMAT WITH COMPLETE DETAILS.

- 1. Name & Address of the Firm/Bidder :
- 2. Telephone Number :

Office :

- 3. i) Background details of the firm (State whether original manufacturer/direct Dealer of the manufacturer)
 - ii) In case of direct dealers, submit copy of valid dealership license issued by the manufacturer.
- 4. State the Name of the Banker including IFSC Code: and Account Number of the Tenderer for releasing digital mode of payment.
- 5. Past experience in such business for last 3 years giving details of established clients especially Government Offices. Submit satisfactory certificate issued by such clients and Government Offices.
- 6. i) Whether capable to execute the tendered item strictly as per enclosed technical specification. (Please mention 'YES' or 'NO')
 - ii) If it is mentioned 'NO' above, submit detailed deviation to be made from the enclosed technical specification.

(Extra sheet may be attached, if required)

iii) If it is mentioned 'YES' above submit copies of product brochure (for product categories) as a proof of their statement.

- 7. State the Name & Address of the Manufacturer whose product has been offered /quoted by the tenderer.
- 8. Proof of financial status of the company/audited Balance Sheet for last 3 years indicating total turnover as well (submit documentary evidence.)
- 9. Whether agreed to accept 30 days' credit Payment Terms. : (Please mention 'Yes' or 'NO')
- 10. Minimum time required to complete the tendered item at SRSC, Holta, Palampur (HP)
- 11. Mention GST Registration Number and attach
 Current valid Tax Clearance Certificate.
- 12. Whether agreed to complete commissioning of the tendered items as per enclosed Specification (Annexure-D) positively by 30 days and failing which ready to absorb heavy penalty, if any order is placed on the bidder after observing tender procedure. (Please mention 'YES' or 'NO')

I/We hereby declare that the above statements are true. I/We also declare that the decision of National Science Centre, Delhi regarding selection of eligible firms for opening of Financial Bid (Part-II) shall be final and binding on me/us.

Dated Official Seal Signature of the Tenderer/Constituted Attorney

ANNEXURE – G

BANK DETAILS OF NATIONAL SCIENCE CENTRE, DELHI

Name of the Account Holder	NATIONAL SCIENCE CENTRE, DELHI
Account No.	2417101004100
Bank Name	CANARA BANK
Bank Address	6, Bhagwan Das Road, New Delhi
IFSC Code	CNRB0002417
MICR Code	110015045
Type of Account	Saving Account
Branch Code	2417
GST Number	07AAAAN2541C1Z5