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सत्यमेव जयते

Government of India
Bhabha Atomic Research Centre
Reactor Design and Deveplopment Group (RDDG)
Reactivity Control Mechanism Section (RCMS)

Ref: RCMS /CBK/INQ/2018/223 Date: September 11, 2018

Sub: Minor Fabrication - Invitation of Quotation.

Assembly, wiring and testing of reactivity control mechanisms for 'NRFN' as per tender specification.

Dear Sir,

1. Quotations are invited for assembly wiring and testing of reactivity control mechanism for 'NRFN' as per tender specification.
2. Taxes and Excise duties if any shall be quoted separately. Form AF/H whichever is applicable shall be provided, if required.
3. Bidder shall quote for above job, which is to be done at full-scale test station, high bay area Tower wing, Fab. Shop, RCnD building and DRHR building, BARC.
4. The quotation must reach Head, RCMS, BARC by **22.09.2018** and must be sent in a sealed envelope superscribed with the **reference number & the due date given above.**
5. The address on the envelope should read:
   Head, RCMS (RDDG)
   DRHR Office, IInd Floor
   BARC, Trombay,
   Mumbai - 400 085
   (Attn.: Shri C B Kothari, SO/E)
6. Head RCMS, BARC reserves the rights to accept / reject any or all quotations without assigning any reason.
7. Incomplete offer / offer received after the due date shall not be considered.
8. Quotations should be preferably neatly typed and any corrections in the offer are not acceptable.
9. Quotation must also indicate the validity of offer.
10. Quotation must be sent by speed post/registered post.
11. Quotation received in computer-generated form shall not be acceptable. Quotation must be submitted in printed letterhead, mentioning clearly GST registration No., PAN No. & Service Tax Registration No. Submission of Challan and Invoice shall also comply the same, in case wok order is placed.

Encl.: Tender specification.

Head, RCMS
RDDG

ANNEXURE
Technical Specification

Assembly, wiring and testing of reactivity control mechanisms for 'NRFN' as per tender specification

1. Scope:

This specification gives the job description, general requirements covered under above enquiry.

2. Requirement:

Reactivity control mechanism is used for reactor shutdown and regulating system. It utilises control cum shut off rod drive mechanism (CSRDM) for control of the reactor. Full scale Test station is available in RcnD building, high-bay area for the testing of prototype reactivity control mechanisms being developed at RCMS, BARC. This job mainly consists of assembly, wiring and testing of its components. This job will be carried out at high bay area, fabrication shop, RCnD building. All the parts/ sub assemblies are required to be assembled at this location. This job requires cleaning, fitting and assembly of the components.

3. Job Description:

- Assembly of Test Station:

  Full scale Test station is required for calibration and testing (performance/life cycle testing) of reactivity control mechanisms under simulated reactor operating conditions. This consists of following major parts:

  1. Fork type dummy absorber plates.
  2. Mechanism Trolley top
  3. Cage simulating control fuel assembly
  4. Tank assembly

- Assembly of Shut off Rod Drive Mechanism:

  Drive mechanism assembly consists of following sub-assemblies:

  1. Drive motor unit.
  2. EM Clutch unit
  3. Reduction Gear Unit
  4. Rack & pinion subassembly
  5. Dashpot sub-assembly
  6. Potentiometer sub-assembly
  7. Limit switch sub-assembly

4. Location of work: Tower wing, Fab. Shop, RCnD building and DRHR building, BARC.

Head, RCMS
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5. QS and inspection:

5.1 All work carried out by the contractor (as per tender specification at BARC) shall be subjected to inspection by our representative all the time.

5.2 Contractor's personnel shall carryout the said job at BARC maintaining all safety aspects.

6. Job Completion Period:

Above Job should be completed within the **5 months** period from the date of the firm work order is issued to the bidder. Any delay which is attributable to the contractor is liable for penalty @ ½ % per week (max 5 %) to be imposed on the contractor.

7. Guarantee:

Job should be completed along with the guarantee certificate for its one year (from the date of supply) of trouble free operation.

8. Sub-contract:

The contractor shall not sub-contract any or all the work without written consent from the purchaser. The fabricator shall be responsible to the purchaser for all work the sub-contractor of the fabricator, if allowed by the purchaser.

9. Payment:

Payment of the above work order shall be made after satisfactory completion of job and on production of bill, advance stamped receipt and guarantee/warranty certificate.

10. Income tax:

Income tax at the rate of 2 % will be deducted from the bill amount. While submitting the bill party should furnish their PAN No., Service Tax/sales Tax/VAT registration No.

11. Confidentiality clause:

11.1 No party shall disclose any information to any third party concerning the matters under this contract generally. In particular, any information identified as 'Proprietary' in nature by the disclosing party shall be kept strictly confidential by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party. This clause shall apply to the sub-contractors. Consultant's advisers or the employees engaged by the party with equal force.

11.2 The supplier/contractor or sub-contractor, consultant, adviser or the employees engaged by the contractor shall not use BARC's name for any publicity purpose through any public media like Press, Radio, TV or Internet without the prior written approval of BARC.

11.3 Any contravention of the above mentioned provisions under Para 4.1 0 and 4.11 by any supplier/contractor, sub-contractor, consultant, adviser or the employees of a supplier will invite penal consequences under sec. 18 of Atomic Energy Act and 'Official Secrets' under sec. 5 of Official Secrets Act.

Head, RCMS
RDDG