दूरबाध ; TELEPHONE : तर : बार्क-भुंबई, घेन्दुर, TELEGRAMS: BARC-MUMBAI, CHEMBUR. टेलेक्स : ०९१-६ १०९७/०९१-६ १०२२ बार्क ईन TELEX: 011-61017/011-61022 BARC IN फेक्स संस्था : 91—22—550 5151 FAX NUMBER: 91-22-5505151



ट्रॉम्बे, मुंबई-४०० ०८५. TROMBAY, MUMBAI-400 085.

#### भारत सरकार GOVERNMENT OF INDIA भाभा परमाणु अनुसंधान केन्द BHABHA ATOMIC RESEARCH CENTRE

# Research Reactor Design and Projects Division

Ref: RRDPD/HFRR/FLS/30594 /2022

Dt: 07-02-2022

# **Tender Enquiry**

Subject: Technical Support for Fuel locking Mock up test facility at CIRUS for developmental and testing activities under HFRR, RRDPD.

Sir,

Sealed quotations, in two parts in the prescribed format, are invited for and on behalf of the President of India for "Technical Support for Fuel locking Mock up test facility at CIRUS for development and testing activities under HFRR, RRDPD"

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## 1.0 TECHNICAL SPECIFICATIONS:

Fuel Locking Facility consists of 9 Fuel positions with hydraulically operated locking mechanism. It requires daily removal of some mechanical parts heavy flange top cover, purging N<sub>2</sub> cylinder, changing/replacing of hydraulic hoses. Finding system leakages troubleshooting and solving the same. It also involves instrumentation and control system which require periodic maintenance. Experimental set up require frequent shifting of material and components from one place to other as per daily requirement. It includes making proper arrangement and plan for safe material handling. Skilled, unskilled staff should understand the working of monorail, chain pulley blocks available at HFRR - Fuel locking Mock up test facility at CIRUS reactor hall. Work has to be completed as per technical specification & terms and conditions given in work order.

Scope of work & Quantity: The scope of work includes the followings:

| S.<br>No. | Description   | Quantity                 |
|-----------|---|--------------------------|
| 1.        | Dismantling and Installation of solenoid valves, flanges and fittings     | 400 Nos.                 |
| 2.        | Fixing of Supports  | 50 Nos.                  |
| 3.        | Daily Removal and installation of Fuel Locking mockup facility Equipments | 80 Equipments<br>(Total) |
| 4.        | Cleaning of equipment Machines, and piping                                | 200 Nos.                 |
| 5.        | Shifting of material /equipment/structure                                 | 60 Nos.                  |
| 6.        | Daily Housekeeping of plant Area  | 2000 m <sup>2</sup>      |

#### 2.0 GENERAL TERMS AND CONDITIONS

- a) You may contact Shri. Pushpendra Hazari, SO/D, RRDPD on Tel no. 022 25596296, arvindk@barc.gov.in SO/G, RRDPD, 25596213, for technical queries and clarification if any.
- b) Mention GST & PAN number in your quotation, otherwise quotation will be invalid
- c) Price quoted shall be filled up in the format given in Annexure-A of the detailed tender document with applicable Goods & Services Taxes if any shown separately. No other charges will be payable.
- d) Quotations received with prices given in any format other than Annexure-A will be rejected.
- e) The offer should be valid for consideration for at least 60 days from due date of the offer.
- f) Quotation received after the due date and time shall be summarily rejected.
- g) Please indicate whether any of your relatives are employed in BARC or you or any of your employees were employed in BARC or any other units of DAE.

- h) Only experienced manufacturers/fabricators will be considered for evaluation of the bids.
- i) The progress of work will be reviewed periodically. If the work is not carried out by the contractor satisfactory (in terms of performance and time) and any deficiency is noticed, recovery towards the deficiency will be made from the contractor's bill.
- j) Department (BARC) reserves the right to terminate the contract at any stage of execution of the contract, without assigning any reasons.

#### 3.0 VENDOR EVALUATION CRITERIA

- 1) Vendor Should have security vetting from BARC. Entry permit (like CEP, TEP etc.) will not be made by BARC.
- 2) Outsourcing of work is not permitted.
- 3) Worked at-least 3 years as Rigger, Helper for BARC or for any similar industry.
- 4) Vendor needs to submit supporting documents for working in DAE.

#### 4.0 CONFIDENTIALITY CLAUSES.

- Confidentiality: No party shall disclose any information to any third party concerning the matters under this contract generally. In particular, any information identified as "Propriety" 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, consultants, advisers or the employees engaged by a party with equal force.
- II. "Restricted information" categories under Section 18 of the Atomic Energy Act, 1962 and "Official Secrets" under Section 5 of the Official Secrets Act, 1923:-
  - Any contravention of the above –mentioned provisions by any contractor, sub-contractor, consultant, adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation.
- III. <u>Prohibition against use of BARC's name without permission for publicity purposes:</u>
  - The 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.
- **PRICE:** Offered cost should be inclusive of total scope of work mentioned above. Maximum possible cost breaks up for various items and accessories, taxes and other charges, if any, is to be provided.
- **6.0 VALIDITY:** Price quoted should be valid throughout the period of the contract.
- 7.0 TAX: As applicable, should be clearly indicated in the offer.
- 8.0 **COMPLETION PERIOD:** Period of contract for the above work in all respect

is 06 (Six) months and the same should be reckoned from the 10<sup>th</sup> day after the date of issue of work order. Any delay which is attributable to the contractor is liable for penalty @ ½% per week (max. 5 %) to be imposed on the contractor. Extension required, if any, is to be applied before validity of the Work Order is over, with proper justifications.

- **9.0 PAYMENT:** 100% including taxes after completion of work, on successful submission of the following documents:
  - i. Advance Stamped Receipt.
  - ii. Original Bill in triplicate.

## 10.0 NOTES TO BIDDER:

- 1. The vendors have to depute one technically qualified manpower as per the following requirements:
  - i. SSC/HSC /ITI qualified
  - ii. Worked at-least 3 years as Rigger, Helper for BARC or for any similar industry.
- 2. Also, vendor should depute one supporting staff (SSC/HSC /ITI qualified or person with at least three-year experience of working in any industry) for assisting the works of cleaning & housekeeping of plant area, material handling, and other work.
- 3. Necessary Tools required for carrying out the jobs indicated in scope of work will be provided by BARC. For example, Chain pulley Block, drilling machine, mechanical tools for fittings, goggles, paper masks, duster etc. The vendor has to arrange for valid PVC for all workers to work inside BARC.
- 4. Safe handling of equipment and instruments are to be ensured by the vendor through proper supervision.
- 5. Safety & security guidelines that may be provided by BARC are to be strictly followed during execution of the work order.

Note: Please mention your PAN No, GST registration No. with the offer. Otherwise, the offer is liable forrejection.

Yours faithfully,

हाँ. एस. भट्टाचार्य / Dr. S. Bhattac(Dr) Sujay Bhattacharya) निदेशक, रिएक्टर परियोजनाएं वर्ग Director, RPG & Head Director, Reactor Projects Group RRDPD BARC, Mumbai-400 085

Cc:

- 1. AO (Works), CC
- 2. Shri A.K.Singh, SO/G, HFRR
- 3. Pushpendra Hazari, SO/D, RRDPD

# Appendix - A

# A. Detailed Scope of Work

It consists of 9 Fuel positions with hydraulically operated locking mechanism. It requires daily removal of some mechanical parts heavy flange top cover, purging N2 cylinder, changing/replacing of hydraulic hoses. Finding system leakages troubleshooting and solving the same. It also involves instrumentation and control system which require periodic maintenance. Experimental set up require frequent shifting of material and components from one place to other as per daily requirement. It includes making proper arrangement and plan for safe material handling. Skilled, unskilled staff should understand the working of monorail, chain pulley blocks available at HFRR - Fuel locking Mock up test facility at CIRUS reactor hall.

- 1. Dismantling and Installation of solenoid valves, flanges and fittings: This job includes laying out of hydraulic hose with proper fittings, installation of various Pressure gauges and providing proper supports for the pipe components pipe segments, flanged bolting joints etc. Installing and dismantling of solenoid valves and their fittings. This job required skill of pipe fitter specifically leak testing and rectifying the same.
- 2. Fixing of Supports: This job required skill Fitter to install / Fix various supports, Support structures necessary for the running of experimental facility. The support structure includes hydraulic cylinder support pneumatic assembly supports, fuel locking supports. These supports are of SS/MS structures generally flanged connection with maximum weight of ~50 kgs.
- 3. Daily Removal and installation of Fuel Locking mockup facility Equipments: This job includes dismantling and installation of SS/MS components of fuel locking system mock-up test facilities like Flanges pressure gauges, pipe fittings, eye bolts etc as per the experimental requirements. This work includes understanding of chain pulley block, material handling, basic mechanical tools handling and operation.
- 4. Cleaning of equipment Machines, and piping: Each equipment/components/instruments shall be properly cleaned with wet or dry method as per the approved procedure given by BARC. After cleaning, it shall be installed back and its functioning should be checked and ensured.
- 5. Daily Housekeeping of plant area: Daily cleaning/Mopping of general working areas, passage, with wet and dry methods. Also surrounding area of the plant should be cleaned and free from any material (including leftover Scrap materials etc.) on weekly basis.

#### B. Terms and conditions:

- 1. BARC will provide the materials like pipe/tube, fittings, structural supports, fasteners, instruments, valves, Chain pulley block, Material handling equipments etc. which are require for day to day activity to complete the Job.
- 2. BARC representatives will provide necessary operational and safety guidance to the persons coming for work.
- 3. The experimental facilities are to be handled with proper precautions to prevent any damage that may occur to personnel, equipment or samples.
- 4. Any problem found in equipment/ system is to be reported immediately.

- 5. Cleanliness and good working environment is to be maintained meticulously.
- 6. Work Should Commence within 10 days after the date of issue of Work Order.

# Annexure-I (For Part 'A')

# Sub: Technical Support for Fuel locking Mock up test facility at CIRUS for developmental and testing activities under HFRR, RRDPD

The Vendor shall furnish here their willingness for the required work as indicated.

| S. No. | Description  | To be filled by the vendor |
|--------|--|----------------------------|
| 1.     | Whether security vetting from BARC obtained?   | YES/NO                     |
| 2.     | Whether staff to be deputed is SSC/HSC /ITI qualified?   | YES/NO                     |
| 3.     | Whether worked at-least 3 years as Rigger, Helper for BARC or for any similar industry?                                  | YES/NO                     |
| 4.     | Whether vendor agreeing assisting the works of cleaning & housekeeping of plant area, material handling, and other work? | YES/NO                     |
| 5.     | Instrumentation work as per technical specification  | YES/NO                     |
| 6.     | Whether Specifications terms and conditions are accepted to Vendor?  | YES/NO                     |

| We, M/s  |   |   | aired jobs as indicated in the                                   |
|--|---|---|--|
| above table will be carry of charge. Decision of Group | out as per the technical specif<br>Director, RPG or his nominat | ication and under t<br>ted officer in this re | he supervision of Engineer In<br>gard shall be final and binding |
| on the contractor.                                     | 200   |   |  |
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|  |   | Signature                                     |  |
|  |   | Name  |  |
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# Annexure-II (For part-B)

# Schedule of work

Sub: Technical Support for Fuel locking Mock up test facility at CIRUS for developmental and testing activities under HFRR, RRDPD

The vendor shall furnish here the cost of items along with applicable taxes indicated separately

| S. No                                 | Description of work  | Quantity           | Estimated        | Amount                                |
|---------------------------------------|--|--------------------|------------------|---------------------------------------|
|                                       |  |                    | <b>Unit Rate</b> | . (₹)                                 |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |  |                    | in (₹)           |                                       |
| 1.                                    | Dismantling and Installation of solenoid valves, flanges and fittings                              | 400 Nos.           |                  |                                       |
| 2.                                    | Fixing of Supports   | 50 Nos.            |                  | i i i i i i i i i i i i i i i i i i i |
| 3.                                    | Daily Removal and installation of Fuel Locking mockup facility Equipments as per the requirements. | 80 Nos.            |                  |                                       |
| 4.                                    | Cleaning of equipment Machines, and piping   | 200 Nos.           | 18.<br>18        |                                       |
| . 5.                                  | Shifting of material /equipment/structure  | 60 Nos             |                  |                                       |
| 6.                                    | Daily Housekeeping of plant Area   | 200 m <sup>2</sup> |                  | 2                                     |
| Total B                               | asic Cost  | a 141              |                  |                                       |
| GST@                                  | 18%  |                    |                  |                                       |
| Any Ot                                | her Charges  |                    |                  |                                       |
| Total E                               | stimated Cost  |                    | 2 -              |                                       |

|             | Signature _ | 1/. | . " |   |
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