GOVERNMENT OF INDIA
BHABHA ATOMIC RESEARCH CENTRE
REACTOR SAFETY DIVISION

Minor Fabrication - Enquiry

Hall.No.7
Trombay
Mumbai 400 085

Ref: RSD/CSS/BARCOM/TI/MF/2020/113722
November 9, 2020

Sub: Minor Repairs/ fabrication- invitation to quote

Dear Sir,

Sealed quotations are invited by Head, RSD for Tender Enquiry for “Supply and installation of Multiwall Polycarbonate Roofing Sheets for BARCOM containment model at Tarapur site as per Annexure-I.”

SCOPE:
The scope of the work broadly involves:

i. Supply of mild steel material (angles, channels) and refurbishment/fabrication of corroded roof structure over BARCOM containment model.
ii. Supply of Multiwall (cellular) Polycarbonate Roofing Sheets (Blue color, Cleat, 10mm thick & both sides UV coated) and fixtures for BARCOM containment model as per Annexure-I.
iii. Installation of Multiwall (cellular) Polycarbonate Roofing Sheets over BARCOM containment model as per Annexure-I.

GENERAL CONDITIONS:

1. Bidder should quote item wise cost of total work, i.e., quote separately for each of the items in the scope of work, mentioned above. GST shall be indicated separately. The bidder shall submit complete information asked in the enquiry, otherwise his/her quotations will not be accepted.
2. The quotations must reach Head, Reactor Safety Division, Engineering Hall No. 7, BARC, Trombay, Mumbai- 400 085 on or before 25.11.2020.
3. The envelope should be super scribed "Minor Fabrication – Roofing Work, BARCOM, Tarapur" and indicate the DUE DATE and Office Ref. No. clearly. The envelope should be sealed.
4. The quotation will be opened on 27.11.2020 at 14.30 Hrs.
5. The necessary items (if any) as given in the enclosed technical specifications (Annexure-I) will be provided by the supplier.
6. In case the bidder needs to clarify and understand the full scope of his work before submitting the quotation, he may do so by prior appointment with Shri I.Thangamani, SO/F, RSD, Engg. Hall No. 7, BARC, Trombay, Mumbai- 400 085 (for appointment please contact on ph. no. 022-25593547 or send e-mail at tmi@barc.gov.in).
7. Duration of the work is 120 working days from the date of acceptance of the work order or reckoned from the 5th working day of date of issuance of work order (depending on the site availability) and the same shall be mentioned in the quotation.
8. The price quoted should be valid for at least 90 days from the date of opening of the quotation.
9. The work is linked with the commissioning and experimental schedules of the BARC Containment (BARCOM) Test Model at Tarapur, which is to be strictly adhered in view of the importance of the project. The contractor/appointed supervisor shall ensure to be present at the BARCOM Tarapur site as and when required for timely completion of job.
10. A brief list of similar jobs executed, if any and the name of the organization for which the work was carried out should be furnished with the quotation.

BARCOM-MF_Enquiry: Page 1 of 2
11. All Taxes and excise duty shall be quoted separately. Any tax exemption certificate, if applicable, shall be given along with the order.
12. Pro-rata payment i.e., splitting of order is not acceptable.
13. Bidder shall note that BARC is the final consumer of the goods/service procured and does not intend to make any outward supply. BARC will not avail the benefits of input tax credit and hence the good can be supplied without quoting GSTIN of BARC, Mumbai on invoice. The invoices taxed under GST as per rates applicable under the GST schedule of rate will be admitted for payment.
14. GSTIN Invoice: As raised by the registered supplier of taxable goods/services along with other details specifically indicating: GSTN, PAN, Location of supply, tax component to be separately indicated. GST @ 5% is applicable to the items and GST @ 18% to the services provided to BARC for R&D purpose as per government notification. The necessary certificate shall be provided to the contractor in this regard.
15. No free issue material will be provided.
16. Payment will be made as per Government Rules after successful and satisfactory completion of the job.
17. The minor fabrication work will be subject to inspection/supervision by the officer in-charge or his authorized representative.
18. The bidder shall specify that "whether he/she has any relation in BARC or the bidder himself is an ex-employee of BARC or the bidder has an ex-employee of DAE on his payrolls", if any, the supplier shall indicate full details of the concerned person in their quotation.
19. The bidders are requested to go through “General terms and Conditions” given in Annexure-II.
20. The job should strictly follow “confidentiality clause” as per Annexure-III.
21. Head, Reactor Safety Division reserves the right to accept/reject any or all of the quotations received without assigning any reason whatsoever.
22. Quotations sent through registered post/speed post from India post are only acceptable. Quotations sent through any other means will be rejected.

Encl.: Annexure-I, Annexure-II & Annexure-III

Copy to:
1. Shri I. Thangamani, SO/F, RSD
2. Asstt. Stores Officer, Zonal 9, Engg. Hall 7
3. Accounts Officer (Works), CC, BARC, Trombay

(Dr. J. Chattopadhyay)
Head, RSD

Dr. J. Chattopadhyay
Director General
Head, Reactor Safety Division
Government of India
BARC, Trombay
Mumbai-400 085.
Annexure – I

A. Description of BARCOM containment:

BARC containment model is a concrete structure of diameter 13m and height 12m from ground level is shown in figure-1. To cover the concrete structure a steel structure (refer fig-1) has been made over which Polycarbonate sheet roofing is required to be carried out. The roofing steel structure is at an elevation of 13m at periphery and extends up to 15.86m height at the center of structure. The radius of the roofing required is around 12.5m. The polycarbonate sheet should be installed over the existing steel supporting frames. Some of these steel supporting frames are damaged due to rusting process. The damaged steel structural frames should be repaired and refurbished before fixing Polycarbonate sheets.

Fig-1 : Schematic axisymmetric diagram of BARCOM containment model
B. Scope of Work for BARCOM containment roofing:

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Description</th>
<th>Quantity / Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>Supply of necessary mild steel material (angle, channel) and refurbishment/fabrication of corroded roof structure over BARCOM containment model.</td>
<td>Area 500 m² (approx.)</td>
</tr>
<tr>
<td>(i)</td>
<td>Supply of Multiwall (cellular) Polycarbonate Roofing Sheets and fixtures for BARCOM containment model with limited warranty for seven years as per specification given below in Section-C. Make of the roofing sheet should be Lexan or equivalent. The supply also includes necessary accessories such as flashings for sealing sheet edges, circular ridge cap at the center, C-section/l-section channel etc. for installation of leak proof roof top. <em>(The party is requested to mention the brand of roofing sheet in the quote and also requested to submit the necessary catalogues, data sheet etc.)</em></td>
<td>Area 500 m² (approx.)</td>
</tr>
<tr>
<td>(ii)</td>
<td>Installation of Multiwall (cellular) Polycarbonate Roofing Sheets over BARCOM containment model.</td>
<td></td>
</tr>
</tbody>
</table>

C. Specifications for Roof material:

- Material & Type: Multiwall Polycarbonate Roofing Sheets (Cellular)
- Color: Sky Blue or Blue color (preferably Sky Blue)
- Sheet Thickness: 10 mm (multiwall), Cellular
- Protection: Coated with UV protection on both sides of sheet
- Make: **LEXAN** make or equivalent
- Warranty: more than 7 years (limited)

D. Testing and qualification:

The installed roofing job should be demonstrated for leak proof (for normal raining conditions) by spraying water over the roof. This demonstration job should be carried out in presence of departmental person/concerned engineer. The work completion certificate will be issued only upon qualification of roofing work against leak proof.

E. General conditions:

(a) Necessary Scaffolding and other essential items required for installation of roofing at higher elevation should be arranged by the party and department will not provide such items.

(b) All the safety precautions as per applicable code and practices shall be followed at site. Personal Protective Equipment (PPE) shall be strictly used by workers while working at site and all safety instructions shall be followed in all respect. The contractor will be responsible for any injury/accident occurring at site, due to any reason, department will not pay or liable for any compensation.

I. Thangamani  
SO/F, CSS, RSD

Vishnu Verma  
Head, CSS, RSD

Annexure - 1 : Page 2 of 2
ANNEXURE – II

General Terms and Conditions

A. Qualification Criteria:
The bidder must have a previous work experience of the similar nature, i.e. mechanical repair/refurbishment and installation of roofing sheets etc. for buildings/workshop/office.

B. Warranty:
The supplier should provide warranty of 1 year for the installation work and items above mentioned in Annexure-I.

C. Work Period:
Duration of the work is 120 working days from the date of acceptance of the work order or from the 5th day of date of issuance of work order (whichever is earlier date).

D. Terms of Payment:
1. No advance payment shall be made.
2. Full payments shall be made within 30 days after completion of the job.
3. Payment shall be made through ECS/RTGS, in favor of the contractor and Accounts Officer, BARC, shall issue the same.
4. The payment shall be made only on the satisfactory completion of the work and on the production of the completion certificate and guarantee certificate.
5. Income tax @2% will be deducted from the bill.
6. If contractor fails to deliver the scope of work within the stipulated period mentioned in this document and the delay incurs financial loss to the department, then L.D. charges @ 0.5% per week (max 5%) as per the rules and guidance of this Department shall be levied.

E. Special Note:
The vendor shall be liable for any damage to the purchaser or any third party arising out of any patent or latent defect in the goods supplied by him or sub-standard service rendered by him.

F. Validity of the Offer:
Vendor shall clearly mention the validity of the offer and the same shall be not less than 90 days from the tender due date.

G. Price Variation:
The prices quoted in the tender shall remain firm throughout the validity period.

H. Approval stages:
   i. Material certificate from supplier shall be submitted for approval. After getting approval from the concerned engineer, work can be started at site. Inspection report at every stage of fabrication and testing report etc. shall be submitted for our approval.
   ii. The vendor should rectify the defects, if any, identified/occurred during inspection/ testing/ installation/ transportation etc.
iii. Vendor shall follow the approval stages strictly and the final installed product should be
defect free, leak tight and qualify the safe operating requirements, otherwise, the
department has the right to cancel the order.

I. Work Quality:
All work shall be done with good workmanship. Painting/Welding should be carried out by
qualified person/welder. Our supervisor will supervise quality of work.

J. Security permission:
i. Contractor shall appoint the required workers with high integrity and will be responsible
for his workers. All BARC security rules will be applicable. Supplier must dispose of all
the debris after completions of the job. Entry permit will be issued on monthly basis and
contractor must have valid photo pass up to May, 2021.

ii. The site is restricted area and permission to the personnel coming inside the premises for
installation work, require security clearances. Hence firm has to obtain Police
Verification Certificates (PVC) from Police Commissioner Officer (not local police)/
District Magistrate office, for all the persons coming inside the premises for work. The
copy of PVC shall be submitted along with offer. Otherwise offer will not be considered
for evaluation.

iii. Firms, who have not worked inside the DAE units (BARC/NPCIL/IGCAR/AERB) in
past, have to go through security vetting procedure and this, may take some time to
complete.

iv. The entry passes for personnel coming inside premises are made by Security Section
and require local residence proof and identification proof along with PVC.

K. Free issue Material and Work period:
No Free issue materials will be provided. After the supply of firm work order, the work shall
be completed in 120 working days.

L. Fabrication and Installation:

i. The mechanical fabrication, erection, installation, testing and commissioning of all the
items mentioned in Annexure-I shall be done according to the relevant design practices
and as directed by concerned engineer. Minor changes suggested by BARC in
design/work, if any, should be accommodated during fabrication or work period.
Variations in dimensions shall be within tolerance limits.

ii. All rubber bushes, lock nuts, inspection crosses, clamps, saddles, spacers, screws, nuts,
bolts, washers, and other accessories shall be supplied by the contractor as required.

iii. The equipment and tools required for executing this work shall be arranged by the
contractor. Free electricity will be provided by the department. However, hooking any
instruments to the mains power supply shall be subjected to the necessary approval of
the concerned engineer.

iv. The contractor shall have to maintain the area assigned to him for the work very clean
and shall follow the instructions of Engineer in-charge in this regard. All
equipment/tools etc. are to be removed and the site area to be cleaned after the end of
the day’s work.
v. The technician required carrying out mechanical fabrication, erection, installation, testing and commissioning work shall be skilled and have requisite qualification/certificates. The documents are to be provided in original to engineer in-charge, before commencement of work at site. Unqualified/unskilled technician/workers will not be allowed to work at site.

M. Testing and Commissioning
The testing and commissioning of all the above mentioned components shall be done according to the relevant practices and as directed by concerned engineer.

N. Price Schedule

i. The bidder shall quote unit rates for each item of work given in Tables for supply of material, fabrication, installation, testing and commissioning work. The amount for each item shall be worked out and the requisite total shall be given. NOT GIVING THIS BREAK-UP TO THE FULLEST DETAIL AS REQUIRED IN THE TABLE SHALL BE SUFFICIENT CAUSE FOR OUTRIGHT REJECTION OF THE OFFER WITHOUT ANY CONSIDERATION.

ii. Bidders shall go through the technical specifications and provide in the offer point by point compliance. The technical deviations, (if any) shall be indicated clearly in the offer. The necessary catalogues are required to be submitted for supply items along with the offer. It may be kindly noted that no further communication will be made to get the technical clarifications. THE OFFERS WITHOUT THIS INFORMATION WILL BE REJECTED WITHOUT ANY CONSIDERATION.

iii. The entire work is to be completed within 120 working days reckoned from the 5th day of date of issuance of work order (depending on the site availability).

iv. It may also be noted that any delay (in completion of work), which is attributable to the contractor is liable for penalty (i.e. L.D. Charges) @ ½ % per week (max 5%) will be imposed on the contractor as per the rules and guidance of this Department.

O. Completion of Contract
The works to be executed by the contractor shall be deemed to be completed only when

i. The supply, fabrication, installation, testing and commissioning are carried out as per the technical requirements given in this tender document.

ii. Any defects, deficiencies brought out during testing are rectified and retested wherever necessary to the satisfaction of the engineer.

iii. The material should be transported safely to the site without any damage. Otherwise the finished product will not be accepted.

P. General Specifications:

1. Quality surveillance, inspection:
All work covered by the specification shall be subject to quality surveillance / inspection by our authorized representative.
2. The fabricator shall not sub-contract any or all of the work without written consent from the purchaser. The fabricator shall be responsible to the purchaser for all work of the sub-contractor, if allowed.

3. All the safety precautions as per applicable code and practices shall be followed at site. All industrial safety rules like using safety shoes, belts, helmets and any other protective items required should be complied with. The Personal Protective Equipment (PPE) shall be strictly used by workers while working at site. The safety instructions shall be followed in all respect. The contractor will be responsible for any injury/accident occurring at site, due to any reason, department will not pay or liable for any compensation.

4. Bhabha Atomic Research Centre (BARC) will not be responsible for any injury or death due to any accident during the work period.

5. Payment will be made only after satisfactory completion of the work and against submission of original bill and advanced stamp receipt.

6. Income tax of 2% and GST TDS @ 2% on the bill amount shall be deducted from the payment.

7. Any person entering BARC shall comply with all the requirements that are imposed by Health Physics Division and Security of BARC from time to time.

8. Contractor shall note that BARC reserves the right to increase or decrease the quantum of job mentioned here in this document.

9. The work shall be carried out by the vendor on the basis of provided technical specifications and general conditions.

10. The party shall arrange all the labourers required for the work.

I. Thangamani
SO/F, CSS, RSD

Vishnu Verma
Head, CSS, RSD

05/11/2020
ANNEXURE - III

Confidentiality Clause

1. **Confidentiality**: 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 also apply to the sub-contractors consultants, advisers or the employees engaged by a party with equal force.

2. “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.

3. **Prohibition against use of BARC’s name without permission for publicity purposes**: 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, T.V. or Internet without the prior written approval of BARC.