GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
Bhabha Atomic Research Centre
Visakhapatnam

Computational Analysis Division

Ref: CAD/HEDM/WO/IND/20-21/12 Date: 28/10/2020

SUBJECT: Notice inviting tender for “Design, Fabrication, Supply, safe delivery of High energy storage banks as per the scope of work (See Annexure-I).”

1. Scope: See Annexure-I.
2. General guidelines for submitting tender
   • You shall send your offer in a sealed envelope indicating delivery period, price inclusive of taxes and other relevant information by speed post to:
     Head,
     Computational Analysis Division
     Bhabha Atomic Research Centre
     Village: Madurai (Sub: P O)
     Anu Vihar Campus, Mekarasi Hill,
     Near Nagavaram Junction,
     Gajuwaka-Yallamanchilli Highway
     Atchutapuram, Visakhapatnam
     Andhra Pradesh- 531011
     (Kind Attention: Pradeep K Maurya, SO/D, CAD, 0891-283-2036)

   • Quotation shall reach us on/or before by Speed Post/Courier/Email "sambaran@barc.gov.in Only.

   • On top left corner of the envelope please indicate Quotation for – " Design, Fabrication, Supply, safe delivery of High Energy storage banks per the scope of work and due date 20/11/2020

   • Overwriting, scratching etc. must be avoided in the quotation. Rewriting the whole figure shall carry out any alteration in the figure. The authorized person from the firm shall countersign such figure.

   • The delivery period mentioned in the quotation shall be strictly adhered to. If the contractor fails to supply and secure extension of delivery date before effecting delivery of the supply against the contract, acceptance of such item by the purchaser will in no way prejudice the right of the purchaser to levy liquidated damage nor will it be entitled to the contractor for payment of statutory levies that comes into force after the expiry of the delivery date.

   • Minimum Guarantee/Warranty period of the material shall be One Year.

   • Supplier shall mention clearly the PAN/TAN no. on quotation.

   • GST number shall be clearly mentioned on Quotation.

   • All the charges and taxes shall be mentioned clearly.

   • You may contact us for any clarification before (Shri. Pradeep K Maurya, 0891-2832036, 9100483817/7382224750, pkmaurya@barc.gov.in

3. Rates:
   As per BOQ (Bill of quantity)
4. Place of Work/Installation:
   PEB-04, CAD
   Bhabha Atomic Research Centre
   Near Nagavaram Junction,
   Gajuwaka-Yallamanchilli Highway
   Atchutapuram, Visakhapatnam
   Andhra Pradesh-531011

5. PAYMENT TERMS:
   a) Part payment/Advance or against delivery cannot be made.
   b) Payment will be made only after satisfactory completion of work and on production of (along with Delivery
      Challan):
      i. Bill/Invoice containing Location of supply, separate tax components along with PAN and GSTN
         numbers.
      ii. Advance Stamped Receipt.
      iii. Bank Account No, Bank and Branch name with IFSC code.
      iv. Undertaking stating that GST has been promptly deposited with the authorities
   c) It may be noted that:
      i. Income tax @2% will be deducted from your bill.
      ii. TDS (under GST) will be deducted as applicable from your bill of taxable goods and/or services, where
         the total value of such supply exceeds 2.50lakh.

6. CONFIDENTIALITY CLAUSE:
   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, consultants, advisers or the employees engaged by a party with equal
   force.
   “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.
   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 medial like press, radio, T.V. or Internet without the prior written approval of
   BARC.

   (Pradeep K Maurya)
   SO/D, CAD
   Phone: 0891-2832036,
   Email: pkmaurya@barc.gov.in
Scope of work

Subject: Design, Fabrication, Supply, safe delivery of High Energy storage energy banks as per the scope of work.

Qty: 06 Nos.

A. Details of scope of works:

1) Item: Technical specification for High Energy storage banks

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Rated Capacitance</td>
<td>178μF</td>
</tr>
<tr>
<td>2.</td>
<td>Tolerance</td>
<td>±10%</td>
</tr>
<tr>
<td>3.</td>
<td>Charging Voltage</td>
<td>15KV DC</td>
</tr>
<tr>
<td>4.</td>
<td>Total Energy at rated voltage</td>
<td>20KJ ±10%</td>
</tr>
<tr>
<td>5.</td>
<td>Maximum discharge peak Current</td>
<td>150KA or more</td>
</tr>
<tr>
<td>6.</td>
<td>Voltage reversal</td>
<td>&gt;=80%</td>
</tr>
<tr>
<td>7.</td>
<td>Internal Inductance</td>
<td>~70nH</td>
</tr>
<tr>
<td>8.</td>
<td>Rated time on charge</td>
<td>&gt;=1 minute</td>
</tr>
<tr>
<td>9.</td>
<td>Repetition rate</td>
<td>&gt;=1 Shot in every 10 minutes</td>
</tr>
</tbody>
</table>

Other requirements:

Quotation should indicate acceptance of the following conditions:

I. Following Test Certificates are necessarily needed to be submitted at the time of delivery for each bank
   • Tightness test at 65 degree Celsius for >10 hours
   • Capacitance and tangent delta measurement at ambient
   • Withstand Voltage test at 1.2 times of rated Charging Voltage for more than or equal to 1 minute.
   • Discharge test at rated charging Voltage (5 shots)
   • Inductance Measurement of a single bank

II. Pre-dispatch inspection will be carried out by purchaser at the supplier/manufacturer’s site. The supplier/manufacturer should accordingly have all the facilities and make arrangements for the tests outlined below.

III. The “Acceptance Tests” during PDI will include:
   i. Charge/discharge cycle tests
   ii. Visual examination
   iii. Sealing Test
   iv. Test for capacitance
   v. Insulation Resistance Test
   vi. Voltage test between terminals
   vii. Voltage test between terminals and containers
   viii. Measurement of dissipation factors

Note: All the above tests will be performed and the items should qualify as per procedures and standards laid down by Bureau of Indian Standards IS 13666: 1993 (Reaffirmed 2008). Any other recognized International Standard if prescribed by the vendor may be allowed at the discretion of the buyer.

IV. The order for Item 1 & 2 may be split after commercial evaluation. Parties should quote for each item separately.

V. It is preferable that the bidder provide the reference of at least one earlier order for similar energy banks (with Name, year and contact details of the buyer/organization) to establish that the party has the capability to carry out the order. Alternately the purchaser should be allowed to visit and inspect the facilities of the manufacturer, prior to awarding the contract, to ensure that infrastructure and production facility is satisfactory. Assessment of bidder’s credentials and manufacturing capability is the sole discretion of the purchaser.

2) General requirements:
   a) The vendors are encouraged to hold prior discussions with the indentor for any clarifications.
   b) Finished products should be delivered to the address given below.

Address:
Stores Officer,
Bhabha Atomic Research Centre
Near Nagavaram Junction,
Gajuwaka-Yallamanchilli Highway
Atchutapuram, Visakhapatnam
Andhra Pradesh-531011

c) The cost of transportation/delivery if any should be mentioned in the quotation.
d) Single order will be placed for all the above items and no partial work is permitted.
e) All the charges (material cost, fabrication cost for the items and transportation/delivery if any) and taxes shall be mentioned in the quotation.

f) Contact Persons:
   a) Shri. Pradeep K Maurya
      SO/D, Computational Analysis Division
      BARC-Vizag
      Email: pkmaurya@barc.gov.in
      Phone: 0891-2832036, 9100483817

(Pradeep K Maurya)
SO/D, CAD