



Tender Document

NAME OF THE WORK: SUPPLY OF HYDRO TURBINE MODELS

ESTIMATED COST : (AS PER SPECIFICATIONS)
Rs. 5,00,000
EMD - Rs. 10,000/-

Sale of tender : 10.03.2011

Opening of Tender: 21.03.2011

**NATIONAL POWER TRAINING INSTITUTE
(NORTHERN REGION)
BADARPUR : NEW DELHI-110044.**

NATIONAL POWER TRAINING INSTITUTE

An ISO 9001 : 2000 & 14001 Organization

(Ministry of Power, Govt. of India)

Badar pur, New Delhi-110044

Phones:- 26952083, 26940722

File No- NPTI/HYDRO/Pur/2011

Dated: 08.03.11

NOTICE INVITING TENDER

Sub:--Supply of Models for Hydro Turbine

The sealed tenders are invited from reputed manufacturer/ supplier for the supply of “**Models for Hydro Turbine**” as per specifications enclosed **annexure – I & II** by the Principal Director, National Power Training Institute, Badarpur, New Delhi-110044. The tender document form duly completed in all respect in accordance with the instructions mentioned here-under should reach this office on or before 21.03.2011 **at 1.00 PM**. The tenders shall be opened on the **same day at 3.00 P.M.** in the presence of the bidders or their authorized representatives who may like to be present at their own expenses.

Important Instructions;-

- 1. The Tenderers are advised to go through the tender documents, terms & conditions thoroughly and must sign all the pages as a token of their acceptance. These documents must be submitted along with their technical bids, failing which the tenders are liable to be rejected.*
- 2. The Tender Documents should be submitted in two parts viz.*

- 1) Technical Bid**
- 2) Price Bid**

Both these parts should be sent in separate sealed cover duly marked as (1) Technical Bid & (2) Price Bid on the top of envelopes and these both envelopes should be kept in third big size sealed envelope super scribing with the tender enquiry number and due date of opening on the top of envelop.

Technical Bids:-

The Technical bids must contain all the relevant technical specifications of the equipments as per tender document along with the relevant technical literatures / brochures / pamphlets / drawings and alternate proposal , if any including the following commercial terms:

1. Detail of EMD submitted by way of Demand Draft.
2. Terms of payment.
3. Delivery period should be offered earliest as possible and be clearly stated in your offer.
4. Validity period should be minimum 90 days from the date of opening the tenders.
5. Price basis should be F.O.R. destination basis i.e. NPTI, Badar pur.

Price Bids:-

The price bids should be submitted containing their rates, amount and make of equipments with detailed specifications, on the body of the original annexure enclosed with the tender schedule, neatly & clearly without any over writing inclusive of supply, installation and commissioning charges, as the case may be. The prices must be firm and final till the delivery of equipments inclusive of all taxes, Govt. levies and other duties on FOR destination basis.

The price bids of only those firms shall be opened whose technical bids are complete in all respect in accordance with the specifications of the tender document and has been accepted by this office

In the first instance the technical bids will be opened on the prescribed date and time in the presence of bidders who may like to be present on the date of opening of the tenders. After scrutiny of the technical bids / details of all the tenders, the observations noticed with regard to the various deficiencies and variations from the specifications of tenders will be communicated to the respective tenderers, if so desired by this office with a view to provide them an opportunity to make up the deficiencies / deviations at par, which noticed in their offer. However, such tenderers will be allowed to revise their technical bids whose technical bids are received at the prescribed date and time and are complete in general. The replies of such tenderers together with the additional price bids if any will be opened along with the original price bids on the specified date and time fixed for the purpose by this office.

General Terms & Conditions:-

- 1 The tender documents are not transferable.
2. The tenders found by vague and indefinite expression such as “Subject to Immediate acceptance” and “Subject to prior sale” will not be considered.

3. Earnest Money:

The tenderer's shall have to deposit the earnest money @ 2 percentage of the total tender value only in the form of demand draft in favour of the “**NATIONAL POWER TRAINING INSTITUTE**”, payable at New Delhi, or in cash to be deposited in this office along with the Technical / Commercial bids. The Technical Bids received without earnest money shall not be considered and liable to be rejected.

If the firm exempted from the deposit of earnest money in an individual case, should enclose an attested photocopy of the valid registration letter issued by the appropriate authority in this regard. However, the original certificate has to be produced, whenever called upon by this office.

4. The payment:

The 90% payment will be released within 30 days after successful supply, installation and commissioning of equipments at site and the balance 10% payment will be withheld as “Security Deposit” towards the faithful performance of the Equipments, during the guarantee period (minimum one year) which shall be released only after satisfactory performance / operation of the equipments in the guarantee period.

5. Prices:

The prices quoted should be firm till the delivery of the equipments. All charges such as packing, forwarding, insurance, freight, and cost of installation shall be included in the prices. The exercise duty and sales tax if charged extra should clearly be indicated failing which the prices will be deemed to be inclusive of all these duties and taxes.

6. Delivery:

The timely delivery of the equipments / materials is the essence of contract. The supply should be completed within the specified delivery period. Delivery and installation shall be completed latest by 31st of March 2011.

7. Late Receipt of Tenders:

The tenders received after the due date and time due to postal delay or any other reasons whatsoever will not be considered and no correspondence would be entertained in this regard. Any tenders received by FAX will not be considered.

8. Revision of Price Bid:

No tenderers shall be allowed to revise the original price bid after opening the technical bids, unless some deficiencies / deviations are noticed in their offer requiring alterations to bring at par with the intent of the N.I.T. specifications and they have been specifically asked for by this office to revise their prices before opening their price bids.

9. Closed Holiday:

In the event of the date of opening of the tender being declared as closed holiday for Central Govt. Offices, the date of opening would be the next working day.

10. Alternative Proposal:

The specification of equipments as specified in tender documents do not confirm the specification of equipments for which the tenderers desire to offer as an alternative, may quote, but may ensure to serve the purpose and must be indicated clearly that in what respect and to what extent their offer is suitable to the buyer.

11. Acceptance of Tender:

This office reserves the right to accept or reject, any or all the tenders, wholly or partially received, without assigning any reason whatsoever. This office does not bind him to accept the lowest tender.

12. Inspection:

This office, on its discretion reserves the right to inspect the firms establishment/site and the equipment, prior to placement of the order. However, the authorized officer shall carry out the final inspection of the equipment and materials at this office

13. Product Range:

The suppliers may quote for the supply of all the equipment and materials or partially in accordance with their product range and the availability of the equipment.

14. Guarantee:

The guarantee for all the equipments shall be for a minimum period of one year from the date of supply and installation of the equipments.

Warrantee to the effect that before going out of the production for the spare-parts the manufacturer / supplier have to submit an advance notice to the buyer for replenishing the stock of the required spares for equipments. But however, the required spares shall be provided for a minimum period of one year after issue of such notice.

15. *Service after Sale:*

Tenderers are required to submit the particulars regarding after sales services and supply of spare parts whether they would be able to provide after sales service for the satisfactory operation and maintenance of equipments.

16. *Demonstration:*

The bidders shall have to arrange the demonstration and working of their equipments and training free of cost to our authorized officers/staff.

17. *Safety:*

The suppliers shall be responsible for the safety of the material during transit and loading & unloading. This office does not own any responsibility if the material is damaged during transit, erection and commissioning if any.

18. *Erection:*

The supplier has to make his own arrangement for the ordinary/special tools, machinery, and other consumables if required for successful completion of Erection and Commissioning.

19. *Liquidated Damages:*

In the event of unsatisfactory delay/non supply of material, the supplier shall be liable to pay liquidated damages at the rate of 0.5 percent per week, subject to a maximum of 5 percent of the order value.

20. *Risk Purchase:*

The supply of the material must be completed within the specified delivery period satisfactorily failing which this office reserves the right to purchase the said equipments from any other sources at the supplier's cost and risk.

21. *Special Discount:*

The NPTI is the Educational Institute Under the Ministry of Power , Govt. of India. The different Labs are being established for B-Tech power Engineering. Therefore it is desirable that firms may offer a special discount, if any and should clearly indicate in their price bids.

22. *Arbitration:*

Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, claim, matter or things whatsoever in any way arising out of the works relating to the contract of execution or failure to execute the same whether arising during the progress of the contract or after the completion or abandonment thereof shall be referred to the sole arbitration of the person to be appointed by the Director General, National Power Training Institute. The proceedings of the arbitration shall be carried out in New Delhi only. The decision of the arbitrator so appointed, will be the final and binding on both the parties.

**Authorised Signatory
of the firm with office seal**

**For and on behalf of
National Power Training Institute (NR)
Badarpur , New Delhi -110044**

Annexure-I

A. PELTON TURBINE MODEL

Pelton Turbine description and material of construction:

The Turbine shall be single jet Horizontal Pelton turbine. The turbine shall consist of Pelton wheel with 26 numbers buckets of Aluminum castings. Each bucket shall be machined carefully and assembled on disc. The runner shall be housed in a turbine casing whose top cover shall be made of perspex (transparent) material. The turbine shaft shall be of steel and shall be supported by two Plummer blocks. The inlet pipe shall be fabricated from MS plates. Nozzle tip and needle spear also shall be of steel. The nozzle opening and closing shall be by operation of a hand wheel.

Pelton Wheel 350 PCD, with 26 nos. Buckets

Distributor (Inlet pipe) ID = 105 mm

Water Jet dia. = 40 mm.

Annexure-II

VERTICAL FRANCIS TURBINE MODEL (STATIC)

Vertical Francis Turbine Model (Static) showing all parts of a typical installation and having following specification:

1. Runner Diameter – 150 mm.
2. Runner Material – Aluminium chrome plated.
3. 16 Nos. guide vanes with regulating mechanism.
4. Guide Vane Material-Aluminium hard chrome plated.
5. Steel Spiral Casing of M.S. Sheet.
6. Draft Tube shall be of elbow type of M.S. Sheet.
7. Inlet Valve of butterfly type of 200 mm diameter shall be provided.
8. Turbine shaft shall be directly coupled to generator shaft.
9. Cut section of generator shall also be provided.