

| DETAIL                                               | INFORMATION                                                                                                                   |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Contact Person and Address                           | S.SUBBURAJ<br>SENIOR MANAGER / CCDP<br>PURCHASE DEPARTMENT/R and D and CR<br>UNIT HPBP<br>BHEL, TIRUCHY, INDIA<br>PIN 620 014 |
| Email                                                | ssraj@bheltry.co.in                                                                                                           |
| Telephone                                            | 0091-431-257 7152                                                                                                             |
| Fax                                                  | 0091-431-25200193                                                                                                             |
| Notification (Reference) No.                         | 2821600004 – CR Dt. 08/11/2016                                                                                                |
| Tender Title                                         | SUPPLY OF KNIFE EDGE GATE VALVE                                                                                               |
| Tender Type                                          | BUY – Two Part                                                                                                                |
| Brief Description                                    | Knife Edge Gate Valve as per the technical specification, commercial terms & conditions enclosed                              |
| Published in Newspaper                               | NO                                                                                                                            |
| Published On                                         | --                                                                                                                            |
| Tender Value in Rs                                   | --                                                                                                                            |
| EMD Value - Rs                                       | NIL                                                                                                                           |
| Document Cost- Rs                                    | NIL                                                                                                                           |
| Date of Issue of Notification -DD/MM/YY              |                                                                                                                               |
| Date for Closure of Sale of Forms - DD/MM/YY         | Not Applicable                                                                                                                |
| <b>Completed Forms to be submitted by - DD/MM/YY</b> | <b>09/12/2016 : 14.00 Hrs IST</b>                                                                                             |
| <b>Date of Opening for Technical Bids - DD/MM/YY</b> | <b>09/12/2016 : 14.30 Hrs IST</b>                                                                                             |

**Note:**

*If the due date of tender opening happens to be a holiday, the tenders will be opened on the next working day.*

*All clarification may be sought at least seven days prior to tender due date from the undersigned with due written request.*

*Corrigendum if any, with respect to this tender will be hosted only in the website <http://www.bhel.com> (or) <http://tenders.gov.in>. You are requested to visit the website regularly for updates.*

*The offer should reach this office on or before the due date & we are not responsible for any postal delay. Late tender will not be considered.*



# BHARAT HEAVY ELECTRICALS LIMITED

( A Government of India Undertaking )  
 HIGH PRESSURE BOILER PLANT  
 PURCHASE DEPARTMENT - FOSSIL BOILERS  
 THIRUCHIRAPALLI - 620014  
 TAMILNADU (INDIA)

0431-2577152  
 PHONE : 0431-2577383  
 GRAMS : BHARATELEC  
 FAX NO: 0431-2520696  
 E-mail: ssraj@bheltry.co.in  
 Web:

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| Enquiry No                                                                                                                                                                                                                                                                                                                                                                                                        | Enquiry Date | Due Date for Quotation |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------|
| 2821600004 - CR                                                                                                                                                                                                                                                                                                                                                                                                   | 08.11.2016   | 09.12.2016             |
| Please quote Enquiry No, Date and due date in all correspondences.<br>This is only a request for quotation and not an order.<br><b>Bid should be submitted in two parts. 1.Techno-commercial bid (Part-I) and 2.Price bid(Part-II) in a separate sealed cover and both covers must be placed in a third cover and sealed. Our Enquiry No., Enq. date &amp; Enq. Due date must be written on all three covers.</b> |              |                        |

| Item | Description                                                | Unit | Quantity | Delivery Quantity | Schedule Date |
|------|------------------------------------------------------------|------|----------|-------------------|---------------|
| 10   | Knife edge gate valve<br>as per the enclosed specification | NO   | 2.000    | 2.00              | 27.01.17      |

## General Note:

### NOTE :

- Offer will be invited in TWO PART BID only  
(Technical bid and Price bid - Two separate covers- "TECHNICAL BID" Cover and "PRICE BID" Cover).
- If regretted make mention on the top of the reply cover as "REGRETTED".
- LD Clause for delivery has to be confirmed without fail. Otherwise we would assume that you have accepted our LD Clause.
- BHEL preferred payment term is "100% direct Payment after 45 days from the date of receipt and acceptance of the material". This payment term acceptance is essential for consideration of your offer. Offer with advance payment or proforma invoice will not be considered.
- Transport and Delivery at BHEL - shall be Vendor's scope.
- Tender details are also hosted in BHEL Web : [www.bhel.com](http://www.bhel.com).
- No Revision of prices will be entertained after the tenders are opened.
- Offer validity should be minimum 90 days from the date of opening, otherwise we are not in a position to consider your offer.
- Kindly submit point wise compliance to our Terms & Condition. Otherwise it will be presumed that you are accepting BHEL's terms and conditions.
- Guarantee certificate is to be submitted by supplier.

The offers should reach us 30 minutes before the time of opening of tenders.  
 The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening. Late and delayed offers are liable to be rejected.

### VIGILANCE AWARENESS WEEK

31st OCT to 5th NOV 2016

FOR VIGILANCE RELATED COMPLAINTS,  
CONTACT DGM/VIGILANCE & SM/VIGILANCE  
PHONE:0431-2577552,2577636,2577985

Yours faithfully,  
 For BHARAT HEAVY ELECTRICALS LIMITED

**S. SUBBURAJ**

Senior Manager  
 Purchase / R&D and CR  
 Bharat Heavy Electricals Limited  
 Thiruchirappalli - 620 014.

MANAGER / PURCHASE  
 (FOSSIL BOILERS)  
 Yours faithfully,



# BHARAT HEAVY ELECTRICALS LIMITED

( A Government of India Undertaking )  
HIGH PRESSURE BOILER PLANT  
PURCHASE DEPARTMENT - FOSSIL BOILERS  
THIRUCHIRAPALLI - 620014  
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2821600004 / 08.11.2016

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11)Qualifying criteria format is enclosed. Copy of filled and signed Qualifying criteria format is to be submitted. Without this offer will not be considered.

12)Technical specification is enclosed. Copy of filled and signed technical specification confirmations is to be submitted. Without this offer will not be considered.

13) Since R and D dept. of BHEL is registerd with Govt of India in the department of scientific and indistrial research for availing excise duty exemption, confirm to supply KNIFE EDGE GATE VALVE without paying excise duty.(Excise duty exemption certificate will be provided by BHEL prior to despatch)

14)Since the quantity is less, special provision for MSE is not applicable.

The bidder along with its associate/ collaborators/ sub-contractors/ sub-vendors/ consultants/ service providers shall strictly adhere to BHEL fraud prevention policy displayed on BHEL website <http://www.bhel.com> and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice.

The supplier shall submit EI/EII forms to BHEL time to time as indicated by the BHEL and in case of inordinate delay in issuing EI/EII forms, then BHEL reserves the right to deduct 5% of the value of the supplied items against which EI/EII forms pending to be issued

## Enclosures:

"LD clause has to be confirmed without fail."

The offers should reach us 30 minutes before the time of opening of tenders.  
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Yours faithfully,  
For **BHARAT HEAVY ELECTRICALS LIMITED**

**S. SUBBURAJ**

Senior Manager

Purchase / R&D and CR

Bharat Heavy Electricals Limited

Thiruchirappalli - 620 014.

MANAGER / PURCHASE

(FOSSIL BOILERS)

Yours faithfully,

## Qualifying Criteria of Knife Edge Gate Valve

The BIDDER has to compulsorily meet the Qualifying Criteria indicated below to get qualified. Otherwise the technical offer will not be considered.

| S NO. | REQUIREMENTS                                                                                                                                                                                                                                                                                    | VENDOR'S RESPONSE |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 1.1   | The BIDDER / VENDOR ( <b>OEM</b> ) shall have a minimum <b>Five</b> Years of Continuous Experience in Design, Manufacture & Supply of “Knife Edge Gate Valve” that can handle solid flow.(Fly ash\solid particles) Vendor shall indicate the actual number of years of experience in the field. |                   |
| 1.2   | The BIDDER / VENDOR to furnish Reference List of Customers, with complete address, details of contact person, Knife Edge Gate Valve has been supplied in the past.                                                                                                                              |                   |
| 1.3   | BHEL reserves the right to verify the information provided by the vendor for the referred Knife Edge Gate valve supplied. BHEL reserves the right to accept or reject the offer based on the assessment of technical and financial capability of vendor.                                        |                   |



## Technical Specifications of Knife Edge Gate Valve

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### Annexure – I

#### **Instructions:**

1. Supplier is requested to give specific confirmation for each point specified **in Table below** WITH DETAILS of the item to be supplied and not to specify only 'YES/NO'.
2. **Any deviation from the specifications may be brought-out clearly by the supplier in the technical bid**

#### **Note:**

1. The vendor shall submit the offers in TWO parts.
  - a. Technical Offer and
  - b. Commercial Offer and Price bid
2. The technical offer shall contain complete details against all clauses of Technical specifications given by BHEL
3. The Technical offer shall be supported by copies of product catalogues and data sheets.
4. Vendor shall indicate the actual number of years of experience in the field and reference list of customers

#### **Scope of supply:**

1. Supply of 2 nos. of Knife edge gate valves as per the specification mentioned in Table below
2. Packing of valves suitable and safe delivery up to BHEL, Trichy – 620014.

#### **Pre dispatch Inspection:**

Pre dispatch Inspection will be carried out by BHEL representative at vendor site (if required).

#### **Application of valves:**

Knife edge gate valves to be used for draining CFBC Fly ash from fly ash hopper. Ash is less than 30  $\mu\text{m}$  and its temperature can go up to 400<sup>0</sup> C. Valve body should be able to handle pressure from -0.05 kg/cm<sup>2</sup> to 5 kg/cm<sup>2</sup>. Valve should be pneumatically operated with the option of manual over ride. The technical specifications of the valves are given below:

## Technical Specifications of Knife Edge Gate Valve

| Model                                   | Knife edge gate valve - Unidirectional                       | Offered | Deviation |
|-----------------------------------------|--------------------------------------------------------------|---------|-----------|
| Operation                               | Pneumatic cylinder operated with manual override arrangement |         |           |
| Diameter(ID)                            | 200 mm                                                       |         |           |
| Media                                   | Fly Ash (<30 $\mu$ m)                                        |         |           |
| Temperature                             | 300- 400° C                                                  |         |           |
| Pressure Body                           | -0.05 to 5 kg\cm <sup>2</sup> (max.)                         |         |           |
| Seat pressure                           | Vendor to specify (>2.8 kg\cm <sup>2</sup> preferred)        |         |           |
| Mounting                                | Horizontal \ Vertical                                        |         |           |
| End Connection                          | ANSI B 16.5                                                  |         |           |
| Design std.                             | MSS SP 81                                                    |         |           |
| Testing std.                            | MSS SP 81                                                    |         |           |
| Max length of total assy.               | Vendor to specify (less than 2.0 m preferred)                |         |           |
| Body                                    | ASTM A 216 gr. WCB                                           |         |           |
| Gland                                   | ASTM A 216 gr. WCB                                           |         |           |
| Gate                                    | ASTM A 240 gr. 304                                           |         |           |
| Spindle                                 | ASTM A 240 gr. 304                                           |         |           |
| Seat                                    | ASTM A 240 gr. 304(Metal to metal)                           |         |           |
| Gland packing                           | Graphited asbestos rope                                      |         |           |
| Yoke(manual & pneumatic)                | IS 2062 \ ASTM A 36                                          |         |           |
| <b>Pneumatic Cylinder Specification</b> |                                                              |         |           |
| Type                                    | Double acting                                                |         |           |
| Cylinder tube                           | ASTM A 240 gr. 304                                           |         |           |
| Piston                                  | ASTM A 240 gr. 304                                           |         |           |
| Cylinder cover                          | Cast iron                                                    |         |           |
| Piston seals                            | Nitrile rubber                                               |         |           |
| Input signal                            | 4-20 mA                                                      |         |           |
| Feedback signal                         | 4-20 mA                                                      |         |           |
| Operating pressure                      | 3.0 to 8.0 kg\cm <sup>2</sup>                                |         |           |
| Air connection                          | PT 1/4"                                                      |         |           |
| Protection                              | IP 67                                                        |         |           |
| Solenoid                                | 230 V AC (weather proof)                                     |         |           |

**Guarantee Period:** The supplier shall warrant the entire supply against deficiency in performance and failure due to defects in material and workmanship for a period of at least 12 months from the date of commissioning or 18 months from the date of supply whichever ever earlier.



**Bharat Heavy Electricals Limited**  
Purchase Department / R&D and CR  
CCDP, Tiruchirappalli – 620 014  
Tamil Nadu, India

## **COMMERCIAL TERMS AND CONDITIONS FOR SUBMISSION OF OFFER**

### **1.0 QUOTATIONS**

Bidders shall submit the offer in **TWO INNER ENVELOPS** as indicated below which shall be sealed in one outer envelope.

**Envelope I** This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This envelope should be clearly marked "**Part I – Technical and Commercial bid**", indicating enquiry no., due date and address & reference of the bidder.

**Envelope II** This sealed envelope should contain **price details**. This envelope should be clearly marked "**Part II – Price bid**", indicating enquiry no., due date and address & reference of the bidder.

Both the envelopes (part I & part II) shall be put in one cover, duly sealed, super scribing as part I and part II of enquiry no., due date of opening and the address and reference of the bidder.

The above offer should reach this office on or before the due date by 14.00 hrs (IST). Late offers will not be considered. We suggest you to send the offer by SPPED POST.

Tender should not be addressed any individual's name but only by designation to:

**AGM / CCDP  
Purchase Department / R&D and CR  
Combined Cycle Demonstration Plant  
BHARAT HEAVY ELECTRICALS LIMITED  
TIRUCHIRAPPALLI – 620 014  
TAMIL NADU, INDIA**

Tender should be free from **CORRECTION AND ERASURES**, Corrections if any, must be attested. The following guidelines are applicable for price bid

- a) If, in the price structure quoted for the required material, there is discrepancy between the unit price and the total price (total price is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly
- b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected
- c) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject of (a) and (b) above

- d) If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date upto which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored.

Offers should be in **ENGLISH** and accompanied by detailed technical literature, catalogue and details of process facility in **ENGLISH**.

## **2.0 PART I (TECHNICAL & UNPRICED COMMERCIAL BID)**

### **2.1 Technical**

This part shall include / indicate the following:

Offer should contain complete scope of supply with all technical details, specification, delivery and other commercial terms and conditions.

### **2.2 Commercial**

This part shall include / indicate the following;

2.2.1 Part of shipment / station of dispatch

2.2.2 Terms of payment

2.2.3 Taxes & duties applicable

2.2.4 Delivery schedule

2.2.5 Offer validity

2.2.6 Country of origin

2.2.7 A copy of "Un-Priced Part II" i.e., a copy of the price bid without **the price details** to be enclosed.

## **3.0 PART II (PRICE – BID)**

This part should contain the schedule of price particulars and to be co – related to the technical details provided in part wherever required / possible break up price details are to be furnished. (Bidders shall quote only fixed rate / price only and not subject to any escalation whatsoever during the period of bid validity and execution of purchase order. Any bid with adjustable or price variation clause shall be treated as "non-responsive" and liable for rejection).

## **4.0 OPENING OF TENDERS**

The part I – Technical & commercial bid alone would be opened on the tender opening date at the pre-fixed time in presence of responded tenderers / authorized representative, who may like to be present for tender opening.

The part II – Price bid of technically suitable bidders alone would be opened. The technically suitable bidders would be informed about the price bid opening date. Clarifications if any required by BHEL for technical evaluation would be sought from bidders before opening of part II – price bid.

## **5.0 GENERAL**

5.1 Incomplete offers will not be considered.



5.2 Terms of Delivery: Bidders are required to quote their best delivery period. Delivery shall be counted from the date of letter of intent.

5.3 Taxes and Duties: All taxes and duties if any payable extra over and above the quoted price should be specifically indicated in the un-priced bid along with CST & TIN No etc., failing which the purchaser will not be liable for payment of such taxes and duties.(the quoted rates shall be considered as "all inclusive"

5.4 validity of offer: Offer shall be kept valid for acceptance for a period of 90 days (ninety days) from the date of bid opening.

5.5 Payment terms: Payment term is 100% direct payment after 45 days from the date of receipt and acceptance of materials (Any deviation in the above payment term will attract loading as mentioned below)  
"Base rate of SBI (as applicable on the date of Techno-commercial bid opening + 6% will be loaded for the period of relaxation sought by bidders).

Payment through bank is not preferred. In case of payment through bank is opted by the supplier, BHEL prefers documents submission through bank with copy of LR and door delivery of Goods to stores with consignee copy attached. In this case loading will be 3% on the offered value.

5.6 Liquidated Damages: It is clearly understood among the parties to the contract the **"Time is the essence of the contract"**. Therefore, the delivery of the goods specified in the purchase order should be made within the time prescribed. Failure to dispatch the materials in the time as per the delivery quoted in our purchase order would make the supplier liable to an un-conditional penalty as below.

a. Liquidated damages shall be 0.5% of the total order value per week or part there of subject to a maximum of 10% of the total order value

b. For staggered delivery schedule, LD shall be 0.5% of the undelivered portion per week of the delay or part there of subject to a maximum of 10% of the total order value.

c. Any deviation from the above LD clause, loading will be applied to the extent to which it is not agreed by the bidder (at offered value)

5.7 Risk Purchase: Alternately the purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitute therefore. The supplier shall be liable for any loss, which the purchaser may sustain by reason of such risk purchases.

5.8 Test Certificates: The bidders shall clearly mention in their offer that test certificate as called for in the technical specification, in the required number of copies will be provided at no extra cost.

5.9 Evaluation of the offers shall be on the basis of "to-Door cost at BHEL, Trichy" (Net cash outflow to BHEL). BHEL will consider the ranking after the loading is applied as offered above wherever deviations are observed.

**BHARAT HEAVY ELECTRICALS LIMITED**

Tiruchirapalli - 620 014

Purchase / R&amp;D and CR

Enquiry No:

date :

**COMMERCIAL TERMS CONFIRMATION**

| SI No | Description                                                                                   | BHEL Requirement                                                                                | Supplier Confirmation          |
|-------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|
| 01    | OFFER VALIDITY                                                                                | 90 days from the date of tender opening                                                         | YES                            |
| 02    | PRICE QUOTED                                                                                  | FOR Destination, BHEL Stores                                                                    | YES / NO                       |
| 03    | PACKING & FORWARDING<br>(Inclusive or extra. If extra clearly mention in % or lumpsum amount) | Supplier Option                                                                                 | Included / Extra               |
|       |                                                                                               |                                                                                                 | .....% / Rs .....              |
| 04    | EXCISE DUTY                                                                                   | R&D department of BHEL is exempted from paying ED. (ED Exemption certificate will be provided). | Accepted                       |
| 05    | VAT or CST<br>( clearly mention in % )                                                        | Supplier Option                                                                                 | VAT ..... %                    |
|       |                                                                                               |                                                                                                 | CST ..... % ( without C form ) |
| 06    | FREIGHT & INSURANCE<br>(Inclusive or extra. If extra clearly mention in % or lumpsum amount)  | Supplier Option                                                                                 | Included / Extra               |
|       |                                                                                               |                                                                                                 | .....% / Rs .....              |
| 07    | DELIVERY SCHEDULE                                                                             | Supplier Option                                                                                 |                                |
| 08    | PAYMENT TERM                                                                                  | 100% direct payment after 45 days from the receipt and acceptance of materials at BHEL, Trichy  | Accepted                       |
| 09    | LD CLAUSE                                                                                     | 0.5% per week to a maximum of 10%                                                               | Accepted                       |
| 10    | GARANTEE / TEST CERTIFICATE                                                                   | Supplier Option                                                                                 |                                |
| 11    | MSME CERTIFICATE                                                                              | To be attached (if available)                                                                   |                                |
| 12    | CONTACT PERSON DETAILS                                                                        | Name                                                                                            |                                |
|       |                                                                                               | Mobile Number                                                                                   |                                |
|       |                                                                                               | Email id                                                                                        |                                |

Date :

Signature of Supplier with Seal