



BHEL : PIPING CENTRE : CHENNAI – 600 017

**ENQUIRY NO: 4010900041**

**DATE: 16.12.09**

**IMPORTANT INFORMATION TO BIDDERS.**

1. This Tender is a **TWO PART BID.**  
Type and quantum of work is detailed in "SCOPE OF WORK"
2. The quoted price shall be " FIRM " till the complete execution of the scope.
3. Mode of Operation for Price Bid – Reverse Auction
4. Last date for submission of offer **28.12.09 - Time - 13.30 Hours.**
5. Techno-Commercial Bid Opening Date **28.12.09 - Time - 14.30 Hours.**
6. The above bid shall be sent in a sealed cover duly indicating

**Enquiry No& date, Tender Opening date & "CW PIPES-IS 3589–TUTICORIN-D PROJECT"**

To

**ADDL.GM / MM**

**BHEL - Piping Centre**

**New No:80 , G.N. Chetty Road**

**T Nagar / Chennai 600 017 . PHONE : 28161216 / 28161244**

**SCOPE OF WORK :**

BHEL requires the below mentioned quantities of various sizes of Welded Pipes – Pipes either **Spiral or Longitudinal Seam Weld** conforming to IS 3589 FE 410 Pipes as per TDC-TDG:07:05 and to be delivered to TUTICORIN project Site. The raw material plate is to be arranged by suppliers themselves.

**LIST OF ITEMS:**

Enq. Sl.no	Pipe Size in MM OD x Thickness	Qty. Mtrs	Destination Project Site	Delivery
10	2235 x 18 UG LS/SPIRAL	540	<b>TUTICORIN D</b>	15.03.2010
20	3240 x 20 UG LS/SPIRAL	560		

**Total Weight ~ 1421 MT**

**TECHNICAL CUM COMMERCIAL**

**Technical :**

1. The bidder shall supply the Welded Pipes, as per IS 3589 Specification and BHEL TDC. The Bidder shall also comply with the following BHEL documents.
  - a. Technical requirements viz. Length, Edge Preparation, Spider Arrangement, Quality Plan etc, as finalized and agreed in MOU for CW Pipes - Enquiry No. BHEL:PC:PUR:CW:IS 3589 : 001 Dt. 01.10.09)
  - b. **Pipes shall be externally coated as follows**  
Surface preparation : Blast cleaning to SA2½  
  
Primer coat : 2 coats of 30 microns each of Epoxy Polyamide resin based Zinc Phosphate paint  
  
Finish Coat : 1 coat of 100 microns of Epoxy resin with MIO paint  
  
Total DFT : 160 microns (min)



- 2 -

BHEL : PIPING CENTRE : CHENNAI – 600 017

ENQUIRY NO: 4010900041 DT: 16.12.09

**Commercial :**

1. The prices quoted by the Bidder shall be on F.O.R. Ex-works basis with Freight extra for transportation of Finished pipes to Tuticorin Project Site. Price quoted shall be " FIRM " till the execution of the complete scope with raw material plate in their scope.
2. Payment for freight will be based on per meter.
3. The bidder shall furnish all the breakups as requested in the price bid format as enclosed.
4. The bidder shall clearly indicate all the applicable Taxes / Duties / CESS.
5. Delivery – Supplies to be completed before 15.03.2010. The bidder shall strictly confirm to our delivery terms.

Delivery is the essence of the contract/PO. BHEL may accept or reject the price bid if delivery is not as specified, or if offered delivery is not suiting Project Plan/ Production Plan as per BHEL.

BHEL has the right to order partly or fully considering the various requirements. BHEL may short close/cancel an order or divert to another vendor if the performance of the vendor is poor, or the delivery requirement of the item is very critical and not being met, at any time during the currency of the Contract/PO irrespective of the PO Delivery date, if there is no response for improvement in delivery as per BHEL requirement.

BHEL may counter offer the final L1 rate to other eligible vendors for acceptance and decide to distribute the purchase orders fully or partly to the accepting vendors for ensuring deliveries meeting production/project requirement. BHEL decision will be final in this regard.

BHEL has the right to reject delayed deliveries or accept on a conditional basis.

6. Bidder shall give a minimum validity of 60 days for the price offer.
7. All other commercial terms as finalized and agreed in the MOU (Copy enclosed)

**PRICE :**

The bidder shall provide the price strictly as per the price format annexed herewith. In this addition to the hard copy, the bidder has to submit in soft copy also in excel format ( Preferably in CD ).

- a. Base Price shall include Cost of Raw Material plus conversion cost per Meter of bare pipe including Edge Preparation and providing Spider Arrangement and Testing as per BHEL TDC : TDG : 07 : 05.
- b. Ordering shall be on FOT Project Site including External Coating.
- c. Percentage of applicable Taxes, Duties and CESS shall be clearly indicated .
- d. Service Tax on transportation, if included or not, shall be clearly indicated.
- e. A soft copy of the price format with price details are also to be sent along with price bid. ( Preferably in CD ).



- 3 -

BHEL : PIPING CENTRE : CHENNAI – 600 017

ENQUIRY NO: 4010900041 DT: 16.12.09

Prices quoted shall be " FIRM " till complete execution of the scope and bidder shall give **validity** of this price offer for a period of **minimum 60 days** from the date of opening of Bids.

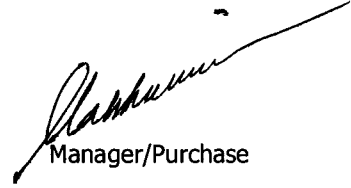
LIST OF DOCUMENTS ENCLOSED :

1. BHEL TDC : TDG : 07 : 05
2. MOU Terms .
3. Business Rule Document for Reverse Auction } shall be sent through Service Provider
4. Price Calculation Sheets }

The above documents form part of this tender document and bidder shall ensure that they have received all these along with tender and confirm.

**Bidder should confirm acceptance to all the Technical and Commercial Terms. Offers with deviation are liable for rejection.**

- **Pre Qualified** is the criteria for consideration for other than the BHEL Approved Vendors. After qualifying for registration, the new Vendors, may be considered for future in line with their system and policy. Such Vendors will not be considered in this Enquiry.
- The new Vendors may download Vendor registration forms from BHEL Web Site [www.bhel.com](http://www.bhel.com) and submit all relevant data for formal registration.



Manager/Purchase

**S. LAKSHMINARAYANAN**  
Manager/ Purchase  
BHEL / Piping Centre  
80 G.N. Road, T. Nagar  
Chennai - 600 017

**Enquiry No. 4010900041 Dt.16.12.2009  
Price Format for TUTICORIN D TPP(2x500MW)**

Sl. No	Pipe Size	Material Code	Total Qty in Mtrs	Base Price of Pipe Rate/Mtr (Ex-Works) as per TDC:	Extra Coating Rate/Mtr Polyamide based Phosphate paint - 2 x 30 Microns) Primer	Outside Epoxy resin Zinc paint - 1 x 100 Microns) Finish Coat	Extra Coating Rate/Mtr (Epoxy with MIO resin Paint to Tuticorin D	Outside Cost/Mtr of Finished Pipe to Site
1	2235 x18	1593859700UG	540	TDC:07:05	- 2 x 30 Microns) Primer	- 1 x 100 Microns) Finish Coat	-	
2	3240 x 20	1593860100UG	560					
USE THIS EXCEL FILE -PRICE FORMAT- GIVEN BY US FOR GIVING YOUR BID								



**1.0 SCOPE**

- 1.1 This Technical Delivery Conditions specify the requirements in addition to IS:3589 for electrically welded (ERW \ SAW ) steel pipes.
- 1.2 The pipes are intended for water services (under Non-IBR piping system only).
- 1.3 The pipes shall conform to the size, grade and quantity as specified in the purchase order.

**2.0 MATERIAL**

- 2.1 The plates / coils used for pipe shall meet the requirements as per IS: 3589 Grade Fe 410 MPa including mechanical test requirements.

**3.0 DIMENSIONAL TOLERANCES**

- 3.1 The tolerances limits are:

OD:- Upto NB 1600 mm:  $\pm 4$  mm; Above NB 1600 mm:  $\pm 6$ mm  
Thickness:- Upto 14mm :  $+1.3$ mm /  $-0.8$ mm; Above 14 mm :  $+1.4$ mm /  $- 0.8$ mm.

Length:- for OD upto 1300 mm :  $+10$  mm/  $- 0$  mm;  
for OD above 1300 mm :  $\pm 50$  mm

Ovality ( Difference between major and minor inside diameter) : 0.5% maximum

Squareness of ends: The ends of pipe section shall not vary by more than 3 mm at any point from a true plane perpendicular to the axis of the pipe and passing through the center of the pipe at the end.

- 3.2 Other tolerances shall be as per IS: 3589

**4.0 MANUFACTURING**

- 4.1 The pipe shall be of longitudinally welded or spirally welded as indicated in the P.O.
- 4.2 The ends shall be edge prepared as indicated in the purchase order.
- 4.3 Circumferential seams shall be 1500 mm apart from each other and from ends.
- 4.4 All pipes shall be completely finished and free from surface, sub surface defects such as pits, cracks, weld spatters & laminations etc..

**5.0 NDE**

- 5.1 The spiral welds/butt welds of length 100 mm from both the ends of the pipe shall be radiographically tested.

**6.0 HYDROSTATIC PRESSURE TEST**

- 6.1 Each pipe shall be subjected to a hydraulic test pressure as per IS: 3589 .  
(i.e., using the formula  $P = 2ST / D$ )

**7.0 INSPECTION**

- 7.1 All pipes shall be inspected by the vendor prior to BHEL / Customers' inspection. BHEL or BHEL authorized inspector / Customer will select the pipes at random and carryout the inspection. The necessary Material Despatch Clearance Certificate is to be obtained by the vendor prior to the despatch of material.

P.Elangovan, QA K.Ganeshan, MM	Approved by C. Karunakaran, Engg K. Vedaprasad, QC
-----------------------------------	--

**8.0 PAINTING AND PACKING**

- 8.1 Unless otherwise specified in the Purchase Order, all the pipes shall be coated with resin type translucent dry type rust preventive on the outside; pipes of diameter above NB 450 mm, shall be coated inside also.
- 8.2 Spiders are to be provided on both ends of the pipes as per the drawing - if indicated in the enquiry / Purchase Order.

**9.0 MARKING**

- 9.1 All pipes shall be paint stencilled, hard punched with the following details.

<u>Paint Stencil</u>	<u>Hard punch</u>
> Specification	> Specification
> Heat number	> Heat number
> Pipe number	> Pipe number
> Manufacturer's identification	> Manufacturer's identification
> Material Code	
> Size	

- 9.2 In addition to the above, for the pipes directly despatched to project site, the following details ( furnished in the P.O. or separately ) shall be paint stencilled & hard punched on both ends of the pipes

> Work order No	> DU No	> Project name
> Quantity	> Weight	

**10.0 CERTIFICATES**

- 10.1 Three original test certificates typed in English shall be submitted along with the Inspection report.

- 10.2 The test certificate shall furnish the following details.

- a. Purchase Order references.
- b. Test Certificate number.
- c. Specification, grade, size, quantity
- d. Heat number of plate (or pipe number with traceability to heat number)
- e. Chemical composition and mechanical properties
- f. Hydrostatic pressure test report
- g. RT Report.

P.Elangovan, QA  
K.Ganeshan, MM



Approved by

C. Karunakaran, Engg  
K. Vedaprasad, QC

