

# TENDER SPECIFICATION

SI No	Tender Specification Number	Unit Number & Project
1	BHE/PW/PUR/KTI-BLR(Vertical Pkg) U 1/1017	150 MW Boiler Vertical Pkg of Unit 1
2	BHE/PW/PUR/KTI-BLR(Vertical Pkg) U 2/1018	150 MW Boiler Vertical Pkg of Unit 2

FOR

Collection of materials from BHEL/client's stores/storage yard; transportation to site of work; pre-erection checks, pre-assembly if necessary, erection, testing, assistances for commissioning & trial operation, handing over, assistance for performance guarantee test of Boiler and its Auxiliaries, Electrostatic Precipitator (ESP) Power Cycle Pipeline, Rotating Machines, insulation, final painting etc of Unit 1 & Unit 2 of 2x150 MW OPG Power Gujarat Private Ltd.

At

OPGGPL Bhadreshwar TPP,

Distt. Kutch  
(Gujarat).

## VOLUME – II

### PRICE BID SPECIFICATION



**BHARAT HEAVY ELECTRICALS LIMITED**

(A GOVERNMENT OF INDIA UNDERTAKING)

POWER SECTOR : WESTERN REGION

345, KINGSWAY : NAGPUR 440 001

## Tender Specification Issue Details

### T E N D E R   S P E C I F I C A T I O N

SI No	Tender Specification Number	Unit Number & Project
1	BHE/PW/PUR/KTI-BLR(Vertical Pkg) U 1/1017	150 MW Boiler Vertical Pkg of Unit 1
2	BHE/PW/PUR/KTI-BLR(Vertical Pkg) U 2/1018	150 MW Boiler Vertical Pkg of Unit 2

FOR

Collection of materials from BHEL/client's stores/storage yard; transportation to site of work; pre-erection checks, pre-assembly if necessary, erection, testing, assistances for commissioning & trial operation, handing over, assistance for performance guarantee test of Boiler and its Auxiliaries, Electrostatic Precipitator (ESP) Power Cycle Pipeline, Rotating Machines, insulation, final painting etc of Unit 1 & Unit 2 of 2x150 MW OPG Power Gujarat Private Ltd.

At

OPGGPL Bhadreshwar TPP,

Distt. Kutch  
(Gujarat).

EARNEST MONEY DEPOSIT: Please see Special Conditions of Contract.

LAST DATE FOR

TENDER SUBMISSION:                      Please see Notice Inviting Tender

THESE TENDER DOCUMENTS CONTAINING Volume-**I** (TECHNICAL BID SPECIFICATION) AND Volume- **II** : PRICE BID ARE ISSUED TO:

M/s.....

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(TENDER DOCUMENTS ARE NOT TRANSFERABLE)

FOR BHARAT HEAVY ELECTRICALS LIMITED

AGM (Purchase)

PLACE: NAGPUR

DATE :

**Bharat Heavy Electricals Limited (PSWR, Nagpur)**  
**Tender Specification no. BHE/PW/PUR/KTI-BLR(Vertical Pkg)/1017-1018**  
**Volume- II.A: Price Bid Specification for**  
**ONE BOILER**  
**IMPORTANT INFORMATION**

This is a combined tender for E & C of 2 units of 150 MW Boiler (Unit 1 & 2 at OPG Kutch Project).

- i Tender specification (Volume I) is common for both units **(Unit 1 & 2)**.
- ii **Unit 1 & Unit 2** shall be awarded to separate agencies.
- iii **Bidder has to submit price for E & C of ONE UNIT of 150 MW Boiler Vertical Package as indicated in the Price Bid.**
- iv L-1 Bidder shall be considered for award of Unit-1.
- v For award of UNIT-2, next bidder in the order of their price competitiveness ( i.e L-2, then L-3 and hence forth) shall be given an option to match their price/rate, with the Awarded/Finalised price/rate of UNIT 1. In case none of the bidders agree to match the Awarded Lump sum price of UNIT-1, then BHEL may consider awarding the UNIT-2 to L-1 bidder or opt any other suitable method to finalize UNIT-2.

Date:

Signature & Official Seal of Bidder

**Bharat Heavy Electricals Limited (PSWR, Nagpur)**  
**Tender Specification no. BHE/PW/PUR/KTI-BLR(Vertical Pkg)/1017-1018**  
**Volume- II.A: Price Bid Specification for**  
**ONE BOILER**

A : Schedule of Quantities and Applicable Rate per Unit of Measurement

SL.NO	Contract (Main Package)	Rate schedule Identifier	QTY of One Unit	UNIT	Applicable Rate per Unit of measurement	PG MAs covered
1.1	Boiler	Structures	2126	MT	90% of 'X'	35,36,38
1.2	Boiler	Pressure Parts	2085	MT	115% of 'X'	04, 05, 06, 07, 08, 09, 10,11, 12,15, 16, 17, 19, 21, 24 (part), 28, 31, 32, 42, 45, 52, mtm pads and clamps of 97
1.3	Boiler	Non Pressure Parts (upto ESP inlet funnel)	682	MT	95% of 'X'	30,41,43,47,48 (part), 57, 80 (part), 81(part), 99 (part)
2.1	RM	Rotating Machines (ID/FD/PA Fans, Mills, etc and aux)	716	MT	60% of 'X'	55,56,61,62,65,67,99 (part)
2.2	RM	Handling Equipments of Rotating Machines	12		70% of 'X'	99 (part)
3.1	ESP	ESP	1825	MT	65% of 'X'	78,79,7X
3.2	ESP	Non Pressure Parts (ESP outlet funnel to Chimney)	595	MT	95% of 'X'	39,89,48, 57
4.1	PIPING	Piping-P91	237	MT	365% of 'X'	24,80, 81
4.2	PIPING	Piping-AS	66	MT	280% of 'X'	24, 80
4.3	PIPING	Piping-CS (HP)	110	MT	245% of 'X'	80, 81
4.4	PIPING	Piping-CS (LP)	206	MT	210% of 'X'	
4.5	PIPING	Piping-SS	0.5	MT	435% of 'X'	80,81
4.6	PIPING	Piping-Hangers and Supports	93	MT	125% of 'X'	80
4.7	PIPING	Piping-Temporary (Steam Blowing)	25	MT	80% of 'X'	
4.8	PIPING	Piping-Temporary (Chemical Cleaning)	20	MT	80% of 'X'	
5.1	INSULATION	Insulation	92	MT	135% of 'X'	
5.2	INSULATION	Pourable and castable	126	MT	55% of 'X'	
5.3	INSULATION	Iron parts	4	MT	120% of 'X'	
5.4	INSULATION	Aluminium Cladding sheets	54	MT	125% of 'X'	
5.5	INSULATION	Wool Mattress	159	MT	85% of 'X'	

Note:

1. Rate per Unit of measurement as calculated above shall be rounded off to the nearest whole number
2. X : is the Single Notional Rate per UOM quoted by Bidder in the Price Bid

Date:

Signature & Official Seal of Bidder

**Bharat Heavy Electricals Limited (PSWR, Nagpur)**  
**Tender Specification no. BHE/PW/PUR/KTI-BLR(Vertical Pkg)/1017-1018**  
**Volume- II.A: Price Bid Specification for**  
**ONE BOILER**

**Example:-**

Say Rs 10,537.77 is the notional rate ("X") in Rupees per UOM quoted by the bidder in the price bid.

The applicable rate per MT for items referred in above table shall be as calculated below:

SL.NO	Contract (Main Package)	Rate schedule Identifier	Applicable rate per MT (rounded off to nearest integer)
1.1	Boiler	Structures	90% of Rs 10,537.77 = Rs 9484/-
1.2	Boiler	Pressure Parts	115% of Rs 10,537.77 = Rs 12,118/-
1.3	Boiler	Non Pressure Parts (upto ESP inlet funnel)	95% of Rs 10,537.77 = Rs 10,010/-
2.1	RM	Rotating Machines (ID/FD/PA Fans, Mills, etc and aux)	60% of Rs 10,537.77 = Rs 6,323/-
2.2	RM	Handling Equipments of Rotating Machines	70% of Rs 10,537.77 = Rs 7,376/-
3.1	ESP	ESP	65% of Rs 10,537.77 = Rs 6,850/-
3.2	ESP	Non Pressure Parts (ESP outlet funnel to Chimney)	95% of Rs 10,537.77 = Rs 10,010/-
4.1	PIPING	Piping-P91	365% of Rs 10,537.77 = Rs 38,463/-
4.2	PIPING	Piping-AS	280% of Rs 10,537.77 = Rs 29,506/-
4.3	PIPING	Piping-CS (HP)	245% of Rs 10,537.77 = Rs 25,818/-
4.4	PIPING	Piping-CS (LP)	210% of Rs 10,537.77 = Rs 22,129/-
4.5	PIPING	Piping-SS	435% of Rs 10,537.77 = Rs 45,839/-
4.6	PIPING	Piping-Hangers and Supports	125% of Rs 10,537.77 = Rs 13,172/-
4.7	PIPING	Piping-Temporary (Steam Blowing)	80% of Rs 10,537.77 = Rs 8,430/-
4.8	PIPING	Piping-Temporary (Chemical Cleaning)	80% of Rs 10,537.77 = Rs 8,430/-
5.1	INSULATION	Insulation	135% of Rs 10,537.77 = Rs 14,226/-
5.2	INSULATION	Pourable and castable	55% of Rs 10,537.77 = Rs 5,796/-
5.3	INSULATION	Iron parts	120% of Rs 10,537.77 = Rs 12,645/-
5.4	INSULATION	Aluminium Cladding sheets	125% of Rs 10,537.77 = Rs 13,172/-
5.5	INSULATION	Wool Mattress	85% of Rs 10,537.77 = Rs 8,957/-

Date:

Signature & Official Seal of Bidder

**Bharat Heavy Electricals Limited (PSWR, Nagpur)**  
**Tender Specification no. BHE/PW/PUR/KTI-BLR(Vertical Pkg)/1017-1018**  
**Volume- II.A: Price Bid Specification for**  
**ONE BOILER**  
**B : PRICE BID**

SN	Description / Item of Work	Single Notional Rate “X” in Rupees per MT	
		In Figures	In words
1	Erection, Testing, Assistance for Commissioning etc of ONE UNIT of Boiler – Vertical Pkg as per scope of work detailed in Tender Specification BHE/PW/PUR/KTI-BLR(Vertical Pkg) /1017-1018		

Note :

1. Notional Rate “X” shall be quoted in Rupees and shall be up to a maximum of 2 decimal places; for example Rs 10,537.77
2. After Price Bid opening, and in case of a tie among two or more bidders in L-I rates (i.e quoting exactly the same LEAST notional rate “X” in Rupees per MT), then these bidders shall be intimated separately to submit rebate in Rupees (upto a maximum of two decimal places) in a ‘SEALED ENVELOPE’. The L-I shall be the party who offers the maximum rebate and the new notional rate shall be “X” less the rebate offered.
3. In case of further tie, process of sl no 2 is repeated so as to arrive at a single L-I Notional rate
4. Total amount for the work shall be the summation of amounts obtained by multiplying respective item ‘Quantities’ to the applicable rate per MT (Obtained from single notional rate as explained in the Example above).

Date:

Signature & Official Seal of Bidder