

# **TENDER SPECIFICATION BHEL: PSSR: SCT: 1975**

## **FOR**

**Erection, Testing, assistance for Commissioning and Trial Operation of Balance Works of Boiler & auxiliaries, Ducts & Dampers, Boiler Integral Piping, Fans, Bowl mills, Rotating Equipment's, its auxiliaries, supply and application of final Painting including Handling of Materials at BHEL / Client's Stores / Storage Yard and transportation to site at 1 x 800 MW North Chennai Stage III.**

## **VOLUME-II PRICE BID**



**BHARAT HEAVY ELECTRICALS LIMITED**

**(A Government of India Undertaking)**

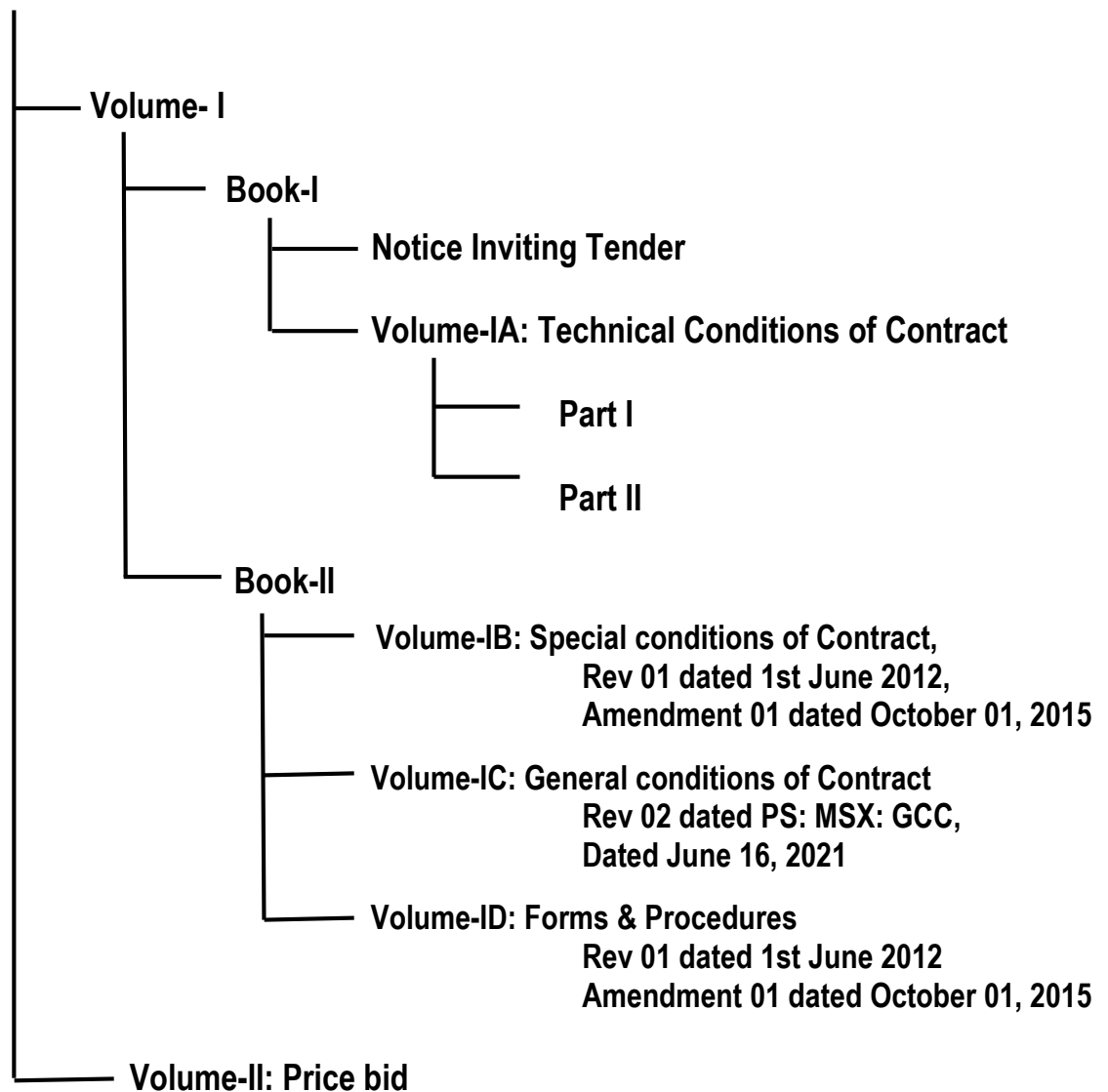
**Tek Towers, No.11, Old Mahabalipuram Road,  
Okkiyam Thoraipakkam, Chennai - 600097.**

# PRICE BID

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## TENDER SPECIFICATION CONSISTS OF

### Techno-Commercial Bid



## PRICE BID

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# PRICE BID

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## **PART-A-INSTRUCTIONS TO BIDDERS:**

1. The 'Price bid contains the consolidated list of BOQ with brief description of items. The quantity indicated in the BOQ / Price bid is approximate only and is liable for variation. Payment will be as per actual quantity executed as certified by BHEL Engineer.
2. Bidders shall quote 'Total Amount' in the format enclosed as a separate Excel File in BHEL NIC e-Procurement portal for the subject tender and upload the same under 'Packet details - > Tender covers -> Finance '(Cover Type Description – Price Bid)" and same shall be taken into account for evaluation and awarding and hence, shall be complete in all respect for the full scope of work defined in specification and in accordance with terms & conditions of the tender. Any other entry elsewhere in the price bid shall be treated as Null and Void. Quoting of rates in any other form/formats will not be entertained.
3. Before filling the Rates in the Price bid, the bidder shall go through the detailed specification of all items of BOQ as well as Scope of Work as specified in relevant Clause of this document
4. The above mentioned 'Total amount' is for the entire Bill of Quantity (BOQ) given in Part -C of the Price Bid.
5. BHEL has pre-fixed the weightages for the amount of individual items of Bill of Quantity with respect to the 'Total Amount' in Part-C.
6. Based on the pre-fixed weightages, the amount for the individual items of the Bill of Quantity shall be arrived at. This amount shall be rounded off to the nearest rupee.
7. Based on the quantities of individual item and the amount arrived in SI No: 6 above, unit rate of individual items shall be derived. This unit rate shall be rounded off to four decimal places.
8. Bidders to note that this is an item rate contract. Payment shall be made for the actual quantities of work executed at the unit rate arrived at as per SI No.7 above.

**Part C : Bill of Quantities**

**Tender Specification BHEL:PSSR:SCT:1975 for Boiler & Aux  
at 1 X 800 MW Coal Based North Chennai Thermal Power Project Stage III**

<b>Ref.No.</b>	<b>Description</b>	<b>Unit of Measurement</b>	<b>Qty.</b>	<b>Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount</b>
1A	STRUCTURES - BUNKER STRUCTURE	--		
1.7.3	PRO RATA PAYMENTS (85%)	--		
1.7.3.1	PRE-ASSEMBLY (IF NOT APPLICABLE, CLUB WITH PLACEMENT IN POSITION)	MT	465.31	.0094332
1.7.3.2	PLACEMENT IN POSITION	MT	465.31	.0062888
1.7.3.3	ALIGNMENT	MT	550	.0111501
1.7.3.4 a)	a)WELDING	MT	727.68	.0167192
1.7.3.4 b)	b) BOLT FIXING(if Not Applicable shall be paid along eith 1.7.3.4 a)	MT	723.86	.0058699
1.7.3.4 c)	c) BOLT TIGHTENING INSPECTION (if Not Applicable shall be paid along eith 1.7.3.4 a)	MT	893.95	.0084574
1.7.3.5	COMPLETION OF NDE & SR	MT	988.28	.0133569
1.7.3.6	PG MA Completion/ Floors completion with gratings & handrails	MT	1,533.79	.0103648
1.7.4	STAGE/MILESTONE PAYMENTS (15%)	--		
1.7.4.11	READINESS FOR FEEDING COAL	MT	1,533.76	.0041458

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1.7.4.12	COAL FIRING	MT	1,533.76	.0041458
1.7.4.16	PAINTING	MT	2,179	.0176699
1.7.4.17	AREA CLEANING, TEMPORARY STRUCTURE CUTTING, REMOVAL & RETURN OF SCRAP	MT	2,179	.002945
1.7.4.18	PUNCH LIST POINTS/ PENDING POINTS LIQUIDATION	MT	2,179	.00589
1.7.4.20	MATERIAL RECONCILIATION	MT	548.38	.0007412
1.7.4.21	COMPLETION OF CONTRACTUAL OBLIGATION	MT	1,533.76	.0020729
1A	STRUCTURES - BOILER STRUCTURE	--		
1.7.1	PRO RATA PAYMENTS (85%)	--		
1.7.1.1	PRE-ASSEMBLY (IF NOT APPLICABLE, CLUB WITH PLACEMENT IN POSITION)	MT	2,135.68	.0577288
1.7.1.2	PLACEMENT IN POSITION	MT	2,135.68	.0432966
1.7.1.3	ALIGNMENT	MT	2,320.82	.0470499
1.7.1.4 a)	a)WELDING	MT	2,634.74	.0356093

## Part C : Bill of Quantities

### Tender Specification BHEL:PSSR:SCT:1975 for Boiler & Aux at 1 X 800 MW Coal Based North Chennai Thermal Power Project Stage III

Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
1.7.1.4 b)	b) BOLT FIXING, TIGHTENING INSPECTION	MT	2,889.9	.019529
1.7.1.5	COMPLETION OF NDE & SR (IF NOT APPLICABLE, THEN THIS PORTION TO BE PAID ALONG WITH WELDING)	MT	3,297.94	.0222863
1.7.1.13	PG MA Completion/ Floors completion with gratings & handrails	MT	3,297.94	.066859
1.7.4	STAGE/MILESTONE PAYMENTS (15%)	--		
1.7.4.15	COMPLETION OF SHEET COVERING FOR BOILER ROOF, BURNER ROOF, LIFT SHAFT CLADDING, COMPLETION OF GUTTERS	MT	7,345.44	.0297828
1.7.4.16	PAINTING	MT	14,555	.1180292
1.7.4.17	AREA CLEANING, TEMPORARY STRUCTURE CUTTING, REMOVAL & RETURN OF SCRAP	MT	9,845.44	.0133064
1.7.4.18	PUNCH LIST POINTS/ PENDING POINTS LIQUIDATION	MT	9,845.44	.0266128
1.7.4.20	MATERIAL RECONCILIATION	MT	2,135.68	.0057729
1.7.4.21	COMPLETION OF CONTRACTUAL OBLIGATION	MT	3,297.94	.0044573
1C	NON-PRESSURE PARTS	--		
1.7.1	PRO RATA PAYMENTS (85%)	--		

**Part C : Bill of Quantities**

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Ref.No.	Description	Unit of Measurement	Qty.	Weightage for amount of each item (Nearest to the 7 decimal points) w.r.t the total amount
1.7.1.1	PRE-ASSEMBLY (IF NOT APPLICABLE, CLUB WITH PLACEMENT IN POSITION)	MT	1,669.35	.0598568
1.7.1.2	PLACEMENT IN POSITION	MT	1,671.7	.0239764
1.7.1.3	ALIGNMENT	MT	1,858.55	.0266563
1.7.1.4	WELDING/BOLTING/FIXING	MT	2,013.22	.043312
1.7.1.5	HANGERS & SUPPORTS ETC	MT	2,032.43	.0728755
1.7.4	STAGE/MILESTONE PAYMENTS (15%)	--		
1.7.4.1	AIR & GAS TIGHTNESS TEST	MT	2,032.43	.0145751
1.7.4.8	Completion of Coal Piping upto Toggle Section	MT	2,032.43	.002915
1.7.4.9	Completion of Enclosure	MT	2,032.43	.00583
1.7.4.12	COAL FIRING	MT	2,032.43	.00583
1.7.4.16	PAINTING	MT	5,122	.0073462
1.7.4.17	AREA CLEANING, TEMPORARY STRUCTURE CUTTING / REMOVAL & RETURN OF SCRAP	MT	2,269.01	.0032543



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1.7.4.18	PUNCH LIST POINTS / PENDING POINTS LIQUIDATION	MT	2,269.01	.0032543
1.7.4.20	MATERIAL RECONCILIATION	MT	1,669.35	.0023943
1.7.4.21	COMPLETION OF CONTRACTUAL OBLIGATION	MT	2,032.43	.002915
2A	ROTATING MACHINES	--		
1.7.1	PRO RATA PAYMENTS (85%)	--		
1.7.1.1	PRE-ASSEMBLY (IF NOT APPLICABLE, CLUB WITH PLACEMENT IN POSITION)	MT	613.86	.0107023
1.7.1.2	PLACEMENT IN POSITION	MT	613.86	.0142697
1.7.1.3	ALIGNMENT	MT	814.66	.0189375
1.7.1.4	WELDING/BOLTING/FIXING	MT	1,029.13	.023923
1.7.1.14	EQUIPMENT TRIAL OPERATION	MT	1,859.51	.021613
1.7.4	STAGE/MILESTONE PAYMENTS (15%)	--		
1.7.4.6	CLEAN AIR FLOW TEST	MT	1,859.51	.0021613

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1.7.4.7	Readiness of Coal Feeders	MT	1,029.13	.0011961
1.7.4.8	Completion of Lub Oil Flushing	MT	1,029.13	.0011961
1.7.4.9	Completion of PG MA	MT	1,029.13	.0011961
1.7.4.12	COAL FIRING	MT	1,029.13	.0023923
1.7.4.13	FULL LOAD	MT	1,029.13	.0011961
1.7.4.14	TRIAL OPERATION OF UNIT	MT	1,029.13	.0023923
1.7.4.16	PAINTING	MT	2,150	.0049979
1.7.4.17	AREA CLEANING, TEMPORARY STRUCTURE CUTTING / REMOVAL & RETURN OF SCRAP	MT	2,015.51	.0023426
1.7.4.18	PUNCH LIST POINTS / PENDING POINTS LIQUIDATION	MT	2,015.51	.0023426
1.7.4.20	MATERIAL RECONCILIATION	MT	613.86	.0007135
1.7.4.21	COMPLETION OF CONTRACTUAL OBLIGATION	MT	1,029.13	.0011961
2B	HANDLING EQUIPMENTS	--		

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1.7.1	PRO RATA PAYMENTS (85%)	--		
1.7.1.1	PRE-ASSEMBLY (IF NOT APPLICABLE, CLUB WITH PLACEMENT IN POSITION)	MT	23	.0004002
1.7.1.2	PLACEMENT IN POSITION	MT	23	.0005337
1.7.1.3	ALIGNMENT	MT	23	.0005337
1.7.1.4	WELDING/BOLTING/FIXING	MT	23	.0005337
1.7.1.14	EQUIPMENT TRIAL OPERATION	MT	23	.0002668
1.7.4	STAGE/MILESTONE PAYMENTS (15%)	--		
1.7.4.6	Completion of Load Test	MT	23	.0001067
1.7.4.12	COAL FIRING	MT	23	.0000534
1.7.4.13	FULL LOAD	MT	23	.0000267
1.7.4.14	TRIAL OPERATION OF UNIT	MT	23	.0000534
1.7.4.16	PAINTING	MT	23	.0000534

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1.7.4.17	AREA CLEANING, TEMPORARY STRUCTURE CUTTING / REMOVAL & RETURN OF SCRAP	MT	23	.0000267
1.7.4.18	PUNCH LIST POINTS / PENDING POINTS LIQUIDATION	MT	23	.0000267
1.7.4.20	MATERIAL RECONCILIATION	MT	23	.0000267
1.7.4.21	COMPLETION OF CONTRACTUAL OBLIGATION	MT	23	.0000267
<b>TOTAL Weightage</b>				0.9999997