



An ISO 9001  
Company

## Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

### OUTSOURCING DEPARTMENT

<b>TITLE</b>  <b>CORRIGENDUM for NIT 23401</b>	Phone: +91 431 257 5094 Email : <a href="mailto:rbk@bheltry.co.in">rbk@bheltry.co.in</a>
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	<b>Reference Number:</b> <b>Enquiry :REQUIRED</b> <b>NEW VENDOR FOR</b> <b>STEEL FABRICATION</b> <b>WITH VENDOR'S</b> <b>MATERIAL</b>	<b>Enquiry Date:</b> <b>18.07.2015</b>	<b>Due date for submission of</b> <b>quotation: 17.07.2016</b>
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You are requested to quote the Enquiry number date and due date in all your correspondences. This is only a request for quotation and not an order

### CORRIGENDUM No. 2

Details of Corrigendum
<ol style="list-style-type: none"><li><b><i>1. Facility checklists for General Fabrication &amp; Stairs and Ducts assembly have been revised and integrated.</i></b></li><li><b><i>2. Facility checklists for Autowelded beams &amp; buckstays, Columns and Ceiling girders have been revised.</i></b></li></ol>
<b>All other terms and conditions as published in the NIT_23401 remain unaltered.</b>



BHARAT HEAVY ELECTRICALS LIMITED, TIRUCHIRAPALLI

OUTSOURCING

Check List for Spot Visit - General Fabrication, Stairs and Ducts assembly

Doc No: SVCL:026/01 dated 30.12.2015

Vendor Name and Address:

Spot assessment date:

Part-A (Mandatory)

Sl No	Parameter for evaluation	Minimum Required	As given by Firm	Actual observed in Audit	Remarks	Ok/Not Ok
1	Land area . (If land is taken under lease, registered lease deed for 3 yrs period is required)	0.9 Acres				
2	Fencing/Compound wall	All around				
3	Power (MIN)	70 HP				
4	Covered Shed	10 M X 10 M or equivalent to 100 sq.m with minimum width of 8 m				
5	Three roller bending machine (for min 7 mm plate thickness)	Inhouse / Outsourced (from BHEL approved source only)				
6	Material handling crane capacity with stability certificate (Mobile crane / A frame / EOT )	10 MT (Mobile crane may be owned or under lease)				
	<b>OVEN:</b>					
7	Electrode baking oven	1 No				
8	Electrode holding oven	1 No				
9	Flask Oven	4 nos				
10	Manual Gas cutting	2 Nos				
	<b>CUTTING MACHINE:</b>					
11	Gas Cutting	1 No				
	<b>GRINDING &amp; DRILLING MACHINES:</b>					
12	Bench Grinding	1 No				
13	Manual / Portable AG (Type 5&7)	2 Nos Each				
14	Drilling machine (Min 25 mm)	1 No				

SI No	Parameter for evaluation	Minimum Required	As given by Firm	Actual observed in Audit	Remarks	Ok/Not Ok
15	Portable drilling machine (Min 16 mm)	1 No				
16	(SMAW)Welding M/c 400 Amps Inverter	4 Nos				
	<b>INSPECTION FACILITIES</b>					
17	LPI Kit	1 Set				
18	MPI Unit with calibration block (Prod type - 1000 A)	1 No				
19	Level II LPI/MPI qualified Personnel with valid certificate	1 Person				
20	Blasting / Painting facility	Inhouse / Outsourced from BHEL approved source				
	<b>MEASURING INSTRUMENTS</b>					
21	Tape 3m,5m,20m (with Class I accuracy)	each 2 Nos				
22	Vernier 0-200mm	1 No				
23	Feeler Gauge	1 No				
24	Weld fillet gauge 25 MM	1 No				
25	Straight Edge	1 No				
26	Try square	1 No				
27	Sprit level	1 No				
28	Water level checking arrangement	1 No				
29	IT Pan Card	Original to be offered for verification				
30	TIN No	Original to be offered for verification				
31	Excise Registration Certificate (for OVM vendors)	Original to be offered for verification				
32	Office room with 2 PC, internet facility and printer	Must				

Sl No	Parameter for evaluation	Minimum Required	As given by Firm	Actual observed in Audit	Remarks	Ok/Not Ok
	<b>MATERIAL ACCOUNTING:</b>					
33	Raw Material Clearance System (For OVM Vendors)	Day Book Entry system or likewise.				
34	Raw Material Testing (For OVM Vendors)	Access to testing labs of BHEL or Any other NABL approved lab				

**NOTE\_1:**

**A. Items in Sl.no: 7, 8, 9, 18, 21, 22, 23, 24 and 25 (Tapes & Straight edge - one time calibration) must have valid calibration certificate from any NABL accredited lab.**

**B. For Sl.no: 5 and 20 earlier executed POs or valid agreement for facility tie-up with BHEL approved source must be produced.**

**C. For mobile cranes under lease, valid lease document must be produced at the time of spot assessment.**

Part-B ( Optional )						
1	Standby Generator					
	Capacity (HP)					
	Owned or On rent					
2	ISO Certification					

**Part-C: Final Recommendation (for BHEL use only)**

**Recommendation after document verification:**

**Recommendation after spot assessment:**

**Auditor-1 (Spot assessment):**

**Auditor-2 (Spot assessment):**

**Important Notes :**

01	Part-A requirement is a must for qualifying the vendor. Hence, filling up all evaluation parameters is a must and shall be available at the time of spot visit
02	Part-B is only optional and need not be considered for disqualifying the vendor.

**BHARAT HEAVY ELECTRICALS LIMITED, TIRUCHIRAPALLI****OUTSOURCING****Check List for Spot Visit - Autowelded Beams and Buck Stays****Doc No: SVCL:024/01 dated 30.12.2015****Vendor Name and Address:****Spot assessment date:****Part-A (Mandatory)**

SI No	Parameter for evaluation	Minimum Required	As given by Firm	Actual observed in Audit	Remarks	Ok/ Not Ok
1	Land area (If land is taken under lease, registered lease deed for 3 yrs period is required)	0.9 Acres				
2	Fencing/Compound wall	All around				
3	Power capacity	100 HP (3 phase)				
4	Covered shed	12M X 14M or 168 sq.m with minimum width of 10 m				
5	Auto welding M/C(SAW) with track facility and 45 degree fixtures	2 Nos, Min 800 amps, track of min 20 mtr continuous length				
6	Material handling crane facility with stability certificate (EOT/A frame/ Gantry / Mobile crane)	20 MT (Combination of multiple cranes with minimum capacity of 12 MTs each crane is also acceptable. Mobile crane may be owned or under lease)				
7	Hydraulic warpage removal machine (Min 500 MT capacity) or Hydraulic press (Min 500 MT capacity) or Beam straightening machine (Min 500 MT capacity)	1 No				

SI No	Parameter for evaluation	Minimum Required	As given by Firm	Actual observed in Audit	Remarks	Ok/ Not Ok
	<b>OVEN:</b>					
8	Flux baking oven (1 No. for each SAW Auto-welding work station)	2 Nos				
10	Electrode baking oven	1 No				
11	Electrode holding oven	1 No				
12	Flask Oven	5 Nos				
	<b>CUTTING MACHINE:</b>					
13	Bug cutting machine	2 Nos				
14	Manual cutting torch	2 Nos				
15	(SMAW)Welding M/c 400 Amps Inverter	5 Nos				
	<b>GRINDING &amp; DRILLING MACHINES:</b>					
16	Bench Grinding	1 No				
17	Manual / Portable AG	2 Nos				
18	Drilling M/c (Min 25 mm dia)	2 Nos				
	<b>INSPECTION FACILITIES</b>					
19	LPI kit	1 Set				
20	MPI Unit with calibration block (Prod type - 1000 A)	1 No				
21	Level II LPI/MPI qualified Personnel with valid certificate	1 Person				
	<b>MEASURING INSTRUMENTS</b>					
22	Tape 3m,5m,20m (with Class I accuracy)	each 2 Nos				
23	Vernier caliper 0-200mm	1 No				
24	Feeler gauge	1 No				
25	Weld fillet gauge 25 mm	1 No				
26	Straight edge	1 No				

SI No	Parameter for evaluation	Minimum Required	As given by Firm	Actual observed in Audit	Remarks	Ok/ Not Ok
27	Try square	1 No				
28	Sprit level	1 No				
29	DFT meter for painting	1 No				
30	Water level checking arrangement	1 No				
31	Blasting / Painting facility	Inhouse / Outsourced (from BHEL approved source only)				
32	IT Pan Card	Original must be offered for verification				
33	TIN No / VAT registration	Original must be offered for verification				
34	Excise Registration Certificate (for OVM vendors)	Original must be offered for verification				
35	Office room with 2 PC , internet facility and printer	Must				
	<b>MATERIAL ACCOUNTING:</b>					
36	Raw Material Clearance System ( <b>For OVM Vendors</b> )	Day Book Entry system or likewise.				
37	Raw Material Testing ( <b>For OVM Vendors</b> )	Access to testing labs of BHEL or Any other NABL approved lab				

**NOTE\_1:**

- A. Items in SI.no: 5, 8 - 12, 20, 22, 23, 24, 25, 26, 29 (Tapes & Straight edge - one time calibration) must have valid calibration certificate from any NABL accredited lab.**
- B. For SI.no: 31, earlier executed POs or valid agreement for facility tie-up with BHEL approved source must be produced.**
- C. For mobile cranes under lease, valid lease document must be produced at the time of spot assessment.**

SI No	Parameter for evaluation	Minimum Required	As given by Firm	Actual observed in Audit	Remarks	Ok/ Not Ok				
<b>Part-B ( Optional )</b>										
1	Standby Generator :									
	a Capacity ( HP)									
	b Owned or On rent									
2	Spectrometer (applicable for alloy steel fabrication)	Inhouse/Outsourced								
3	ISO Certification									
<b>Part-C: Final Recommendation (for BHEL use only)</b>										
Recommendation after document verification:										
Recommendation after spot assessment:										
Auditor-1 (Spot assessment):			Auditor-2 (Spot assessment):							
<b>Note 2:</b>										
01	Part-A requirement is a must for qualifying the vendor. Hence, filling up all evaluation parameters is a must and shall be available at the time of spot visit									
02	Part-B is only optional and need not be considered for disqualifying the vendor.									





BHARAT HEAVY ELECTRICALS LIMITED, TIRUCHIRAPALLI

OUTSOURCING

Check List for Spot Visit - Ceiling girders

Doc No: SVCL:004/02 dated 31.12.2015

Vendor Name and Address:

Spot assessment date:

Part-A - (Mandatory)

Minimum experience required for Ceiling girders fabrication

01	Report of past experience in fabricating similar jobs (Min 20 MT as assembly using plate above 40 mm thro' SAW process) for power projects of at least 250MW / other projects' structures accompanied by P.O copies, inspection report with dimensions issued by customer (or) client or track record for at least 2 BHEL - POs or 100MT completion for Auto welded Beams/Buckstays .
02	Spot evaluation of firm's quality (if qualified) including firm's personnel by BHEL on fulfilling the above requirement.

Part-A1 - (Mandatory)

Sl No	Paramter for evaluation	Minimum Required	As given by Firm	As observed in Audit	Remarks	Ok/ Not Ok
1	Land area (If land is taken under lease, registered lease deed for 3 yrs period is required)	2 acres				
2	Fencing/Compound wall	All around				
3	Power capacity	100 HP (3 phase)				
4	Covered Shed	30 x 40 m or 1200 sq.m with minimum width of 25 m				
5	Auto welding M/C(SAW) with track facility and 45 degree fixtures	2 Nos, Min 800 amps, track of min 20 mtr continuous length				
6	Material handling crane facility (EOT/ Gantry / Mobile crane)	To Handle 60 MT (Single piece) (combination of multiple cranes with minimum capacity of 30 MTs each crane is also acceptable)				
		Span: 12 m				
		Track Length : 30 m				

	<b>GRINDING MACHINE</b>					
7	Bench Grinding	1 No				
8	Manual / portable grinding machine (AG)	2 Nos				
	<b>CUTTING &amp; DRILLING MACHINE:</b>					
9	Bug Cutting M/c	2 Nos				
10	Manual Cutting torch	2 Nos				
11	Drilling machine (Min 25 mm dia)	2 Nos				
	<b>OVEN</b>					
12	Flux baking oven (1 No. for each SAW Auto-welding work station)	2 Nos				
13	Electrode baking oven	1 No				
14	Electrode holding oven	1 No				
15	Flask Oven	5 Nos				
16	Pre heating & post heating	Burner with minimum length of 15 m.				
17	(SMAW)Welding M/c 400 Amps Inverter	5 Nos				
	<b>INSPECTION FACILITIES</b>					
18	MPI Unit with calibration block (Prod type - 1000 A)	1 No				
19	LPI Kit	1 Set				
20	Level II LPI/MPI qualified Personnel with valid certificate	1 Person for each type.				
21	UT/RT facility with qualified personnel	Inhouse / Outsourced - BHEL approved source only				

	<b>MEASURING INSTRUMENTS</b>					
22	Tape 3m,5m,20m (Class I accuracy)	each 2 Nos				
23	Vernier 0-200mm	1 No				
24	Feeler gauge	1 No				
25	Weld fillet gauge 25 MM	1 No				
26	Straight edge	1 No				
27	Try square	1 No				
28	Spirit level	1 No				
29	Water level checking arrangement	1 No				
32	DFT Meter for painting	1 No				
33	Post welding heat treatment facilities (Electrical resistance upto 40 mm and induction heating above 40 mm)	Inhouse / Outsourced - BHEL approved source				
34	Blasting / Painting facility	Inhouse / Outsourced - BHEL approved source				
35	IT Pan Card	Original to be offered for verification				
36	TIN No	Original to be offered for verification				
37	Excise Registration Certificate (for OVM vendors)	Original to be offered for verification				
38	Office room with 2 PC , internet facility and printer	Must				
	<b>MATERIAL ACCOUNTING</b>					
39	Raw Material Clearance System ( <b>For OVM Vendors</b> )	Day Book Entry system or likewise.				
40	Raw Material Testing ( <b>For OVM Vendors</b> )	Access to testing labs of BHEL or any other NABL approved lab				

**NOTE\_1:**

**A. Items in Sl.no: 5, 12,13, 14, 15, 22, 23, 24, 25, 26, 32 (Tapes & Straight edge - one time calibration) must have valid calibration certificate from any NABL accredited lab.**

**B. For outsourced facilities, earlier executed POs or valid agreement for facility tie-up with BHEL approved source must be produced.**

**C. For mobile cranes under lease, valid lease document must be produced at the time of spot assessment.**

<b>Part - B (Optional)</b>						
1	<b>Standby Generator</b>					
	Capacity (KVA / HP)					
	Owned or On rent					
2	Stenciling					
3	Punching Machine					
<b>Part-C: Final Recommendation (for BHEL use only)</b>						
<b>Recommendation after document verification:</b>						
<b>Recommendation after spot assessment:</b>						
<b>Auditor-1 (Spot assessment):</b>			<b>Auditor-2 (Spot assessment):</b>			
<b><u>Important Notes :</u></b>						
01	<b>1. Part-A, A1 requirement is a must for qualifying the vendor. Hence, filling up all evaluation parameters is a must and shall be available at the time of spot visit</b>					
02	<b>2. Part-B is only optional and need not be considered for disqualifying the vendor.</b>					

**BHARAT HEAVY ELECTRICALS LIMITED, TIRUCHIRAPALLI****OUTSOURCING****Check List for Spot Visit - Columns**

Doc No: SVCL:001/03 dated 31.12.2015

Vendor Name and Address:

Spot assessment date:

**Part-A - (Mandatory)****Minimum experience required for Column Fabrication**

- 01 Report of past experience in fabricating similar jobs (Min 20 MT as assembly using plate above 40 mm thro' SAW process) for power projects of at least 250MW / other projects' structures accompanied by P.O copies, inspection report with dimensions issued by customer (or) client or track record for at least 2 BHEL - POs or 100MT completion for Auto welded Beams/Buckstays .
- 02 Spot evaluation of firm's quality (if qualified) including firm's personnel by BHEL on fulfilling the above requirement.

**Part-A1- (Mandatory)**

SI No	Paramter for evaluation	Minimum Required	As Given by Firm	Actual Observed in Audit	Remarks	Ok/Not Ok
01	Land area (If land is taken under lease, registered lease deed for 3 yrs period is required)	0.9 Acres				
02	Fencing/Compound wall	All around				
03	Power capacity	100 HP (3 phase)				
04	Covered shed	12M X 14M or 168 sq.m with minimum width of 10 m				
05	Auto welding M/C(SAW) with track facility and 45 degree fixtures	2 Nos, Min 800 amps, track of min 20 mtr continuous length				
06	Hydraulic warpage removal machine (Min 500 MT capacity) or Hydraulic press (Min 500 MT capacity) or Beam straightening machine (Min 500 MT capacity)	1 No				
07	<b>Roller Supports for Individual Column Pieces - Column Assembly</b>	<b>14 Nos. (Open area length Min :85 M)</b>				
08	End machining (milling or any machining process) set up to obtain rest plate/ cap plate flatness of 0.1 mm accuracy	Inhouse / Outsourced (from BHEL approved source only)				
09	Material handling crane facility with stability certificate for column fabrication and assembly (EOT/A frame/ Gantry / Mobile crane)	To Handle 60 MT (Single piece) (combination of multiple cranes with minimum capacity of 20 MTs each crane is also acceptable)				

	<b>CUTTING &amp; DRILLING MACHINE:</b>					
10	Bug cutting machine	2 Nos				
11	Manual gas cutting torch	2 Nos				
12	Drilling machine - Column Assembly	Radial / Column drilling machine - 1 no, Portable (Magnet type) - 2 Nos				
	<b>OVEN:</b>					
13	Flux baking oven (1 No. for each SAW Auto-welding work station)	2 Nos				
14	Electrode baking oven	1 No				
15	Electrode holding oven	1 No				
16	Flask Oven	5 Nos				
17	Pre heating	Burner with 15 m minimum length.				
18	(SMAW)Welding M/c 400 Amps Inverter	5 Nos				
	<b>INSPECTION FACILITIES</b>					
19	MPI Unit with calibration block (Prod type - 1000 A)	1 No				
20	LPI Kit	1 Set				
21	Level II LPI/MPI qualified Personnel with valid certificate	1 Person for each type.				
	<b>MEASURING INSTRUMENTS</b>					
22	Tape 3m,5m,20m (with Class I accuracy)	each 2 Nos				
23	Vernier caliper 0-200mm	1 No				
24	Feeler gauge	1 No				
25	Weld fillet gauge 25 MM	1 No				
26	Straight edge	1 No				
27	Try square	1 No				
28	Spirit level	1 No				
29	Water level checking arrangement	1 No				
30	Air Compressor of 3 HP rating	1 set				
31	IT Pan Card	Original to be offered for verification				
	<b>MATERIAL ACCOUNTING</b>					
32	Raw Material Clearance System (For OVM Vendors)	Day Book Entry system or likewise.				
33	Raw Material Testing (For OVM Vendors)	Access to testing labs of BHEL or any other NABL approved lab				
<b>NOTE_1:</b> <b>A. Items in Sl.no: 5, 13-16, 19, 22, 23, 24, 25, 26 (Tapes &amp; Straight edge - one time calibration) must have valid calibration certificate from any NABL accredited lab.</b> <b>B. For outsourced facilities, earlier executed POs or valid agreement for facility tie-up with BHEL approved source must be produced.</b> <b>C. For mobile cranes under lease, valid lease document must be produced at the time of spot assessment.</b>						

Part - B (Optional)						
01	ISO Certification					
02	Stenciling	Off cuts identification (using metal markers). Spectro machine preferable				
03	Post welding Heat Treatment Facilities (Electrical Resistance upto 40 mm and induction heating above 40 mm)	Inhouse / Outsourced (from BHEL approved source only)				
04	Templates and Shop made gauges	As per product requirements				
05	UT/RT	Inhouse / Outsourced (from BHEL approved source only)				
06	Blast cleaning	Inhouse / Outsourced (from BHEL approved source only)				
07	Punching Machine					
08	CNC cutting machine					
09	<b>Standby Generator</b>					
	Capacity (HP)					
	Owned or On rent/hire					
Part-C: Final Recommendation (for BHEL use only)						
Recommendation after document verification:						
Recommendation after spot assessment:						
Auditor-1 (Spot assessment):			Auditor-2 (Spot assessment):			
NOTE_2:						
01	Part-A, A1 requirement is a must for qualifying the vendor. Hence, filling up all evaluation parameters is a must and shall be available at the time.					
02	Part-B is only optional and need not be considered for disqualifying the vendor.					