

**Bharat Heavy Electricals Limited**  
**Ranipet-632406, India.**  
**Quality Assurance(Mech)**

QA:FGD(M):QR:HWMB:27

Date 05/08/2021

Indent No. : RFW11250 DATED 27-07-2021

Work Order No. : G501-057-2-FW715

Project : DADRI-II 4X490MW FGD PACKAGE.

Item : HOIST WITH MONORAIL BEAM.

Ref: 6130-109-QVM-Q-013(CL); 6130-109-PVM-H-001/03(PS); 6130-109-QVC-Q-004(QP)

Quality requirements are given below:

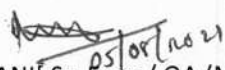
1. Inspection at Manufacturer works applicable by BHEL/BHEL TPI for mono rail beam as per the attached NTPC approved QP.
2. Annexure-Q shall be a part of the enquiry file
3. Packing shall be as per Engineering approved technical specification / drawing.
4. Painting shall be done as per the following specification.

Item	SURFACE PREPARATION	PRIMER	INTERMEDIATE	FINISH	TOTAL DFT	SHADE
Handling Equipment(Hoist)	POWER TOOL CLEANING TO S3(SSPC-SP3)	TWO COATS OF RED OXIDE ZINC PHOSPHATE TO IS12744(35 MICRONS PER COAT)	NIL	TWO COATS OF SYNTHETIC ENAMEL TO IS 2932(30 MICRONS PER COAT)	130 micron	GREY WHITE RAL 9002
Idler roller shall be applied with two coats of 70 microns at shop						
Monorail for hoist	Blast cleaning to Sa 2½ (Near white metal) with surface profile 40-60µm conforming to ISO 8501-1	One coat of Two component moisture curing zinc (ethyl) silicate primer coat (Min 80% metallic zinc content in dry film, solid by volume minimum 60% ±2). Zinc dust composition and properties shall be as per Type II as per ASTM D520-00 DFT- 70µ	One coat of Two component polyamide cured epoxy with MIO content (containing lamellar MIO Min 30% on pigment, solid by volume min. 80%±2) DFT- 100µ	Two coats of two pack aliphatic isocyanate cured acrylic polyurethane paint to IS 13213 solid by volume min.55%±2) DFT- 35µ/ coat	240 micron	Grey white, RAL 9002

5. BHEL approved vendors is applicable for supply of hoists and monorail beams.
6. Vendor shall confirm following for inspection purpose.
  - a. Latest version of standards & Specification shall be applied
  - b. Materials shall be procured in compliance to Functional Technical Specification.
  - c. Gauges and measuring instruments with valid calibration only shall be used.
  - d. Inspection / Inspection waiver / approval by BHEL do not absolve Supplier's responsibility for conformity of the specification as per the terms of PO.
  - e. BHEL /BHEL Authorized representatives shall have the right to witness the necessary inspection and testing of goods mentioned in the PO.
  - f. In case of Vendor Drawing & Datasheet, it needs approval by BHEL Engineering.
  - g. This QP shall be read along with relevant PO, BHEL Specification/Drawing/Approved Datasheet. All requirements shall be complied by supplier.

QA/Electrical has provided hoist quality requirements separately.

This is for your information and necessary action at your end please.

  
ABDUL GHANI[ Sr. Engr / QA (Mech)]

  
RENJITH K[MANAGER/QA]



एन टी पी सी लिमिटेड

(भारत सरकार का उद्यम)

**NTPC Limited**

(A Govt. of India Enterprise)

(Formerly National Thermal Power Corporation Ltd.)

केन्द्रीय कार्यालय नोएडा

Corporate Centre NOIDA

Reference: CC:PE:6130:109:22695

Date:28-06-18

From:	RAKESH SHARMA CTF-GADARWARA & PM FGD	To:	BHEL-RANIPET BHEL, Boiler Auxillaries Plant, Ranipet - 632406, TAMILNADU
		CC:	- - -
<b>SUBJECT : NCTPP2, FLUE GAS DESULPHARISATION SYSTEM PACKAGE</b> Please find enclosed following drawings/documents for necessary action at your end as indicated in purpose code.			
VENDOR DRG NO:	null		
NTPC DRG NO:	6130-109-QVC-Q-004		
REVISION NO:	02		
DRG TITLE:	MQP for Structural Fabrication		
APP CATEGORY:	I		
RELEASE DATE:	28-06-18		
COMMENTS:	CAT I with minor comments.		



Engineering Division  
ISO 9001:2008 Certified

अभियंत्रिकी कार्यालय परिसर, प्लॉट नं.- ए 8ए, सेक्टर-24, पोस्ट बॉक्स नं.- 13, नोएडा (उ प) पिन-201 307

टेलिफोन नं.- 0120-2410333, 2410116 फैक्स-0120-2410136, 2410137

पंजीकृत कार्यालय: एनटीपीसी भवन, स्कोप कॉम्प्लेक्स, 7 इंस्टीट्यूशनल एरिया, लोधी रोड, नई दिल्ली-110 003

टेलिफोन नं.- 011-24361018 फैक्स-011-24361018, वेबसाइट: www.ntpc.co.in

ENGINEERING OFFICE COMPLEX, Plot No: A-8A, Sector-24, Post Box No: 13, Noida (UP), Pin-201 307

Telephone No: 0120-2410333, 2410116 Fax-0120-2410136, 2410137


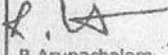

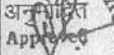
Registered Office: NTPC Bhawan, Scope Complex, 7 Institutional Area, Lodhi Road, New Delhi-110 003

Telephone No: 011-24360100 Fax-011-24361018, Website: www.ntpc.co.in

<b>ENDORSEMENT SHEET FOR QP</b> <b>REFERENCE / STANDARD / FIELD QUALITY PLAN (RQP/ SQP/RFQP/SFQP)</b>		
<b>TO BE FILLED IN BY SUPPLIER AT TIME OF SUBMISSION</b>		 <b>To be filled in by NTPC</b>
RX		
PROJECT NAME	NTPC NCTPP DADRI II (4X490 MW)- FGD PACKAGE	<b>REVIEW &amp; ENDORSEMENT BY NTPC:</b> PROJECT SPECIFIC QP NUMBER ALLOTTED  <b>QP NO.: 6130-109-QVC-Q-004</b>  <b>REV. NO.: 02      DATE: 21.06.2018</b>  **The RQP/SQP/RP once endorsed for a particular contract shall remain valid even though the original QP may have expired or revised, unless / otherwise mutually agreed with the supplier  (TICK APPLICABLE)
CONTRACT NO.:	CS-6130-109-9-FC-NOA-6641	
MAIN SUPPLIER	BHEL - RANIPET (CUST. NO. G501 – G502)	
MANUFACTURER WORKS & ADDRESS	BHEL RANIPET/BHEL APPROVED SOURCES	
ITEM /EQUIPMENT / SYSTEM/ SUB-SYSTEM DETAILS i.e. MODEL TYPE/SIZE/RATING etc.	FGD/ COLUMNS OF FGD STRUCTURES	
APPROVED QP NO.: <u>RQP/SQP/RFQP/SFQP</u>	0000-999-QVM-P-207**, REV:05, DT: 18.08.2016	
<b>Confirmation by Main Supplier (TICK WHICHEVER APPLICABLE)</b>		
<b>I. That the item/ component is identical to that considered for QP approval.    ✓ OR</b>		<b>The QP is endorsed for this project without any change    ✓</b>
<b>II. That there are minor changes in the item/ component with respect to that considered for QP approval, however the same do not affect the contents of QP. OR</b>		<b>The QP is endorsed for this project with changes as indicated.</b>  <b>DISTRIBUTION OF ENDORSEMENT OF</b> <b>A) RQP/SQP:</b> 1. MAIN SUPPLIER (WITH A COPY OF QP) 2. MANUFACTURER 3. RIO 4. CQA-SPL 5. CQA-O/C  <b>B) RFQP/SFQP:</b> 1. MAIN SUPPLIER (with a copy of QP) 2. MANUFACTURER 3. NTPC FQA (with a copy of QP) 4. NTPC Erection (with a copy of QP) 5. CQA-SPL    6. CQA-O/C
<b>✓ III. That there are minor changes in the item/ component with respect to that considered for QP approval, however the same affect the QP slightly, as indicated below / in attached sheet.</b>		
CAT-II ITEM- FOR THIS ITEM, CERTIFICATION BY MAIN SUPPLIER WILL BE SUBMITTED AS PER NTPC FORMAT, (FOR ITEMS UNDER INSPECTION CATEGORY-II). HENCE COLUMN 'N' IS NOT APPLICABLE.		
ROLLED SECTIONS SHALL BE OF GRADE DESIGNATION E250, QUALITY A/BR, SEMI KILLED/KILLED CONFORMING TO IS 2062. ALL STEEL PLATES SHALL BE OF GRADE DESIGNATION E250, QUALITY BR (FULLY KILLED), CONFORMING TO IS 2062 AND SHALL BE TESTED FOR IMPACT RESISTANCE AT ROOM TEMPERATURE. PLATES BEYOND 12MM THICKNESS AND UP TO 40MM THICKNESS SHALL BE NORMALIZED ROLLED. PLATES BEYOND 40MM THICKNESS SHALL BE VACUUM DEGASSED & FURNACE NORMALIZED AND SHALL ALSO BE 100% ULTRASONICALLY TESTED AS PER ASTM A578 LEVEL B-S2.		
 <b>SIGN.: (Main Supplier)</b> <b>Rajamanickam.M    DATE : 21.06.2018</b>	<b>SIGN.: (Manufacturer ) DATE:</b>	<b>NTPC (Reviewed /Approved by/ Date &amp; Seal)</b>

RAJAMANICKAM. M  
 SENIOR ENGINEER  
 QUALITY  
 BHEL BAR RANIPET-632-406  
 FORMAT NO.: QSM-QA/P-10/F3-10



MANUFACTURER'S NAME AND ADDRESS		REFERENCE QUALITY PLAN					TO BE FILLED IN BY NTPC						
 <b>Ranipet</b> <b>M/S BHEL: BAP:</b> <b>RANIPET 632 406</b> <b>TAMIL NADU</b>		<b>SYSTEM:</b> <b>COLUMNS OF EP</b> <b>SUPPORTING STRUCTURES</b> <b>&amp; ROOF BEAMS (PGMA: X81,</b> <b>X48, X28)</b> <b>SUB-SYSTEM ESP</b>		<b>QF NO.: R 203</b> <b>REV. NO.: 05</b> <b>DATE: 18.08.2016</b> <b>PAGE: 01 OF 04.</b>		<b>SIGN. OF MFGR'S</b>  <b>R Arunachalam</b> <b>SM / QA</b>		<b>QF NO.: 0000-999-QVM-P 207</b> <b>REV. NO.: 5</b> <b>DATE: 18.08.2016</b> <b>PAGE 01 OF 04</b> <b>VALID UPTO:</b> <b>17.08.2019</b>		<b>REVIEWED BY:</b>  <b>APPROVED BY:</b>  <b>31.08.2016</b> <b>Approved</b>			
SL. NO	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS
					M	C/N				M	C	N	
1.	2.	3.	4.	5.	6.		7.	8.	9.	10.			11.
1.0	<b>RAW MATERIALS</b>												
1.1	PLATES, ROLLED SECTIONS & BUILT UP SECTION - IF APPLICABLE	CHEM & MECH PROPERTIES  SOUNDNESS OF PLATES > 40MM & ROUNDS > 50 MM	MAJOR	VERIFICATION OF TC	100%	@@	RESPECTIVE MATERIAL SPECIFICATION AS PER DRAWING & NOTE-1  ASTM -A578 level B-S2.	TC	✓	P	V	V	
			MAJOR	UT	100%	@@		TC	✓	P	V	V	
2.0	<b>INPROCESS CONTROL</b>												
2.1	FLAME CUTTING	FREE FROM DEFECTS	MAJOR	VISUAL	100%	100%	AWS D1.1	R		P	V	-	
2.2	WELDING	WELDERS ARE QUALIFIED AS PER AWS D1.1 & WELD PROCEDURES ARE PREQUALIFIED TO AWS D1.1 & NTPC WILL REVIEW PROCEDURES & QUALIFICATION RECORDS											
2.3	WELD INSPECTION	SIZE & FINISH	MAJOR	VISUAL & MEASUREMENT	100%	10%	DRAWING & AWS D1.1	R		P	V	V	

⑥ REVIEW OF TC FOR PLATES ABOVE 40MM THICKNESS ONLY. FOR THICKNESS PLATES THICKNESS ≤ 40MM COC WILL BE SUBMITTED BY BHEL, CHANNELS OF SIZE 400 MM AND ABOVE & BEAMS OF SIZE 450MM & ABOVE TC VERIFICATION BY NTPC.

**LEGEND:** \* RECORDS, IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.  
 \*\* M: MANUFACTURER/SUB-SUPPLIER C: MAIN SUPPLIER, N: NTPC P: PERFORM W: WITNESS AND V: VERIFICATION. AS APPROPRIATE, CHP: NTPC SHALL IDENTIFY IN COLUMN "N" AS "W", TC - TEST CERTIFICATE, R - REPORT

**Note:** # NTPC Inspection Engineer to check, approval date/ revision no. of reference documents at the time of Inspection

FORMAT: QS-01-QA1-P-10/F1-R1

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SL. NO		COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS
						M	C/N				M	C	N	
1.		2.	3.	4.	5.	6.		7.	8.	9.	D	** 10.		11.
2.4		WELD NDE FOR COLUMNS												
2.4.1		BASE PLATE & TOP PLATE WELDING IN COLUMNS	WELD SOUNDNESS	MAJOR	LPI	100%	10%	AWS D1.1	R	✓	P	W	W	
2.4.2		OTHER FILLET WELDS OF COLUMNS	WELD SOUNDNESS	MAJOR	LPI	10%	10%	AWS D1.1	R	✓	P	W	W	
2.4.3		BUTT WELDS FOR STRUCTURAL	WELD SOUNDNESS ON BACK GOUGING	MAJOR	LPI	100%	100%	AWS D1.1 & NOTE-2	R	✓	P	W	V	
2.5		WELD NDE FOR ROOF BEAMS	ON FINISHED WELDS	MAJOR	LPI	100%	100%	AWS D1.1	R	✓	P	W	V	
2.5.1		BUTT WELDS	ROOF BEAMS BUTT WELDS IN FLANGE	MAJOR	RT	100%	100%	AWS D1.1 & NOTE-3	R	✓	P	W	V	
			OTHER BUTT WELDS FOR STRUCTURAL	MAJOR	LPI / MPI	10%	10%	AWS D1.1	R	✓	P	W	W	
2.5.2		INCASE OF BUILT UP BEAMS	FILLET WELDS BETWEEN FLANGE AND WEB BY SUBMERGED ARC WELDING (SAW)	MAJOR	MPI	100%	100%	AWS D1.1	R	✓	P	W	W	


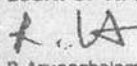
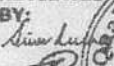
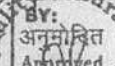
**LEGEND:** \* RECORDS, IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.  
 \*\* M: MANUFACTURER/SUB-SUPPLIER C: MAIN SUPPLIER, N: NTPC P: PERFORM W: WITNESS AND V: VERIFICATION. AS APPROPRIATE, CHP: NTPC SHALL IDENTIFY IN COLUMN "N" AS 'W', TC - TEST CERTIFICATE, R - REPORT

**Note:** # NTPC Inspection Engineer to check, approval date/ revision no. of reference documents at the time of Inspection

FORMAT : QS-01-QA1-P-10/F1-R1

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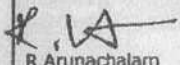
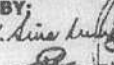
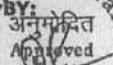
MANUFACTURER'S NAME AND ADDRESS		REFERENCE QUALITY PLAN					TO BE FILLED IN BY NTPC						
 <b>Ranipet</b> M/S BHEL: BAP: RANIPET 632 406 TAMIL NADU		SYSTEM: COLUMNS OF EP SUPPORTING STRUCTURES & ROOF BEAMS (PGMA: X81, X48, X28) SUB-SYSTEM ESP		QP NO.: R 203 REV. NO.: 05 DATE: 18.08.2016 PAGE: 03 OF 04.		SIGN. OF MFGR'S  R Arunachalam SM / QA		QP NO.: 0000-999-QVM-P 207 REV. NO.: 5 DATE: 18.08.2016 PAGE 03 OF 04 VALID UPTO: 17.08.2019		REVIEWED BY:  APPROVED BY:  Dt: ..... * 20% RANDOM WITNESS BY NTPC & OTHERS VERIFICATION			
SL. NO	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS
					M	C/N				M	C	N	
1.	2.	3.	4.	5.	6.		7.	8.	9.	10.			11.
2.5.3	INCASE OF BUILT UP BEAMS (Continued)	WELDS IN OTHER STRUCTURE	MAJOR	MPI/LPI	100%	100%	AWS D1.1	R	✓	P	W	W	* 20% RANDOM WITNESS BY NTPC & OTHERS VERIFICATION
3.0	FINAL INSPECTION												
3.1	DIMENSIONAL CONTROL FOR COLUMNS	DIMENSIONS, GUSSET PLATE ORIENTATION, TWIST, SWEEP, CAMBER	MAJOR	MEASUREMENT & VERIFICATION	100%	100% /10% /1 no.	DRAWING & NOTE-4	R	✓	P	W	W	
3.2	DIMENSIONAL CONTROL FOR ROOF BEAMS	LENGTH, SECTION DEPTH, PLATE LOCATION FOR TR BEAM, STRAIGHTNESS, TRIAL ASSY, CAMBER, SWEEP, TWIST & MATCH MARKING FOR SITE FIT-UP	MAJOR	MEASUREMENT & TRIAL ASSY OF LONGITUDINAL ROOF (LR) BEAMS	100%	100% Note 5	DRAWING & NOTE-5	R	✓	P	W	V	
3.3	COMPLETENESS IN ALL RESPECTS FOR BOTH COLUMNS & ROOF BEAMS	WELD FINISH, APPEARANCE, CENTRE LINE MARKING, ORIENTATION & LOCATION OF GUSSET PLATES	MAJOR	MEASUREMENT & VISUAL	100%	100%	DRAWING & AS PER CONTRACT SPECIFICATION	R	✓	P	W	V	

**LEGEND:** \* RECORDS, IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.  
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 <b>Ranipet</b>		<b>MANUFACTURER'S NAME AND ADDRESS</b>  <b>M/S BHEL: BAP: RANIPET 632 406 TAMIL NADU</b>		<b>REFERENCE QUALITY PLAN</b>  <b>SYSTEM: COLUMNS OF EP SUPPORTING STRUCTURES &amp; ROOF BEAMS (PGMA: X81, X48, X28) SUB-SYSTEM ESP</b>				<b>QP NO.: R 203</b> <b>REV. NO.: 05</b> <b>DATE: 18-08-2016</b> <b>PAGE: 04 OF 04.</b>		<b>SIGN. OF MFGR'S</b>  <b>R. Arunachalam SM / QA</b>		<b>QP NO.: 0000-999-QVM-P 207</b> <b>REV. NO.: 5</b> <b>DATE: 18-08-2016</b> <b>PAGE 04 OF 04</b> <b>VALID UPTO: 17.08.2019</b>		<b>TO BE FILLED IN BY NTPC</b> <b>REVIEWED BY:</b>  <b>APPROVED BY:</b>  <b>Dt. ....</b>	
SL. NO	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS		
					M	C/N					M	C	N		
1.	2.	3.	4.	5.	6.		7.	8.	9.	D	** 10.			11.	

3.4	PAINTING & PRESERVATION	PAINT COATING THICKNESS - DFT	MAJOR	MEASUREMENT & VISUAL	100%	100%	DRAWING & NTPC APPROVED PAINTING SCHEME	R		P	W	V	
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#### RECORD OF REVISIONS

REV. NO.	EFFECTIVE DATE	DETAILS OF REVISION MADE
REV 00	DT 29 04 2003	ORIGINAL ISSUE
REV 01	DT 30 09 2004	REVISED BASED ON THE DISCUSSION WITH NTPC (MOM DT 11 09 04)
REV 02	DT 24 01 2005	REVISED BASED ON NTPC COMMENTS (FORMAT MODIFIED)
REV 03	DT 17 05 2008	REVISED BASED ON DISCUSSION WITH NTPC (MOM HELD ON 07 05 2008 AT RANIPET), CL.3.2 IN COLUMN 10 UNDER NTPC "W" CHANGED AS "V" AS PER RECENT ENDORSEMENT SHEET(R511) IN WHICH IT IS ACCEPTED
REV 04	DT 17 06 2011	GUSSET PLATE ORIENTATION ADDED IN CLAUSE NO. 3.1 & 3.2 AND SUBMITTED TO NTPC FOR EXTENDING THE VALIDITY DATE OF RQP.
REV 05		1. RQP OF COLUMNS OF EP SUPPORTING STRUCTURE AND ESP ROOF BEAMS WERE MERGED INTO ONE RQP AND ACCORDINGLY CLAUSES WERE INCLUDED & RE-NUMBERED. 2. ALL REMARKS DETAILS WERE INDICATED AS A SEPARATE NOTE AT THE LAST PAGE FOR MORE CLARITY. 3. REFER CLAUSE 3.2 - PLATE LOCATION FOR TR BEAM CONNECTION INCLUDED. ALSO CLARITY ON TRIAL ASSY OF LR BEAM INCLUDED AS A NOTE - REFER NOTE -5.

#### NOTE :

- RAW MATERIALS ARE TAKEN TO STOCK ON VERIFICATION OF TC / RANDOM TESTING.
- BACK GRINDING AND LPI ON BUTT JOINTS & CHP FOR VERIFICATION OF BHEL RECORDS BY NTPC.
- FLANGE BUTT WELDS - RT FILM TO BE REVIEWED BY BHEL / NTPC
- FOR MAIN COLUMN (PGMA numbers ENDING WITH "81" - 100% "W" BY NTPC. FOR OTHER CASING STRUCTURE COLUMNS (PGMA numbers ending with "48") - 10% OF OFFERED LOT OR MINIMUM 1 NO "W" BY NTPC.
- LONGITUDINAL ROOF ( L R ) BEAMS WILL BE TRIAL ASSEMBLED ON THE GROUND FLOOR FOR ITS ALIGNMENT & MEASUREMENT OF OVERALL LENGTH (APPROX. 60 MTR) AND "W" BY NTPC. FOR TRANSVERSE ROOF ( T R ) BEAMS TRIAL ASSEMBLY IS NOT APPLICABLE, SINCE IT IS A SINGLE PIECE ITEM (APPROX. 4 MTR)

**LEGEND:** \* RECORDS, IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.  
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**Note: # NTPC Inspection Engineer to check, approval date/ revision no. of reference documents at the time of Inspection**

FORMAT : QS-01-QA1-P-10/F1-R1

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Annexure Q		
	Indent No:	Enquiry no:
Sl.No	BHEL / Customer Requirements	##Specific confirmations by the manufacture(Acceptable/Not acceptable)
	<b>Quality Plan Requirement: (If SQP is not given &amp; Vendor QP applicable)</b>	
	(i) MQP (Manuafcutering Quality Plan) shall be submitted in attached format for BHEL/Customer review & approval. Our SQP/Typical MQP/ MQP Format is attached for guidance & use.	
	(ii) MQP shall invariably cover w.r.t Inward inspection including on Raw materail Procurement, In process and Final inspection in elaborated way/details.	
	(iii) Bidder shall also to give specific confirmation that on need basis, their competent officials shall visit to BHEL/customer for finalization of Quality plan including test procedure/methodology during preaward / post award approval / detailed engineering in the event of an order.	
	(iv) No deviation on BHEL/Customer approved MQP/ SQP (In case BHEL SQP is provided) is acceptable.	
1	(v) Bidder shall agree to submit all cross referred documents other than codes/standrads to BHEL/Customer/Consultant.	
	<b>Important Notes shall be included in MQP :</b> (a) Latest revision of Standard s & Specification shall apply. Only International Standards are applicable. (b) Materials shall be procured in compliance to Functional Technical Specification. (c) Inspection shall be in compliance with Approved Quality Control Procedure for the Product. (d) NDT shall be carried out by Qualified Personnel with compliance to Approved NDT Procedures and Acceptance Norms, as per ASME Section V. (e) Gauges and measuring Instruments, with valid calibration only shall be used. (f) Cleaning and Painting of products shall be carried out as per Approved Painting Schedule. (g) Finished Products shall be packed to comply with Approved Packing Schedule. (h) Welding shall be carried out by Qualified Personnel with compliance to Approved NDT Procedures and Acceptance Norms, as per ASME Section V.	
2	<b>Domestic / Inland Inspection</b> will be carried out by BHEL/BHEL apointed Third Party Inspection Agency (TPIA) / Customer/Customer Apointed Inspection Agency/Consulatnat. This is applicable for all Stage inspection and Final Inspection identified as "W" - Witness or "CHP" - Customer Hold Point as per customer approved Quality Plan/ Technical specification / Approved Drawing/ Approved Data sheet / Scheme / PID / PFD / SLD (Process Instrumentaion Diagram / Process Flow Diagram / Single Line Diagram) etc (As applicable).	
3	<b>Inspection Agency for Foreign Bidders and also for Indian Bidder but importing from Foreign Sources:</b> (1) Any one of the flollowing Third Party Inspection Agency (TPIA) shall be appointed by the bidder and same shall be furnished by the bidder in techno commercial bid itself. (2) The details of TPIA with contact details like Name of the official, Phone no, Email id shall also to be submitted during pre/post award. However cost for such inspection agency shall be borne by the bidder only. Inspection charges for such inspection agency shall be indicated separately so that if BHEL/Customer is undertaking the inspection by on their own , then these charges non claimable by the bidder. <b>List of TPIA :</b> 1.M/s Bureau Veritas 2.M/s TUV-Nord 3.M/s TUV-SUD 4.M/s TUV Rheinland 5.M/s Lloyds Register 6.M/s SGS 7.M/s Germanischer Lloyds 8.M/s QUEST 9.M/s Certification Engineers International 10.M/s Intertek 11.M/s IR Class Systems and Solutions 12.M/s DNV 13. M/s Fichtner 14. M/s ABS Inspection Services	



Sl.No	BHEL / Customer Requirements	##Specific confirmations by the manufacture(Acceptable/Not acceptable)
4	<b>Stage Inspection during manufacturing Process :</b> Stage Inspection during manufacturing shall be carried out as per approved quality plan and all necessary documents shall be provided for review,verification and clearanace for further processing. This inspection call shall be given well in advance (atleast 2 weeks before) to TPI/Bidder's own inspection agency to avoid delay in the manufacturing processes.	
5	<b>Inspection before despatch for domestic supplier :</b> Inspection before despatch at supplier's works shall be carried out by Bidder appointed inspection agency(As in SI no.3.) Inspection shall be done as per approved Quality plan/ Technical specification/ Approved Drawing/ Approved Data sheet .	
6	Inspection at Foreign Source/Supplier: (a) As in sl no: 3. shall be ensured without fail (b) No materail / items shall be despatched without getting the written communication from BHEL / Customer inspection carried out by Bidder apointed Third Party Inspection Agency (As per SI no.3) / Customer/Customer Apointed Inspection Agency/Consulatnat. This is applicable for all Stage inspection and Final Inspection identified as "W" - Witness or "CHP" - Customer Hold Point as per customer approved Quality Plan/ Technical specification / Approved Drawing/ Approved Data sheet / Scheme / PID / PFD / SLD (Process Instrumentaion Diagram / Process Flow Diagram / Single Line Diagram) etc (As applicable). Inspection before despatch for Foreign supplier : Inspection before despatch at supplier's works shall be carried out by bidder appointed inspection agencies having international presence at vendors and or vendor's sub vendor works. Inspection shall be done as per approved Quality plan/ Technical specification/ Approved Drawing/ Approved Data sheet by TPIA mentioned in SI no: 03 at supplier's cost.	
7	<b>Painting</b> shall be done strictly as per BHEL/Customer approved painting schedule / scheme only. Paint Thickness / Paint shade shall be ensured as per BHEL / Customer approved painting schedule / specification / data sheet etc. No deviation is acceptable unless otherwise accepted by BHEL/Customer in writing. Any conflict if any among BHEL / Customer approved painting schedule / Spec / data sheet etc shall be brought to the notice to BHEL well in adavance before proceding including the BOI being procured for assy / skid like motors etc	
8	Specific conformation for document package in the event of an order (2 Hard copies & soft copy in PDF file) is to be given containing the following with proper linkages (i) Index Sheet (ii) MQP/RQP/Endorsement Sheet (As applicable) (iii) TCs identified by BHEL/ Customer for record for "CHP" / "W" and Verification portion ("V") as given in approved QP. (iv) Final inspection report + TC including Chemical + Mechnaical + HT + NDT etc (v) Third party Inspection report + TC (vi) Customer CHP/ MDCC (vii) Type test / Performance Test reports conducted (viii) Type test / Performance Test approval/ clearance obtained from BHEL/Customer (ix) BOM with As Build Drgs with actual make / rating used with BHEL/customer approved drawings.	
9	<b>Packing / Seaworthy Packing</b> shall be as per BHEL Packing schedule / approved drg / sketch. This shall be ensured to take care tarnsit / handling / transhipment in Road / Sea / Air. Photographs are to be submitted for BHEL review before despatching the material as per contract conditions.	
10	<b>Outsourcing of test facilities:</b> Bidder shall ensure all the testing facilities in house. However If any of the test facilities are not available with successful bidder, then bidder shall ensure the same at NABL accreadted third party lab / Govt / Govt Lab for major testing such as NDT, Electrical & Mechanical testing.	
11	<b>Important Note:</b> No deviation on the above requirement 01 to 10 is acceptable w.r.t Quality Requirement and those offers not meeting these specific customer requirement is liable for rejection and hence the bidder shall submit all the required documentary evidances in the offer itself.	
12	## Necessorily to be filled up by the bidder at the time of offer itself otherwise the offer may not be considered w.r.t Quality Requirement being customer specific requirement.	

VENDOR SIGN AND STAMP:

Vendor Name & Address: