



BHARAT HEAVY ELECTRICALS LIMITED
BHOPAL

No.: QNDT / 022

Rev.: 01

QUALITY CONTROL – QHC DEPARTMENT

DATE : 24.03.2015

NDE DEPARTMENTAL PROCEDURE

Page 1 of 3


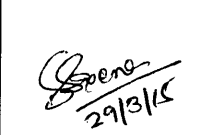
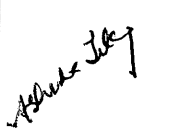


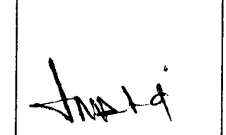
TITLE : PROCEDURE FOR AUTHORIZATION OF NDT AGENCIES TO
PERFORM NDT ON BHEL JOBS AT BHEL VENDORS' WORKS.

RECORD OF REVISION

Rev. No.	Rev. Date	Details of Revisions
00	24.02.2015	New Procedure.
01	24.03.2015	Cl.3.2, 3.3, 6.2 and Annexure-A revised. Cl.4.6 added.

Prepared by Committee

Approved by

	 29/3/15				
V K Dongre	Sandeep Saxena	Abhishek Tirkey	Dharmendra Singh	B B Kandir	Mohd.Rashid



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Page 2 of 3

1.0 GENERAL :

This procedure covers the Authorization of NDT Agencies to conduct NDT on BHEL jobs at BHEL Vendor's Works in and around Bhopal.

2.0 SCOPE OF WORK :

- 2.1 Agency shall conduct NDT viz. Radiography Testing(RT), Ultrasonic Testing(UT), Magnetic Particle Testing(MT) and Dye Penetrant Testing(PT) on BHEL jobs being fabricated by BHEL Vendors in and around Bhopal.
- 2.2 Agency shall conduct NDT as per requirement of BHEL P.O., Specification/ procedure called in the drawing/QAP.
- 2.3 Payment for testing shall be made by Vendor.

3.0 QUALIFYING CONDITIONS :

- 3.1 Agency should be a Govt. Registered Firm.
- 3.2 Manpower requirement (as minimum) as follows :
- 3.2.1 Agency should have minimum 02 NDT certified(ASNT/ISNT) Level-II/III in any one NDT methods i.e. RT/UT/MT/PT or more on regular rolls of the agency and they should have minimum 02 years of experience form date of issue of initial NDT certificate in the respective method.
- 3.3 Agency should have their own equipments as follows as minimum :
- 3.3.1 RT – Radiography testing setup shall be approved by AERB, available in and around Bhopal like Mandideep, Habibganj, Govindpura. As per Annexure-A.
- 3.3.2 UT – UT machine shall be capable of testing jobs of plates/welding/casting/forging thickness 8mm. to 150mm. or more, having DAC & DGS facilities, with reasonable set of probes& cables, standard calibration blocks (V1,V2,etc.). As per Annexure-A.
- 3.3.3 MT – MPI machine OR Yoke & Pie indicator as per Annexure-A.
- 3.3.4 Consumables : Shall be provided by Agency or Vendor as per their discretion. Consumables shall be of reputed make & confirm to product specification / NDE procedures. Specific requirement by customer like NPCIL for use of NPCIL approved consumables shall be met.

4.0 METHOD OF AUTHORIZATION OF AGENCIES :

- 4.1 Expression of interest regarding authorization of NDT agencies shall be floated by BHEL once for initial enrollment of agency. This procedure shall be uploaded on the vendor's portal of BHEL Bhopal's website for further enrollment of new agencies.
- 4.2 Agencies fulfilling above qualifying conditions shall apply for the same. Details shall be given as per Annexure-A and Checklist as per Annexure-B.
- 4.3 Application of the Agencies applying in the EOI will be scrutinized by BHEL committee, appointed by GM(Quality).
- 4.4 Authorization shall be given initially for period of 6 months. If performance of agency is found satisfactory, agency may be fully authorized.

Abhishek Jindal



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Page 3 of 3

- 4.5 List of authorized agencies with their NDT personnel as per Annexure-D, shall be uploaded on vendor's portal of BHEL Bhopal website. This list shall be controlled by Revision Number & date.
- 4.6 Authorization of individual personnel shall be valid upto date of validity of individual's certificate. Authorization shall be treated as invalid upon expiry of certificate. Agency to submit re-validated certificate before expiry of certificate.
- 5.0 Monitoring of NDT agencies.**
- 5.1 Separate register to be maintained to keep record of BHEL jobs NDT tested. Each requisition to be given Unique Sl. No along with Min. required entries given as per Annexure-C.
- 5.2 Jobs which have been marked defective and not cleared within 7 days, shall be reported as Exception Report on every Monday in the same format as Annexure-C. Even if no case is available for reporting, nil report shall be submitted.
- 5.3 Surveillance check of agencies work / record will be done by BHEL.
- 6.0 Withdrawal of Authorization/Debaring of NDT agencies/personnel.**
- Action on NDT agency / personnel will be taken on the basis of :
- 6.1 Manipulation/Forgery of NDT report by personnel / agency.
- 6.1.1 Such cases shall be dealt with as per corporate MM Procedure "Guidelines for suspension of Business dealing with supplier, contractors AA/MM/SB/01/ Rev 01 dt 17.9.2013".
- 6.2 Severity of defect, which has not been detected by the personnel & has been noticed during subsequent operation & reported in PMIR / QDRC / QIX report.
- 6.2.1 Repeatability of wrong interpretation.
- 6.2.2 Initially agency will be debarred for 6 months.
- 6.2.3 To reauthorize agency after 6 months, agency has to give proper justification and action plan to prevent repeating of wrong interpretation .
- 7.0 Revision of Procedures**
- 7.1 Revision in the procedure of authorization / panelizing / debaring of agency/personnel shall be decided by the committee appointed by GM(Quality).
- 7.2 Head-NDT will act as Custodian of the List of authorized NDT agencies and concerned documents.

Name of NDT testing agency.....

Address.....

.....

Phone no.....

1.0 No of Qualified / Certified NDT personnel (ASNT/ISNT)

(Including BARC certified Radiographer-RT-1, Site-Inchage-RT-2, RSO - *PI provide copy of payroll/PF/ESI statement in evidence of employees on regular roll of agency*)

Sl No.	Name	NDT Method	Level	Date of First Certification	Certificate validity up to

2.0 No. of NDT equipment's and accessories available at Bhopal

(owned by testing agency – Invoice/Sale deed of equipment to be enclosed as proof of ownership))

Sl No.	List of Equipment's (As minimum required)		
	RT	UT	MT
	(Nos./Make/rating)	(Nos./Make/rating)	(Nos./Make/rating)
	X-Ray m/c - (Min.200KV/5mA) OR Ir-192-(Min.05 Ci strength)	UT m/c for -Thickness – 8mm. to 150mm. or more. DAC Facility – Available. DGS Facility – Available.	Portable MPI m/c – AC & HWDC/DC. Min. 1000 Amps. OR Yoke – AC & HWDC/DC.
	RSM	Probes : 2/4 Mzs.	Pie Indicator
	Densitometer	0°, 45°, 60°, 70°	
	Dark Room Facilities.	Calibration Blocks :V1,V2.	
	Testing capacity of equipt. to be indicated.	Testing capacity of equipt. to be indicated.	Testing capacity of equipt. to be indicated.

3.0 Any other facilities available at Bhopal

.....
.....

(Signature of Owner & Agency's Seal)

 Several handwritten signatures and stamps are present at the bottom of the page. From left to right, there is a circular stamp with a signature inside, followed by a signature that appears to be 'Ramesh', another signature 'Ashish J...', a signature 'ASD', a signature 'Rahul', and a signature 'Anand'.

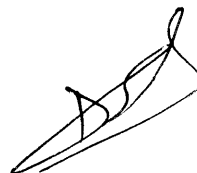
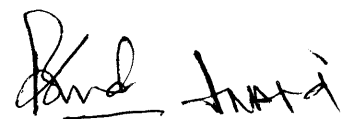
CHECKLIST FOR PROCEDURE NO. QNDT/022.

NOTE : - Applicant shall fill in the following details and no column should be left blank.

Sl. No.	Description	
1.	(a) Name of the Applicant (b) Address (c) Email Address (d) Phone nos. (e) Name & designation of the official of the applicant to whom all the references shall be made	
2.	Copy of Agency's Govt. Registration.	Page No.
3.	Duly completed Annexure-A	Page No.
4.	NDT certificate of individuals as per list mentioned in Annexure-A, including individual's photograph.	Page No. from to
5.	Details of machine ownership (Sale deed/original invoice) as mentioned in Annexure-A.	Page No. from to
6.	AERB Approval Certificate for Firm for RT Agency only.	Page No. from to
7.	Submission of Details about type of ownership of the firm (please provide documentary proof)	Page No. from to
8.	Submission of Attested copy of power of attorney if signed by person other than the owner.	Page No. from to

Signature of the applicant with seal



Agencies Authorised For Conducting NDT at BHEL Vendor's Works.

Ref: QHC/NDT/Agency/01 Rev.- Date:

Sl No.	NDT Agency & Address	Methods	Name of Persons	Methods	Level	Certificate Valid upto	Contact Person, E-Mail, Phone No
1							
2							
3							
4							

Signature of Committee Members.

(Member)

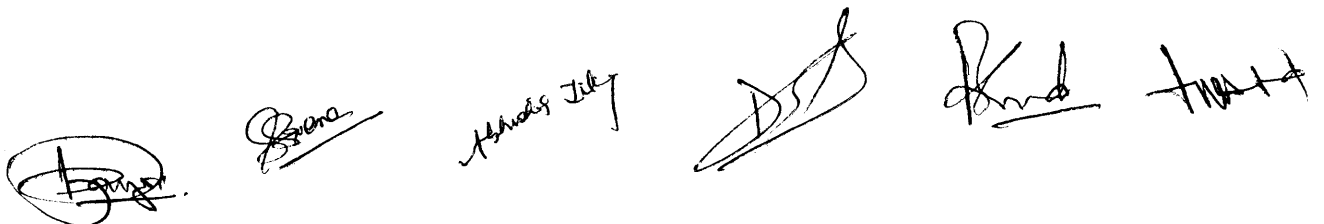
(Member)

(Member)

(Member)

(Member)

(Member)



Handwritten signatures of committee members, including names like 'Srinivas Jitly', 'Kand', and others.