

Discussion on 10CFR50, Appendix B and NQA-1 requirements for acceptance of subsuppliers

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Quality Program Manual For ASME Code Section III

NPT - Class 1, 2, 3, CS, MC, TC and SC Fabrication without Design Responsibility and for Appurtenances and Supports (Supports limited to 1998 Edition 1998 Addenda and earlier Editions and Addenda's of the Code) and as a Material Organization manufacturing and supplying ferrous and non-ferrous material at the above location only.

NS - Class 1, 2, 3 & MC Fabrication of Supports without Design Responsibility at the above location only.

NA- Class 1, 2, 3 Shop Assembly at the above location only.

The applicable requirements of: 10 CFR 50 Appendix B, 10 CFR 21, MIL-I-45208A, NQA 1, ANSI N45.2, and Canadian Standards CAN3-Z299.2-3, as well as the applicable requirements of 10CFR 71 Subpart H, 10 CFR 72 Subpart G and 10CFR 830 Subpart A.

Objective

- ▶ Discuss the methods of acceptance of suppliers and materials allowed by ASME Section III Code, NQA-1, and potentially different requirements of 10CFR50, Appendix B (Part 21)

Implementation of IN 86-21

- ▶ NRC has accepted the process of approving a supplier's programmatic controls based ASME Section III N type and QSC Certificates
- ▶ Implementation must be verified via:
 - ▶ --Periodic Audit or
 - ▶ --Inspection & Test

Implementation of IN 86-21

Inspection / Testing

Purchaser may evaluate the procurement requirements and determine that implementation audits are not necessary for procuring items that are:

- 1) Relatively simple and standard in design, manufacturing, and testing;
- 2) Adaptable to standard or automatic inspections or test of the end product to verify quality characteristics after delivery)

NUPIC Checklist

- (a) Verify that where acceptance of material from an ASME Material Organization is based on certification (including materials supplied under provisions of NX2610), the supplier validates the certification via surveillance, audit and/or independent tests.

- (b) If validation of the certification is based on independent test and end use is not known, ensure the test encompasses all characteristics of the material specification (i.e., chemical, physical, hydro, etc.).

Appendix B/ANSI N45.2 Ref: (7/8) IE Notice 86-21 including supplements NQA-1 Supplement 7S-1

Material Upgrade vs Dedication

Upgrade is defined as the utilization of unqualified source material in ASME Section III

Unqualified source material: source material not produced by a Certificate Holder, Material Organization, or approved supplier in accordance with the requirements of Section III, NCA-3800.

Material Upgrade vs Dedication

Question 8:

For raw material, what is the NRC's position on purchase from commercial distributor relating to acceptance by commercial grade versus use of ASME rules for unqualified source material? Does testing of metal from commercial suppliers have to be defined as "dedicated"?

Answer:

If the raw material is to be used for ASME pressure boundary components, then the ASME rules apply and the process of upgrading of unqualified source material applies. If the raw material is to be used in other safety related applications, then commercial-grade dedication must be performed. Testing of materials would always be part of the dedication process.

Material Upgrade vs Dedication

Question 18:

What is the NRC position on purchase from commercial distributor relative to acceptance by commercial grade vs. use of ASME rules for unqualified source material?

Answer:

NCA-3800, Subsection 3855.5(a) provides specific requirements for the use of Unqualified source material by Material Organizations to be used in ASME components. The process described in 3855.5(a) is not CGI dedication. Acceptance of commercial-grade material for safety related applications should be based on the identification and verification of the material's critical characteristics.

Material Upgrade vs Dedication

Question 72:

When performing commercial grade dedication to material that is produced to industry specifications such as ASTM A/B and the dedicating entity does not have design or engineering capabilities, what is an acceptable method for determining critical characteristics?

Answer:

Vendors supplying material as a basic component, including dedication activities, are required to establish adequate controls for the review of materials, parts, equipment, and processes for suitability of application as established in Criterion III, "Design Control," of Appendix B. When performing dedication of materials, the dedicating entity may utilize ASTM standards for the specification of critical characteristics that need to be verified to provide reasonable assurance that the material will perform its intended safety function. Design or engineering involvement is necessary in performing these activities. The level of design control or engineering involvement is dependent on the nature, complexity, and use of the items to be dedicated.

Acceptance of Calibration Services

NCA-3126 Subcontracted Calibration Services

As an alternative to survey and audit of suppliers of subcontracted services, a Certificate Holder or Material Organization may accept accreditation by National Voluntary Laboratory Accreditation Program (NVLAP), American Association for Laboratory Accreditation (A2LA), or other accrediting body recognized by NVLAP through the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA), provided the following requirements are met:

Acceptance of Calibration Services

NRC only recognizes domestic ILAC signatories including:

- ▶ NVLAP
- ▶ A2LA
- ▶ ACLASS
- ▶ LAB
- ▶ IAS
- ▶ Perry Johnson Associates

Questions ???????

