QUALITY ASSURANCE REQUIREMENTS

Requisition No.:  
Safety Classification: □ SC □ SS □ GS
Quality Level: □ QL-1 □ QL-2 □ QL-3

Quality Assurance Engineer*: Jerry Heaney  
Date: 9/17/19  
Design Authority/Engineer*: Lawrence Curtis  
Date: 9/17/19  
Project Number: N/A  
Title: LAW Melter Fabrication

*QAE/DA/Engineer name if attached in Electronic Procurement System, otherwise, print, signature, and date.

Evaluation Criteria

The ASME NQA-1 requirements checked below apply to this procurement. Clarifications are provided when the extent of coverage varies or when exceptions are taken. If no clarification is provided, the requirement applies as written.

Section A

ASME Version | NQA-1 | NQA-1a | NQA-1b
Edition/Year | ✗ 2008 | ✗ 2009 | □ 2011

NQA-1 Part I
(All) OR (Specify)

☒ 1. Organization
   ☒ 100 Basic
   ☒ 200 Structure and Responsibility
   ☒ 300 Interface Control

☒ 2. Quality Assurance Program
   ☒ 100 Basic
   ☒ 200 Indoctrination and Training
   ☒ 300 Qualification Requirements
   ☒ 400 Records of Qualification
   ☒ 500 Records

☐ 3. Design Control
   ☒ 100 Basic
   ☒ 200 Design Input
   ☒ 300 Design Process
   ☒ 400 Design Analyses
   ☒ 500 Design Verification
   ☒ 600 Change Control
   ☒ 700 Interface Control
   ☐ 800 Software Design Control
   ☒ 900 Documentation and Records

☒ 4. Procurement Document Control
   ☒ 100 Basic
   ☒ 200 Content of the Procurement Documents
   ☒ 300 Procurement: Document Review
   ☒ 400 Procurement: Document Changes

☒ 5. Instruction Procedures and Drawings
   ☒ 100 Basic

☒ 6. Document Control
   ☒ 100 Basic
   ☒ 200 Document Control
   ☒ 300 Document Changes

☐ 7. Control of Purchased Items and Services
   ☒ 100 Basic
   ☒ 200 Supplier Evaluation Selection
   ☐ 300 Bid Evaluation
   ☒ 400 Control of Supplier Generated Documents
   ☒ 500 Acceptance of Item or Service
   ☒ 600 Control of Supplier Nonconformances
   ☒ 700 Commercial Grade Items and Services
   ☒ 800 Records

☒ 8. Identification and Control of Items
   ☒ 100 Basic
   ☒ 200 Identification Methods
   ☒ 300 Specific Requirements

☒ 9. Control of Special Processes
   ☒ 100 Basic
   ☒ 200 Process Control
   ☒ 300 Responsibility
   ☒ 400 Records

☐ 10. Inspection
   ☒ 100 Basic
   ☒ 200 Inspection Requirements
   ☒ 300 Inspection Hold Points
   ☒ 400 Inspection Planning
   ☒ 500 In-Process Inspection
   ☒ 600 Final Inspections
   ☒ 700 Inspections During Operations
   ☒ 800 Records

☒ 11. Test Control
   ☒ 100 Basic
   ☒ 200 Test Requirements
   ☒ 300 Test Procedures (other than computer programs)
   ☒ 400 Computer Program Test Procedures
   ☒ 500 Test Results
   ☒ 600 Test Records

☒ 12. Control of Measuring and Test Equipment
   ☒ 100 Basic
   ☐ 200 Selection
   ☒ 300 Calibration and Control
   ☒ 400 Records

☐ 13. Handling, Storage and Shipping
   ☒ 100 Basic
   ☐ 200 Special Requirements
   ☐ 300 Procedures
   ☐ 400 Tools and Equipment
   ☐ 500 Operators
   ☐ 600 Marking or Labeling

☒ 14. Inspection, Test and Operating Status
   ☒ 100 Basic
### 15. Control of Non-Conforming Items
- 100 Basic
- 200 Identification
- 300 Segregation
- 400 Disposition

### 16. Corrective Action
- 100 Basic

### 17. Quality Assurance Records
- 100 Basic
- 200 Generation of Records
- 300 Authentication of Records
- 400 Classification
- 500 Receipt Control of Records

### 17. Quality Assurance Records (continued)
- 800 Storage
- 700 Retention
- 800 Maintenance of Records

### 18. Audits
- 100 Basic
- 200 Scheduling
- 300 Preparation
- 400 Performance
- 500 Reporting
- 600 Response
- 700 Follow-Up Action
- 800 Records

### NQA-1 Part II (Subparts)

#### Quality Assurance Requirements for:

- **2.3 Housekeeping for Nuclear Power Plants**
  - 100 General (Information Only)
  - 200 General Requirements
  - 300 Requirements
  - 400 Records

- **2.5 Installation, Inspection, and Testing of Structural Concrete, Structural Steel, Soils, and Foundations for Nuclear Power Plants**
  - 100 General (Information Only)
  - 200 General Requirements (Information Only)
  - 300 Requirements
  - 400 Preconstruction Verification
  - 500 Inspection of Soils and Earthwork
  - 600 Inspection of Foundation Pile and Caisson Construction
  - 700 Inspection of Concrete Construction
  - 800 Inspection of Steel Construction
  - 900 Data Analysis and Evaluation
  - 1000 Records

- **2.7 Computer Software for Nuclear Facility Applications**
  - 100 General (Information Only)
  - 200 General Requirements
  - 300 Software Acquisition
  - 400 Software Engineering Method
  - 500 Standards, Conventions, and Other Work Practices
  - 600 Support Software
  - 700 References (Information Only)
### 2.8 Installation, Inspection, and Testing of Mechanical Equipment and Systems for Nuclear Power Plants

- **100** General (Information Only)
- **200** General Requirements
- **300** Pre-installation Verification
- **400** Control During Installation Process
- **500** Installed Systems Inspection and Tests
- **600** Data Analysis and Evaluation
- **700** Records

#### 2.14 Commercial Grade Items and Services

- **100** General (Information Only)
- **200** Definition Applications (Information Only)
- **300** Utilization
- **400** Technical Evaluation
- **500** Critical Characteristics
- **600** Methods of Accepting Commercial Grade Items and Services
- **700** Commercial Grade Services
- **800** Documentation

#### 2.15 Hoisting, Rigging, and Transporting of Items for Nuclear Power Plants

- **100** General (Information Only)
- **200** General Requirements
- **300** Types of Handling Equipment
- **400** Design Requirements

### 2.15 Hoisting, Rigging, and Transporting of Items for Nuclear Power Plants (continued)

- **500** Acceptance Criteria for Manufactured Handling Equipment
- **600** Testing, Inspection, and Maintenance
- **700** Control of the Use of Handling Equipment
- **800** Qualifications of Personnel
- **900** Records

#### 2.18 Maintenance of Nuclear Facilities

- **100** General (Information Only)
- **200** General Requirements
- **300** Preventive Maintenance
- **400** Corrective Maintenance
- **500** Records

#### 2.20 Subsurface Investigations for Nuclear Power Plants

- **100** General (Information Only)
- **200** General Requirements
- **300** Verification Requirements
- **400** Field Investigation Requirements
- **500** Laboratory Testing
- **600** Evaluation and Analysis
- **700** Records

### Section B - Other National Standards

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### Section C - Other Requirements or Clarifications, indicate requirement edition or year/date (such as NQA-1, Part, III, or IV)

#### Exceptions:

- Part 1 Requirement 2 - 302 "capabilities of inspection & test personnel, 303.3 "independent assessment activities", 303.6, 305
- Part 1 Requirement 3 - 300 (C) (3), 501 (C), 501.3, 601
- Part 1 Requirement 4 - 207, 300"changes due to bid evaluations/negotiations
- Part 1 Requirement 7 - 506
- Part 1 Requirement 8 - 302, 303(C)
- Part 1 Requirement 11 - (a) "computer software", (c), (d)(1), (d)(2)
- Part 1 Requirement 17 - 300(b), 401, 601, 602