

WRPS QUALITY ASSURANCE REQUIREMENTS

Requisition No. Unknown - TBD

Quality Assurance Engineer*:

Robert Frank

Date

3/15/2016

Design Authority/Engineer*:

Jacob McCoskey

Date

3/15/2016

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

Evaluation Criteria

The ANSI/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	<input type="checkbox"/> 2008 <input type="checkbox"/> 2004	<input type="checkbox"/> 2009 <input type="checkbox"/> 2005	<input type="checkbox"/> 2007

NQA-1 Part I

(All) OR (Specify)

- | | |
|---|---|
| <p><input type="checkbox"/> 1. Organization</p> <ul style="list-style-type: none"> <input type="checkbox"/> 100 Basic <input type="checkbox"/> 200 Structure and Responsibility <input type="checkbox"/> 300 Interface Control <p><input type="checkbox"/> 2. Quality Assurance Program</p> <ul style="list-style-type: none"> <input type="checkbox"/> 100 Basic <input type="checkbox"/> 200 Indoctrination and Training <input type="checkbox"/> 300 Qualification Requirements <input type="checkbox"/> 400 Records of Qualification (2008) <input type="checkbox"/> 400 Certification and Qualification (2004) <input type="checkbox"/> 500 Records <p><input type="checkbox"/> 3. Design Control</p> <ul style="list-style-type: none"> <input type="checkbox"/> 100 Basic <input type="checkbox"/> 200 Design Input <input type="checkbox"/> 300 Design Process <input type="checkbox"/> 400 Design Analyses <input type="checkbox"/> 500 Design Verification <input type="checkbox"/> 600 Change Control <input type="checkbox"/> 700 Interface Control <input type="checkbox"/> 800 Software Design Control <input type="checkbox"/> 900 Documentation and Records <p><input type="checkbox"/> 4. Procurement Document Control</p> <ul style="list-style-type: none"> <input type="checkbox"/> 100 Basic <input type="checkbox"/> 200 Content of the Procurement Documents <input type="checkbox"/> 300 Procurement Document Review <input type="checkbox"/> 400 Procurement Document Changes <p><input type="checkbox"/> 5. Instruction Procedures and Drawings</p> <ul style="list-style-type: none"> <input type="checkbox"/> 100 Basic <p><input type="checkbox"/> 6. Document Control</p> <ul style="list-style-type: none"> <input type="checkbox"/> 100 Basic <input type="checkbox"/> 200 Document Control <input type="checkbox"/> 300 Document Changes <p><input type="checkbox"/> 7. Control of Purchased Items and Services</p> <ul style="list-style-type: none"> <input type="checkbox"/> 100 Basic <input type="checkbox"/> 200 Supplier Evaluation Selection <input type="checkbox"/> 300 Bid Evaluation <input type="checkbox"/> 400 Control of Supplier Generated Documents <input type="checkbox"/> 500 Acceptance of Item or Service <input type="checkbox"/> 600 Control of Supplier Nonconformances <input type="checkbox"/> 700 Commercial Grade Items and Services <input type="checkbox"/> 800 Records | <p><input type="checkbox"/> 8. Identification and Control of Items</p> <ul style="list-style-type: none"> <input type="checkbox"/> 100 Basic <input type="checkbox"/> 200 Identification Methods <input type="checkbox"/> 300 Specific Requirements <p><input type="checkbox"/> 9. Control of Special Processes</p> <ul style="list-style-type: none"> <input type="checkbox"/> 100 Basic <input type="checkbox"/> 200 Process Control <input type="checkbox"/> 300 Responsibility <input type="checkbox"/> 400 Records <p><input type="checkbox"/> 10. Inspection</p> <ul style="list-style-type: none"> <input type="checkbox"/> 100 Basic <input type="checkbox"/> 200 Inspection Requirements <input type="checkbox"/> 300 Inspection Hold Points <input type="checkbox"/> 400 Inspection Planning <input type="checkbox"/> 500 In-Process Inspection <input type="checkbox"/> 600 Final Inspections <input type="checkbox"/> 700 Records (2004) <input type="checkbox"/> 700 Inspections During Operations (2008) <input type="checkbox"/> 800 Records (2008) <p><input type="checkbox"/> 11. Test Control</p> <ul style="list-style-type: none"> <input type="checkbox"/> 100 Basic <input type="checkbox"/> 200 Test Requirements <input type="checkbox"/> 300 Test Procedures (other than computer programs) <input type="checkbox"/> 400 Computer Program Test Procedures <input type="checkbox"/> 500 Test Results <input type="checkbox"/> 600 Test Records <p><input type="checkbox"/> 12. Control of Measuring and Test Equipment</p> <ul style="list-style-type: none"> <input type="checkbox"/> 100 Basic <input type="checkbox"/> 200 Selection <input type="checkbox"/> 300 Calibration and Control <input type="checkbox"/> 400 Records <p><input type="checkbox"/> 13. Handling, Storage and Shipping</p> <ul style="list-style-type: none"> <input type="checkbox"/> 100 Basic <input type="checkbox"/> 200 Special Requirements <input type="checkbox"/> 300 Procedures <input type="checkbox"/> 400 Tools and Equipment <input type="checkbox"/> 500 Operators <input type="checkbox"/> 600 Marking or Labeling <p><input type="checkbox"/> 14. Inspection, Test and Operating Status</p> <ul style="list-style-type: none"> <input type="checkbox"/> 100 Basic |
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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)

- 600 Storage
- 700 Retention
- 800 Receipt Control 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:

(All) OR (Specify)

Introduction

- 100 Purpose
- 200 Applicability
- 300 Responsibility
- 400 Planning and Procedures
- 500 Definitions
- 600 Multiunit Facility Provisions

2.1 Cleaning of Fluid Systems and Associated Components for Nuclear Power Plants

- 100 General
- 200 General Requirements
- 300 Cleanness Criteria
- 400 Manufacturing Phase Cleanness
- 500 Cleanness Prior to Inspection
- 600 Cleanness During Installation
- 700 Maintenance of Installation Cleanness
- 800 Preoperational Cleaning
- 900 Layup and Postlayup Cleaning
- 1000 Postoperational Repairs and Modifications
- 1100 Records

2.2 Packaging, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants

- 100 General
- 200 General Requirements
- 300 Packaging
- 400 Shipping
- 500 Receiving
- 600 Storage
- 700 Handling
- 800 Records

2.3 Housekeeping for Nuclear Power Plants

- 100 General
- 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
- 200 General Requirements
- 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
- 200 General Requirements
- 300 Software Acquisition
- 400 Software Engineering Method
- 500 Standards, Conventions, and Other Work Practices
- 600 Support Software
- 700 References

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2.8 Installation, Inspection, and Testing of Mechanical Equipment and Systems for Nuclear Power Plants

- 100 General
- 200 General Requirements
- 300 Preinstallation 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
- 200 Definition Applications
- 300 Utilizations
- 400 Technical Evaluation
- 500 Critical Characteristics
- 600 Methods of Accepting Commercial Grade Items
- 700 Commercial Grade Services
- 800 Documentation

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

- 100 General
- 200 General Requirements
- 300 Types of Handling Equipment

- 400 Design Requirements
- 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
- 200 General Requirements
- 300 Preventative Maintenance
- 400 Corrective Maintenance
- 500 Records

2.20 Subsurface Investigations for Nuclear Power Plants

- 100 General
- 200 General Requirements
- 300 Verification Requirements
- 400 Field Investigation Requirements
- 500 Laboratory Testing
- 600 Evaluation and Analysis
- 700 Records

Section C – Other National Standards

	National Standard Title:	ID Doc. Designation	Edition/Year	Section
a.	_____	_____	_____	_____
b.	_____	_____	_____	_____
c.	_____	_____	_____	_____
d.	_____	_____	_____	_____
e.	_____	_____	_____	_____
f.	_____	_____	_____	_____
g.	_____	_____	_____	_____

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

- This procurement does not require the supplier to have an NQA-1 QA program. Please ignor Sections A-C above.

The work of this SOW has been graded as Enhanced Quality within the WRPS Quality Assurance Program.

The subcontractor shall have a documented and implemented Quality Assurance Program. A project specific approach to Quality Assurance may be applied (e.g., a graded approach employing a project plan).

The program/project plan shall address the following:

1. The organizational structure, functional responsibilities, levels of authority, and lines of communications for activities affecting quality shall be documented.
2. A documented quality assurance program shall be planned, implemented, and maintained which addresses the requirements of this project. The program shall identify the activities and items to which it applies.

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- The program shall provide control over activities affecting quality to an extent consistent with their importance.
 - The program shall include monitoring activities against acceptance criteria in a manner sufficient to provide assurance that the activities affecting quality are performed satisfactorily.
 - The program shall be established at the earliest time consistent with the schedule for accomplishing the activities.
 - The program shall provide for the planning and accomplishment of activities affecting quality under suitably controlled conditions. Controlled conditions include the use of appropriate equipment, suitable environmental conditions for accomplishing the activity, and assurance that prerequisites for the given activity have been satisfied.
 - The program shall provide for any special controls, processes, test equipment, tools, and skills to attain the required quality of activities and items and for verification of that quality.
 - The organization shall establish and implement processes to detect and correct quality problems.
3. Activities affecting quality and services shall be described to a level of detail commensurate with the complexity of the activity and the need to assure consistent and acceptable results. The need for, and level of detail in, written procedures or instructions shall be determined based upon complexity of the task, the significance of the item or activity, work environment, and worker proficiency and capability (education, training, experience).
4. The preparation, issue, and change of documents that specify quality requirements or prescribe activities affecting quality such as plans, instructions, procedures, and drawings shall be controlled to ensure that correct documents are being employed. Such documents, including changes thereto, shall be reviewed for adequacy and approved for release by authorized personnel.
5. Quality assurance records shall be identified, generated, authenticated, and maintained. Quality assurance records shall furnish documentary evidence that items or activities were performed as planned and meet any specified requirements.