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	Date	

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OPERATIONAL QUALITY ASSURANCE PROGRAM DESCRIPTION	PCN#: N/A
 OQAPD-01	Effective Date: 10/15/15

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DESCRIPTION OF CHANGES

Justification (required)
See LDCN-15-032.

Page(s)	Description (including summary, reason, initiating document, if applicable)
32	<p>Appendix II, Section 2.0: Replace “will implement will implement the Regulatory Position of Regulatory Guide 1.26, Rev. 3 (February 1976)” with “takes exception, in general, to inclusion of safety classification basis requirements in the Operational Quality Assurance Program Description”.</p> <p>Appendix II: Add new Section 2.1, as follows, “Energy Northwest will identify appropriate industry-standard criteria for safety classification of systems, structures, and components in the Final Safety Analysis Report, subject to the provisions of 10 CFR 50.59.”</p>

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1.0 PURPOSE

1.1 Management

1.1.1 Methodology

- a. The Operational Quality Assurance Program Description (OQAPD) provides a consolidated overview of the quality program controls which govern the operation and maintenance of Energy Northwest's quality related items and activities. The OQAPD describes the quality assurance organizational structure, functional responsibilities, levels of authority, and interfaces.
- b. The requirements and commitments contained in the OQAPD are mandatory and must be implemented, enforced, and adhered to by all individuals and organizations. Employees are encouraged to actively participate in the continued development of the OQAPD as well as its implementation. Proposed changes should be promptly communicated when identified.
- c. The OQAPD applies to all activities associated with structures, systems, and components which are safety related or controlled by 10 CFR 72. The OQAPD also applies to transportation packages controlled by 10 CFR 71. The methods of implementation of the requirements of the OQAPD are commensurate with the item's or activity's importance to safety. The applicability of the requirements of the OQAPD to other items and activities is determined on a case-by-case basis. The OQAPD implements 10 CFR 50 Appendix B, 10 CFR 71 Subpart H, and 10 CFR 72 Subpart G.
- d. The OQAPD is implemented through the use of approved procedures (i.e., policies, directives, procedures, instructions, or other documents) which provide written guidance for the control of quality-related activities and provide for the development of documentation to provide objective evidence of compliance.

1.2 Organization

- 1.2.1 The organizational structure responsible for implementation of the OQAPD is described below. The specific organization titles for the quality assurance functions described are identified in procedures. The authority to accomplish the quality assurance functions described is delegated to the incumbent's staff as necessary to fulfill the identified responsibility.
- 1.2.2 The Chief Executive Officer is responsible for providing top level direction of all activities associated with the safe and reliable operation of Energy Northwest's nuclear site. The Chief Executive Officer provides guidance with regards to nuclear safety and company quality assurance policy and oversees the activities of the offsite safety review committee.

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1.2.3 The following executives report to the chief executive officer:

- a. The executive responsible for nuclear safety and efficient operation of the plant and the Independent Spent Fuel Storage Installation (ISFSI) is responsible for establishing policies, goals and objectives, and implementing the quality assurance program.
- b. The executive responsible for operations support is responsible for establishing policies, goals and objectives for those organizations that provide support for the safe and efficient operation of the plant and the ISFSI, and implementing the quality assurance program.
- c. The executive responsible for organizational performance is responsible for implementing the quality assurance program and maintaining the OQAPD in accordance with regulatory requirements.
- d. The executive responsible for procurement is responsible for the purchase of materials, equipment, and services, inventory control, control of procurement documents, equipment qualification, and warehousing that are required to support operation and maintenance of the plant and ISFSI.
- e. The executive responsible for administrative services is responsible for providing processes for control, distribution, and maintenance of documents and quality assurance records.

1.2.4 The individuals fulfilling the following management functions report to the executives identified above. These individuals may report through other layers of management, but shall maintain sufficient authority and organizational freedom to implement the assigned responsibilities.

- a. The manager responsible for quality has overall authority and responsibility for establishing, controlling, and verifying the implementation and adequacy of the quality assurance program as described in this OQAPD including stopping unsatisfactory work. Although the manager responsible for quality may have other responsibilities, there are no duties or responsibilities unrelated to the OQAPD that would prevent the required attention to quality assurance matters. Further, the implementation of the quality assurance program takes precedence over other non-quality assurance duties.

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The manager responsible for quality has direct access to all levels of management, including the CEO, all executives, and appropriate managers and supervisors for any significant quality-related problem or deficiency. In the event of a conflict between quality assurance and non-quality assurance activities reporting to the manager, the authority to resolve the issue and the accessibility to all levels of management, including the vice presidents and the CEO, will be delegated to the Quality supervisors. The Quality supervisors will be responsible for providing recommendations on solutions to quality problems and performing monitoring, assessments, and audits for non-quality assurance areas that are the direct responsibility of the manager.

- b. The manager responsible for overall plant operations assures the safe, reliable, and efficient operation of the plant and the ISFSI within the constraints of applicable regulatory requirements and the operating license. The functional responsibilities include the following:
 - Chemistry
 - Operations
 - Maintenance
 - Radiological Protection
 - Plant Engineering
 - Work Control
 - Tests
 - On-Site Safety Review Committee
 - Maintenance of the plant and the ISFSI* in conformance with approved design
- c. The manager responsible for training provides direction, control, and overall supervision of all training of personnel required by regulations.
- d. The manager responsible for records management provides direction, control, and overall supervision of the records management program and associated activities.
- e. The manager responsible for the corrective action program provides direction, control, and overall supervision of the corrective action program and associated activities.

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- f. The manager responsible for engineering is responsible for the development and maintenance of engineering programs, policies, and procedures and for providing engineering services. Different aspects of these responsibilities (e.g., system engineering) may be fulfilled by separate managers.
- g. The manager responsible for materials, purchasing, and contracts is responsible for procurement, services, receipt, storage, and issue of materials, parts, and components.

1.2.5 The on-site and off-site safety review committees independently review activities to provide additional assurance that the plant and the ISFSI are operated and maintained in accordance with the Operating License, the cask certificate of compliance, and applicable regulations which address nuclear safety. These responsibilities are outlined in Appendix III.

2.0 QUALITY ASSURANCE (QA) PROGRAM

2.1 Purpose

This section provides an overall description of the QA Program that will be applied to initial testing and subsequent operation and maintenance activities throughout the life of the Energy Northwest nuclear power plant and ISFSI.

2.2 General

- 2.2.1 The QA Program will be implemented through a series of Site Wide Procedures (SWP) and plant procedures contained in the Plant Procedure Manual. The procedures will address the applicable requirements of Appendix B to 10 CFR 50, 10 CFR 72 Subpart G, and 10 CFR 71 Subpart H. The procedures will comply with the regulatory positions of QA-related Regulatory Guides as identified and modified in Appendix II, Position Statements, and the additional Quality Program requirements as identified in Appendix III.
- 2.2.2 A list of safety-related items that will be subject to the applicable controls of the QA Program is included in the Final Safety Analysis Report (FSAR) for the Energy Northwest nuclear power plant. Changes to this listing shall be controlled by the manager responsible for engineering and approved by the manager responsible for overall plant operations and ISFSI.
- 2.2.3 A list of important-to-safety items that shall be subject to a graded application of the controls of the QA Program is included in the ISFSI Final Safety Analysis Report (FSAR) for the certified spent fuel storage casks used by Energy Northwest under a general license. Changes to this list shall be controlled by the cask certificate holder. Important-to-safety classification categories are defined in Table 2-1. The relationship of the important-to-safety graded approach to 10 CFR 50, Appendix B is included in Table 2-2.

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- 2.2.4 Applicable provisions of the QA Program shall remain in effect for the life of the Energy Northwest nuclear power plant and ISFSI.
- 2.2.5 Revision to the QA Program will be made by the Quality organization as follows:
- a. Proposed changes to the QA Program will be evaluated to determine whether or not they would result in a reduction of commitments previously accepted by the Nuclear Regulatory Commission (NRC).
 - b. Changes that do not reduce the commitments may be implemented prior to forwarding such changes to the NRC. All such changes shall be forwarded to the NRC in accordance with 10 CFR 50.71(e).
 - c. Changes that reduce commitments will be forwarded to the NRC for its review and acceptance prior to implementation. Such changes shall be regarded as accepted by the NRC upon receipt of a letter from the NRC to this effect or sixty (60) days after submittal to the NRC, whichever occurs first.
- 2.2.6 Managers of Energy Northwest organizations responsible for implementing the applicable provisions of the QA Program shall assure that activities that affect safety-related functions of plant items or important to safety functions of ISFSI items are performed by personnel who have been indoctrinated and trained. The scope, objective, and method of implementing the indoctrination and training program shall be documented. Proficiency of personnel performing activities that affect safety-related functions of plant items or important to safety functions of ISFSI items shall be maintained by retraining, re-examining, and/or recertifying, as applicable. Methods shall be provided for documenting training.
- 2.2.7 The scope, implementation, and effectiveness of the QA Program are routinely audited by the Quality organization. Copies of audit reports are presented to Energy Northwest management to provide for assessment of the effectiveness of the QA Program. Additionally, at least once per two (2) years, Energy Northwest management arranges for an independent evaluation of the adequacy of the scope, implementation, and effectiveness of the QA Program. The scope of these evaluations includes auditing the activities described in Section 10.0, Inspection and Section 18.0, Audits. This is accomplished by knowledgeable personnel outside of the Quality organization to assure achievement of an objective program assessment. Results of these independent evaluations are reported to the Chief Executive Officer, the executive responsible for nuclear safety and plant operations, and the executive responsible for operations support.

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2.2.8 Regulatory Commitments

Except where alternatives are identified, Energy Northwest complies with the QA guidance documents listed on Appendix II. If the guidance in one of these documents is in conflict with the OQAPD, the guidance provided in the OQAPD is the controlling guidance. Additionally, the following clarifications apply to all guidance documents listed in Appendix II:

- a. For modifications and non-routine maintenance, guidance applicable to construction-like activities is applicable to comparable plant activities. The inspection of modifications, repairs, rework, and replacements shall be in accordance with the original design and inspection requirements or a documented approved alternative.
- b. The definitions provided by Regulatory Guide 1.74 and associated clarifications, as described in Appendix II, apply wherever the defined term is used in the OQAPD and associated guidance documents.
- c. Clarification to a guidance document applies wherever the guidance document is invoked.
- d. In each of the ANSI standards, other documents (e.g., standards, codes, regulations, tables, or appendices) are referenced or described. These other documents are only quality assurance program requirements if explicitly committed to in the OQAPD. If not explicitly committed to, these documents are not considered as quality assurance program requirements, although they may be used as guidance.
- e. Items and activities controlled by 10 CFR 72 and transportation packages controlled by 10 CFR 71 shall implement the applicable quality requirements using a graded approach to an extent that is commensurate with the item or activities importance to safety.
- f. Scheduling latitude of 25 percent, or 90 days, whichever is shorter may be applied to performance of periodic activities (annual supplier evaluations, triennial vendor audits, recertification in accordance with ANSI N45.2.23-1978 (QA Program Audit Personnel), and Annual Evaluations in accordance with ANSI N45.2.6-1978 (Qualifications of Inspection, Examination, & Testing Personnel).) The grace period of 90 days may be applied to the 24-month frequency for internal audits described in Section 18.2.4. This grace period will not be applied to audits of the Emergency Plan to satisfy the requirements of 10 CFR 50.54(t); Security Plan to satisfy the requirements of 10 CFR 50.54(p)(3), 73.56(g)(1) and (g)(2), and 10 CFR 73.55(g)(4); and Fire Protection Audit to satisfy the requirements of NRC Regulatory Guide 1.189, Section 1.7.10.1. The next performance due date for such activities will be based on their originally scheduled date. The periodicity for these activities will not exceed the original commitment plus 90 days.

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TABLE 2-1

CLASSIFICATION OF TRANSPORTATION PACKAGING AND DRY SPENT FUEL STORAGE SYSTEM COMPONENTS ACCORDING TO IMPORTANCE TO SAFETY

The importance to safety (ITS) classification categories below are taken from NUREG/CR-6407. These classifications were originally derived from Appendix A of Regulatory Guide 7.10.

ITS structures, systems, or components are those features of an ISFSI whose function is:

- To maintain the conditions required to store spent fuel or high-level radioactive waste safely,
- To prevent damage to the spent fuel or the high-level radioactive waste container during handling and storage, or
- To provide reasonable assurance that spent fuel can be received, handled, packaged, stored, and retrieved without undue risk to the health and safety of the public.

When a structure, system, or component is evaluated to be ITS, they are further categorized into one of three classification categories (A, B, or C). The classification level for ITS structures, systems, or components is determined based on the following descriptions:

Classification Category	Importance to Safety	Description
A	Critical to safe operation	Category A items include structures, components, and systems whose failure could directly result in a condition adversely affecting public health and safety. The failure of a single item could cause loss of primary containment leading to release of radioactive material, loss of shielding, or unsafe geometry compromising criticality control.
B	Major impact of safety	Category B items include structures, components, and systems whose failure or malfunction could indirectly result in a condition adversely affecting public health and safety. The failure of a Category B item, in conjunction with the failure of an additional item, could result in an unsafe condition.
C	Minor impact of safety	Category C items include structures, components, and systems whose failure or malfunction would not significantly reduce the packaging effectiveness and would not be likely to create a situation adversely affecting public health and safety.

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TABLE 2-2

10 CFR 71, SUBPART H AND 10 CFR 72, SUBPART G

ITS GRADED APPROACH MATRIX TO 10 CFR 50, APPENDIX B

10 CFR 50 Appendix B		10 CFR 71/72 Graded Approach		
Criterion	Title	ITS Cat. A	ITS Cat. B	ITS Cat.C
I	Organization	X	X	
II	Quality Assurance Program	X	X	
III	Design Control	X	X	
IV	Procurement Document Control	X	X	
V	Instructions, Procedures and Drawings	X	X	X
VI	Document Control	X	X	X
VII	Control of Purchased Material, Equipment and Services	X		
VIII	Identification and Control of Materials, Parts, and Components	X		
IX	Control of Special Processes	X	X	
X	Inspection	X	X	
XI	Test Control	X	X	
XII	Control of Measuring and Test Equipment	X	X	
XIII	Handling, Storage, and Shipping	X	X	
XIV	Inspection, Test, and Operating Status	X	X	
XV	Nonconforming Materials, Parts, or Components	X	X	
XVI	Corrective Action	X	X	X
XVII	Quality Assurance Records	X	X	
XVIII	Audits	X	X	
10 CFR Part 21 Applicability		X		

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3.0 DESIGN CONTROL

3.1 Purpose

This section sets forth requirements for the control of new designs, changes thereto, and modifications that affect plant safety-related functions or ISFSI important to safety functions of structures, systems, and components.

3.2 General

3.2.1 Organizations (both internal and external) participating in the preparation, review, approval, and verification of design documents (drawings, design input and criteria, specifications, design analysis, digital computer software, system descriptions, procedures, and instructions) associated with new designs, changes thereto, and plant modifications shall develop and implement procedures that clearly delineate actions to be accomplished. These procedures shall contain provisions to assure that:

- a. Applicable regulatory requirements and design bases specified in the Columbia Generating Station and ISFSI Final Safety Analysis Reports are correctly translated into design documents.
- b. Appropriate quality standards are specified and included in design documents and that changes from such standards are documented, approved, and controlled.
- c. Design analysis (reactor physics, stress, thermal, hydraulic, accident, etc.) is performed, where applicable.
- d. Items such as compatibility of materials, parts, components, and processes selected; accessibility for inservice inspection, maintenance, and repair; and delineation of acceptance criteria for inspections and tests are considered, where applicable, during the design development and review phases.
- e. Errors and deficiencies discovered in approved design documents that could adversely affect plant safety-related or ISFSI important to safety structures, systems, and components are documented and that appropriate corrective action is taken.
- f. Development, maintenance, and use of digital computer software is controlled. These provisions shall formally define the software life cycle process to include planning, implementation, and design output. Where the use of a particular digital computer software program for performing design calculations is specified, such computer software is verified and certified for use.

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- 3.2.2 Where two or more design organizations are involved in the performance of design, necessary interface controls (both internal and external) shall be documented and controlled between the participating organizations, particularly in the area of review, approval, release, distribution and revision of interface documents.
- 3.2.3 Design verification, to provide assurance that the design meets the specified design inputs, shall be performed by utilizing methods such as design reviews, alternate calculations, or qualification testing.
- 3.2.4 Design verification procedures shall be established and implemented. These procedures shall:
- a. Provide for the determination of the method for design verification that will be utilized.
 - b. Provide assurance that the design verification is performed and documented by personnel other than those who performed the original design but who may be from the same organization.
 - c. Identify the responsibilities of the verifier; areas, features, and pertinent considerations to be verified; and the documentation to be generated.
 - d. Require that where verification method is only by test, the prototype, component, or feature testing is performed at the earliest practicable stage and under the most adverse design conditions.
 - e. Require the accomplishment of design verification, in all cases, prior to relying upon the item to perform its safety function.
- 3.2.5 Design documents shall be reviewed for adequacy by the originating organization unless delegated to another qualified organization. Such reviews shall be documented and maintained on file.
- 3.2.6 Changes to approved design documents shall be subjected to design control measures comparable with those that were applied to the original design and shall be approved by the same organization that approved the original design, unless delegated to another qualified organization, as applicable.
- 3.2.7 Measures shall be established to assure that Energy Northwest personnel are made aware of design changes/modifications that affect the performance of their duties.

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4.0 PROCUREMENT DOCUMENT CONTROL

4.1 Purpose

This section sets forth requirements for preparation, review, and approval of procurement documents and changes thereto in order to control the quality of vendor furnished safety-related plant items and services and important to safety ISFSI items and services.

4.2 General

- 4.2.1 Procedures/instructions shall be established and implemented to control procurement-related activities such as procurement planning; preparation, review, approval and control of procurement documents; vendor selection; bid evaluations; and review and concurrence of vendor's quality assurance programs. These procedures/instructions shall clearly delineate the sequence of actions to be accomplished in the preparation, review, and approval of procurement-related documents and shall identify those positions or groups responsible for performing those actions.
- 4.2.2 Procurement documents for items (other than commercial grade off-the-shelf items, as defined in 10 CFR 21) and for services shall require, where necessary, vendors or subvendors to have a quality assurance program consistent with the applicable provisions of 10 CFR 50, Appendix B, 10 CFR 72, Subpart G, or 10 CFR 71, Subpart H.
- 4.2.3 As deemed necessary, the procurement documents will provide for right of access to the vendor's facilities and records for source inspections/audit by Energy Northwest or its designee.
- 4.2.4 Procurement documents shall contain or reference applicable technical requirements (such as regulations, specifications, drawings, codes, and standards), test and inspection requirements, and special process instructions that must be complied with by vendors.
- 4.2.5 Procurement documents shall contain, as applicable, requirements which identify the documentation (such as drawings, specification, inspection and test records, personnel and procedure qualifications, Certificates of Conformance or equivalent certifications, and material chemical and physical test results) to be prepared, maintained, submitted, or made available to Energy Northwest for review and/or approval.

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4.2.6 Procurement documents shall be reviewed by independent Procurement personnel. This review will be performed and documented to assure that quality requirements are correctly stated; that they can be inspected and controlled; the vendor is on the current Energy Northwest Evaluated Supplier List; and the procurement documents have been prepared to incorporate appropriate provisions of 4.2.2 through 4.2.5. Quality personnel shall review procurement documents on a sampling basis, either during visits to vendor's facilities, or during audits/surveillances, or at receiving inspection.

4.2.7 Changes (other than those that are of administrative nature) to approved procurement documents shall be subjected to the same degree of control that was applied during the preparation of original procurement documents.

5.0 INSTRUCTIONS, PROCEDURES, AND DRAWINGS

5.1 Purpose

This section sets forth requirements for instructions, procedures, and drawings for activities that affect safety-related functions of plant items and important to safety functions of ISFSI items.

5.2 General

5.2.1 Activities that affect safety-related functions of plant items and important to safety ISFSI items shall be described by and accomplished through implementation of documented procedures, instructions or drawings, as appropriate.

5.2.2 Procedures/instructions shall be established to assure that procedures, instructions or drawings include appropriate quantitative (such as dimensions, tolerances, and operating limits) or qualitative (such as comparative workmanship samples) acceptance criteria for determining satisfactory work performance and quality compliance.

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6.0 DOCUMENT CONTROL

6.1 Purpose

This section sets forth requirements for the control of documents pertaining to activities that affect safety-related functions of plant items and important to safety functions of ISFSI items.

6.2 General

6.2.1 Procedures shall be established and implemented to control the preparation, review, approval and issuance of documents, including changes thereto, which pertain to activities affecting safety-related functions of plant items and important to safety functions of ISFSI items. As a minimum, the following types of documents shall be controlled:

- a. Operational QA Program Description.
- b. Design documents (e.g., calculations, drawings, specifications, analyses) including documents related to digital computer software.
- c. As-built documents.
- d. Final Safety Analysis Reports.
- e. Procurement documents.
- f. Administrative procedures including Site Wide Procedures which address operations, maintenance, technical specifications, inservice inspection and testing, modification, calibration, testing, nonconformance reports, Final Safety Analysis Reports, fuel handling and procurement documents.
- g. Nonconformance reports.

6.2.2 Procedures that control the preparation, review, approval and issuance of documents, including changes thereto, shall contain provisions which provide assurance that:

- a. Type documents listed in paragraph 6.2.1.b through 6.2.1.g are reviewed for technical adequacy, by qualified individuals, prior to approval for release.
- b. Procedures listed in paragraph 6.2.1.f are reviewed for inclusion of appropriate quality requirements by qualified Quality personnel, randomly, periodically, and situationally.
- c. Documents are approved for release by authorized personnel prior to implementation.

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- d. Documents are available at the location where the prescribed activity will be performed prior to commencing the work.
- e. Changes (other than those that are of administrative nature) to approved documents are reviewed and approved by the same organizations that performed the original review and approval unless delegated to other appropriately qualified organizations.
- f. Approved changes to documents are promptly incorporated into instructions, procedures, drawings and other appropriate documents.
- g. Obsolete or superseded documents are controlled to prevent their inadvertent use.

6.2.3 Current revision status of documents, such as instructions, procedures, drawings, and specifications shall be identified and maintained.

7.0 CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES

7.1 Purpose

This section establishes controls to assure that safety-related plant items and services and important to safety ISFSI items and services, whether purchased directly or through contractors and subcontractors, conform to procurement documents.

7.2 General

7.2.1 Procedures/instructions shall be established and implemented for the control of purchased materials, equipment, and services. These procedures/ instructions shall clearly describe the actions to be accomplished and identify those positions or groups responsible for performing those actions.

7.2.2 Material, equipment, digital computer software, services and spare/replacement parts (other than commercial grade items as defined in 10 CFR 21) for plant safety-related or ISFSI important to safety structures, systems and components:

- a. Shall have a technical evaluation to assure that requirements for acceptable item(s) are specified in the procurement documents.
- b. Shall be procured from vendors whose quality assurance qualifications have been affirmed, either prior to or after award of the contract, by Supplier Quality personnel, and
- c. Shall be subject to the existing quality assurance program controls and to technical requirements at least equal to the original technical requirements or to revised controls that have been properly reviewed and approved.

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- 7.2.3 Material, equipment, digital computer software, services and spare/replacement parts for plant safety-related or ISFSI important to safety structures, systems and components that are commercial grade items as defined in 10 CFR 21:
- a. Shall have a technical evaluation to assure that requirements for acceptable item(s) are specified in the procurement documents.
 - b. Shall have acceptance methods to provide reasonable assurance the item(s) received is the item(s) which was specified. These may include one or more of the methods of Paragraphs 7.2.4, 7.2.5, or 7.2.6 as specified by the Technical Evaluation.
- 7.2.4 Evaluation of vendors, including review and concurrence of vendors' QA programs, shall be performed by Supplier Quality with assistance if required from Procurement or Engineering personnel competent in determining the ability of vendors to provide acceptable quality products. Source selection will be based on one or more of the following:
- a. The ability of the vendor to comply with those elements of 10 CFR 50 Appendix B, 10 CFR 71 Subpart H, and 10 CFR 72 Subpart G applicable to the type of material, equipment, or services being procured.
 - b. A review of previous record and performance of vendors who have provided similar articles of the type being procured.
 - c. A survey of the vendor's facilities and QA program to determine their capability to supply a product which meets the design, manufacturing, and quality requirements.
 - d. Suppliers of commercial-grade calibration services with accreditation by a nationally-recognized accrediting body and a documented review of the supplier's accreditation by Energy Northwest may be used in lieu of audit, survey, inspections, or tests following delivery, or in-process surveillances during performance of the service.
- 7.2.5 Source verification (vendor surveillance, inspection and audit) shall be commensurate with the relative importance, complexity, and quantity of the items or service procured and the vendor's quality performance. In-process and final surveillance requirements of vendor products shall be determined in advance and performed to assure conformance with procurement document requirements. Source verification is not required to be performed where the quality of the item can be verified by review of test reports, inspection upon receipt, or other means. Source verification activities shall include evaluation of vendor furnished Certificates of Conformance and/or vendor's Certification System.

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7.2.6 Receiving inspection of vendor furnished items shall be performed to assure that:

- a. The item is properly identified and corresponds to the identification on the procurement document and the receiving documentation.
- b. The item and the acceptance records satisfy the inspection instruction prior to relying upon the item to perform its safety function.
- c. Specified inspection, test, and other records are complete and available at the site prior to relying upon the item to perform its safety function.
- d. Inspection status of accepted items is identified prior to their being released for storage, use or further work.

7.2.7 Documentary evidence that the vendor furnished items conform to the procurement requirements shall be retained by Energy Northwest for the life of the items.

8.0 IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS

8.1 Purpose

This section sets forth requirements for identification and control of plant safety-related and ISFSI important to safety materials, parts, and components.

8.2 General

8.2.1 Procedures and/or instructions shall be established and implemented for the identification and control of items so as to prevent use of incorrect or defective items. These procedures and/or instructions shall assure that:

- a. Identification requirements for items are established during initial planning (i.e., during generation of specifications and design drawings).
- b. Identification of the item is maintained by heat number, part number, serial number or other appropriate means.
- c. Identification of the item is maintained either on the item or on records traceable to the item.
- d. The traceability of the item to appropriate documentation, such as specific inspection/test records, code data reports, and physical/chemical mill test reports, is maintained when such traceability is required by codes, standards, or specifications.
- e. Identification of the item is maintained throughout fabrication, shipping, installation and use of the item.

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- f. The location and method (such as application of metal tags or markings) of identification do not affect the plant safety-related function or ISFSI important to safety function of the item.
- g. Correct identification of the item is verified prior to release of the item for fabrication, shipping, assembling and installation.

9.0 CONTROL OF SPECIAL PROCESSES

This section sets forth requirements for special process activities which affect plant safety-related and ISFSI important to safety structures, systems, and components.

9.1 General

- 9.1.1 Special processes are those that require interim in-process controls in addition to final inspection and/or examination to assure achievement of required quality.
- 9.1.2 Procedures/instructions shall be established and implemented to assure adequate performance and control of special processes such as welding, heat treating, nondestructive testing, and chemical cleaning. These procedures/instructions shall contain provisions for:
 - a. Qualifying the personnel, equipment, and procedures to be utilized for performing special processes.
 - b. Documenting the evidence (inspection or process results) of acceptable performance of special processes.
- 9.1.3 Special processes shall be performed by qualified personnel utilizing qualified procedures and qualified equipment in accordance with applicable codes, standards, and specifications. For special processes not covered by existing codes or standards, the necessary qualifications of personnel, procedures, and equipment shall be defined in appropriate documents.
- 9.1.4 Procedures, equipment, and personnel to be utilized for the performance of special processes shall be qualified/certified by authorized personnel from applicable organizations (e.g., Quality, Engineering, and Plant organizations, etc.).
- 9.1.5 Qualification records of procedures, equipment, and personnel associated with special processes shall be established, filed, and maintained.

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10.0 INSPECTION

This section sets forth requirements for inspection of activities that affect safety-related functions of plant items and important to safety functions of ISFSI items.

10.1 General

- 10.1.1 Inspections which provide assurance that safety-related plant items and activities and important to safety ISFSI items and activities conform to applicable specifications, drawings, codes, standards, and regulations, shall be performed and documented in accordance with written and approved procedures, instructions or check lists.
- 10.1.2 Inspection procedures, instructions or check lists will, as appropriate, provide for:
- a. Date inspection performed
 - b. Description of inspection method
 - c. Identification of characteristics and activities to be inspected.
 - d. Acceptance or rejection criteria
 - e. Identification of required procedures, drawings and specifications
 - f. Specifying necessary measuring and test equipment including accuracy requirements
 - g. Identity of inspector and/or data recorder
- 10.1.3 Inspections shall be performed by individuals other than those who performed or directly supervised the activity being inspected. Inspections, in general, will be performed by or under the supervision of the Energy Northwest Quality organization. However, personnel from the performing groups (Operations, Maintenance, Technical, Test and Startup, etc.) may be utilized for performing certain inspections associated with normal plant or ISFSI operation. When such is the case, the related work procedures shall require (a) demonstration of correct performance of the work through a functional test where the work involves breaching a pressure retaining boundary, and (b) review and concurrence by the Energy Northwest Quality organization of qualification criteria of inspection personnel prior to initiation of inspection activity.

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- 10.1.4 Individuals performing inspections shall be qualified and the status of their qualifications shall be maintained current. Personnel performing peer verification shall be qualified in the area being verified in accordance with the Energy Northwest Maintenance Training Program.
- 10.1.5 Where mandatory inspection holdpoints are identified in pertinent documents, work shall not proceed beyond those holdpoints without the consent of the responsible inspection personnel or group.
- 10.1.6 Inspection results shall be documented, evaluated, and their status recorded.

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11.0 TEST CONTROL

11.1 Purpose

This section sets forth requirements for testing to assure that safety-related plant items and important to safety ISFSI items will perform satisfactorily in service.

11.2 General

11.2.1 Tests required to demonstrate that plant/ISFSI items will perform satisfactorily in service shall be identified, documented, and performed in accordance with written and approved procedures/instructions.

11.2.2 Tests will include, as appropriate, the following:

- a. Prototype qualification tests
- b. Proof tests prior to installation
- c. Preoperational and startup tests
- d. Surveillance tests during plant/ISFSI operation
- e. Tests associated with plant/ISFSI modification and maintenance activities

11.2.3 Test procedures/instructions shall incorporate or reference, as appropriate, the following:

- a. Instructions for performing the test
- b. Test prerequisites such as calibrated instruments, adequate test equipment, completeness of the item to be tested, and suitable environmental conditions.
- c. Mandatory inspection hold points
- d. Acceptance/rejection criteria
- e. The requirements and acceptance limits contained in the applicable design documents
- f. Methods of documenting or recording test data and results
- g. Provisions for assuring that test prerequisites have been met.

11.2.4 Test results shall be documented, evaluated, and their status recorded by a responsible individual or group.

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12.0 CONTROL OF MEASURING AND TEST EQUIPMENT

12.1 Purpose

This section sets forth the requirements to establish those measures which will assure that tools, gages, instruments, and other measuring and testing devices used in activities affecting quality are controlled, calibrated, and adjusted at specified periods in order to maintain accuracy within necessary limits.

Measuring and test equipment does not include permanently installed operating equipment or test equipment used for preliminary checks where data obtained will not be used to determine acceptability or be the basis for design or engineering evaluation. Additionally, calibration and control measures are not required for rulers, tape measures, levels and other such devices if normal commercial manufacturing practices provide adequate accuracy.

12.2 General

12.2.1 Measuring and test equipment (M&TE) shall be calibrated and adjusted using approved procedures/instructions.

12.2.2 A calibration program for the control and use of M&TE shall be established, and implemented. This program, as a minimum, shall provide for the following:

- a. Unique identification of the item and its traceability to the calibration test data.
- b. Labeling or tagging (or otherwise controlling) to indicate the due date of the next calibration.
- c. Calibration technique and frequency.
- d. Generation and maintenance of records which indicate the complete listing of all items under the calibration system together with their current calibration status.
- e. Controlled environment conditions for sensitive and close tolerance M&TE.

12.2.3 M&TE shall be calibrated against certified calibrating standards having known valid relationships to nationally recognized standards. If no national standards exist, the basis for calibration will be documented.

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- 12.2.4 Standards adequacy will be determined by computing the ratio of test instrument tolerance to standard tolerance (Test Uncertainty Ratio, or TUR). A TUR of 4:1 or greater is considered acceptable. TURs of less 4:1 will be handled on a case by case basis, either by widening the test instrument tolerance (with the concurrence of the customer), or by mathematically reducing the test instrument tolerance to provide the same level of confidence as a 4:1 ratio. Other methodologies may be employed with the concurrence of the customer, including a statement of uncertainty or documentation of the actual ratio, if less than 4:1. The method used will be documented.
- 12.2.5 M&TE shall be calibrated and maintained at specified periods based on the required accuracy, purpose, stability characteristics, and other conditions affecting the measurement.
- 12.2.6 When an item of M&TE is found to be out of calibration, an evaluation shall be made and documented to determine the validity of previous inspection/test results and the disposition to be made of items previously inspected/tested.

13.0 HANDLING, STORAGE AND SHIPPING

13.1 Purpose

This section establishes controls for cleaning, handling, storage, packaging, shipping and preservation of plant safety-related items and applicable ISFSI important to safety items.

13.2 General

- 13.2.1 Cleaning, handling, storage, packaging, shipping and preservation of items shall be accomplished in accordance with written procedures/instructions, to prevent damage, loss or deterioration by environmental conditions. These procedures/instructions shall be prepared in accordance with the design and procurement requirements of the items.
- 13.2.2 When necessary for particular items, special coverings, special equipment and special protective environments, such as inert gas atmosphere, specific moisture content levels, and temperature levels, shall be specified, provided, and their existence verified.
- 13.2.3 Responsible personnel shall assure that items are identified, inventoried, adequately packaged to ensure integrity during transit, properly addressed and released and that these activities are documented.
- 13.2.4 Measures shall be established and implemented to control the storage (including control of shelf-life) of chemicals, reagents, lubricants, spare parts, and other consumable materials for plant safety-related and ISFSI important to safety applications.

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14.0 INSPECTION, TEST, AND OPERATING STATUS

14.1 Purpose

This section sets forth the requirements for identifying the inspection, test, and operating status of plant safety-related items and ISFSI important to safety items.

14.2 General

- 14.2.1 Procedures/instructions shall be established and implemented for identifying the inspection, test, and operating status of plant items. These procedures/instructions shall include provisions for assuring that:
- a. The application and removal of status indicators (stamps, tags, labels, routing cards, physical barriers, etc.) is controlled.
 - b. Items which require inspections and tests are identified and controlled to preclude bypassing of such inspections and tests.
 - c. The status of inspections and tests performed upon individual plant/ISFSI items is indicated by the use of status indicators or other suitable means.
 - d. The operating status of nonconforming, inoperative, or malfunctioning installed plant/ISFSI items is documented and identified to prevent inadvertent operation.

15.0 NONCONFORMING MATERIALS, PARTS, OR COMPONENTS

15.1 Purpose

This section sets forth requirements for the control of plant safety-related and ISFSI important to safety items, services, or activities which do not conform to specified requirements.

15.2 General

- 15.2.1 Measures shall be established to control nonconforming items to prevent their inadvertent use or installation. These measures shall include, as appropriate, procedures/instructions for identification, review, documentation, segregation, disposition, approval, and notification to affected organizations of nonconforming items.
- 15.2.2 Measures shall be established and documented defining the responsibility and authority for determining and approving the disposition of nonconforming items.

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- 15.2.3 Nonconformances shall be documented. This documentation shall:
 - a. Clearly identify the nonconforming item; and
 - b. Describe the nonconformance, the disposition of nonconformance, and inspection/test requirements (where applicable).
- 15.2.4 Nonconforming items shall be reviewed and accepted for use-as-is, rejected, repaired, or reworked in accordance with documented procedures/instructions.
- 15.2.5 Acceptability of repaired, reworked and replaced item shall be verified and documented by inspecting and/or testing the item in accordance with original inspection and/or test requirements or approved alternatives.
- 15.2.6 Where feasible, nonconforming items shall be segregated from other acceptable items and/or uniquely identified as nonconforming until properly dispositioned for use.
- 15.2.7 Reports of nonconformances shall be periodically analyzed by the personnel responsible for Quality reviews to identify quality trends. Significant results shall be referred to appropriate management for review and assessment.

16.0 CORRECTIVE ACTION

16.1 Purpose

This section sets forth the requirements for identification, correction, documentation, and reporting of conditions adverse to quality such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances.

16.2 General

- 16.2.1 Conditions adverse to quality shall be evaluated and the need for corrective actions determined in accordance with established procedures. These procedures shall provide for prompt identification and correction of conditions.
- 16.2.2 For conditions significantly adverse to quality, the corrective action procedures shall provide for the following:
 - a. Determination of the cause of the condition.
 - b. Corrective action so as to preclude repetition of the condition.
 - c. Verification of the implementation of the corrective action.
- 16.2.3 Conditions significantly adverse to quality, its cause, and the corrective action taken shall be documented and reported to appropriate levels of management for review and assessment.

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17.0 RECORDS

17.1 Purpose

This section sets forth requirements for generation, transmittal, retention, and maintenance of quality assurance records for Energy Northwest's nuclear power plant and ISFSI.

17.2 General

17.2.1 Sufficient records shall be maintained to furnish evidence of the quality of plant safety-related and ISFSI important to safety items and activities. As a minimum these records shall include the following:

- a. Operating logs
- b. Results of design reviews, inspections, tests, audits, and material analysis
- c. Monitoring of work performance
- d. Qualifications of personnel, procedures, and equipment.
- e. Drawings, specifications, procedures, and procurement documents.
- f. Nonconformance and corrective action reports
- g. Records as required by Appendix III, Section 5.0.

17.2.2 Inspection and test records shall identify the following where applicable:

- a. Inspector and/or data recorder
- b. The type of observation
- c. The date and results of inspection or test.
- d. Acceptability of results.
- e. The action taken to resolve any deficiencies noted.

17.2.3 Quality assurance records shall be generated (prepared, reviewed, and approved), accumulated, transmitted for incorporation into the records retention system, retained, maintained, and controlled in accordance with documented procedures and/or instructions.

17.2.4 The quality assurance records shall be organized and filed so that each document is identifiable and retrievable.

17.2.5 The quality assurance records shall be filed and maintained in facilities that provide protection from possible deterioration or damage and shall be controlled to prevent loss. Storage facilities shall conform with the requirements in ANSI N45.2.9-1974.

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18.0 AUDITS

18.1 Purpose

This section sets forth requirements for auditing to verify implementation and determine the effectiveness of the QA Program.

18.2 General

- 18.2.1 A comprehensive system of planned and documented audits by the Quality organization, shall be carried out to verify compliance with applicable aspects of the QA Program. These audits shall consist of both internal audits of Energy Northwest's nuclear power plant, ISFSI and other Energy Northwest organizations and external audits of Energy Northwest vendors performing activities covered by the QA Program. External audits will be scheduled in accordance with the requirements of Regulatory Guide 1.144.
- 18.2.2 Audits shall include the objective evaluation of work areas, activities, processes, and items; review of documents and records; and evaluation of quality-related practices, procedures and instructions to determine the effectiveness of implementation of the QA Program.
- 18.2.3 Continuous monitoring activities, surveillances, and observations performed by the Quality Organization are performed as an integral part of the evaluation (Audit) program and provide inprocess coverage of the applicable areas to supplement the audit program.
- 18.2.4 Audits shall be scheduled based upon the status and safety importance of the activities. The schedule shall assure that activities are audited at the indicated frequencies or more frequently as performance dictates. The scheduling latitude outlined in Section 2.2.8.f applies. Audits are performed in accordance with approved written procedures which include the following quality-related activities:
- a. The conformance of operation to provisions contained within the power plant and ISFSI Technical Specifications and applicable license conditions at least once per 24 months.
 - b. The performance, training and qualifications of the entire unit staff at least once per 24 months.
 - c. The results of actions taken to correct deficiencies occurring in the power plant and ISFSI equipment, structures, systems, or method of operation that affect nuclear safety, at least once per 24 months.
 - d. The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix B, 10 CFR Part 50, and 10 CFR 72, Subpart G at least once per 24 months.

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- e. The fire protection equipment, program implementation, and programmatic controls including the implementing procedures at least once per 24 months by qualified licensee QA personnel including the use of an outside independent fire protection consultant.
 - f. Each element of the Emergency Plan and implementing procedures as defined by 10 CFR 50.54(t) and 10 CFR 72.32
 - g. Each element of the Security Plan and implementing procedures as defined by 10 CFR 50.54(p), 10 CFR 73.55, and 10 CFR 72, Subpart H. Supplemental audit of the Medical Review Officer (MRO) and Substance Abuse Expert (SAE) elements, services provided by a Contractor/Vendor (C/V), are to be performed on a nominal 12 month frequency.
 - h. Any other area of power plant and ISFSI operation considered appropriate by the CNSRB or the CEO.
 - i. The radiological environmental monitoring program and the results thereof at least once per 24 months.
 - j. The OFFSITE DOSE CALCULATION MANUAL and implementing procedures at least once per 24 months.
 - k. The PROCESS CONTROL PROGRAM and implementing procedures for processing and packaging of radioactive wastes and spent fuel at least once per 24 months.
 - l. The performance of activities required by the Quality Assurance Program for effluent and environmental monitoring at least once per 24 months.
 - m. The Environmental Protection Plan (Nonradiological) and implementing procedures at least once per 24 months.
 - n. The Radiation Protection program including compliance and effectiveness of implementation of radiation control procedures at least once per 24 months.
- 18.2.5 Audits shall be performed in accordance with written procedures or check lists and conducted by appropriately trained personnel not having direct responsibilities in the areas being audited.
- 18.2.6 Audit results shall be documented by auditing personnel and reviewed by management having responsibility in the area audited.
- a. Audit reports shall be forwarded to the CEO and to the management positions responsible for the areas audited within 30 days after completion of the audit.
- 18.2.7 Follow-up action on adverse audit findings shall be accomplished.

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APPENDIX I

"QUALIFICATION REQUIREMENTS"

The minimum qualification requirements for Quality Assurance personnel meet ANSI/ANS-3.1 1987.

Equivalency to a Bachelor's degree in Engineering or a related science degree will be determined based upon an evaluation of the following factors:

1. High school diploma or GED.
2. Sixty (60) semester hours of related technical education taught at the college level (900 classroom or instructor conducted hours).
3. Qualified as an NRC senior operator at the assigned plant.
4. Four (4) years of additional experience in their area of responsibility.
5. Four (4) years of supervisory or management experience.
6. Demonstrated ability to communicate clearly (verbally and in writing).
7. Certification of academic ability and knowledge by corporate management.
8. Successful completion of the Engineer-In-Training examination.
9. Professional Engineer License.
10. Associate degree in Engineering or a related science.

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APPENDIX II

"POSITION STATEMENTS"

This Appendix identifies those quality-related Regulatory Guides which Energy Northwest intends to follow during operation phase of its nuclear power plant. However, where the Regulatory Positions stated in these Regulatory Guides could lead to misunderstanding, or where alternate methods and/or solutions are implemented for accomplishment of Regulatory Positions, they are also described in this Appendix. The commitments to comply with applicable Regulatory Guides not addressed in this Appendix are or will be documented in the applicable Final Safety Analysis Report. The Positions, described in this Appendix, will be incorporated into procedures and/or instructions for applicable activities. This Appendix will be revised, as and when necessary, by Energy Northwest's Quality Organization, in accordance with the provisions of Section 2 of the QA Program.

1.0 REGULATORY GUIDE 1.8, REV. 1-R (May 1977) - "Personnel Selection and Training"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.8, Rev. 1-R (May 1977). For details, see Chapter 13 of the Final Safety Analysis Report for Columbia Generating Station. Quality Assurance personnel will meet the qualification requirements of ANSI/ANS-3.1-1987 (See Appendix I).

2.0 REGULATORY GUIDE 1.26, REV. 3 (February 1976) - "Quality Group Classifications and Standards for Water-, Steam-, and Radioactive- Waste-Containing Components of Nuclear Power Plants"

Energy Northwest takes exception, in general, to inclusion of safety classification basis requirements in the Operational Quality Assurance Program Description.

2.1 Energy Northwest will identify appropriate industry-standard criteria for safety classification of systems, structures, and components in the Final Safety Analysis Report, subject to the provisions of 10 CFR 50.59.

3.0 REGULATORY GUIDE 1.29, REV. 3 (September 1978) - "Seismic Design Classification"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.29, Rev. 3 (September 1978).

4.0 REGULATORY GUIDE 1.30, (Safety Guide 30, August 11, 1972) - "Quality Assurance Requirements for the Installation, Inspection and Testing of Instrumentation and Electric Equipment"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.30 (Safety Guide 30, August 11, 1972), subject to the following:

4.1 Regulatory Position C.1 of Regulatory Guide 1.30 (Safety Guide 30, August 11, 1972) states that ANSI N45.2.4-1972 should be used in conjunction with ANSI N45.2-1971, "Quality Assurance Program Requirements for Nuclear Power Plants." It is Energy Northwest's position that ANSI N45.2-1971 is not applicable for operational phase activities of nuclear

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power plants. Instead Energy Northwest will comply with its Position Statement on Regulatory Guide 1.33.

- 4.2 Section 1.1 of ANSI N45.2.4-1972: This standard will be applied to the installation, inspection, and testing of Class 1E instrumentation, electrical systems and/or components for plant modifications comparable in nature and extent to the activities normally occurring during the initial plant design and construction phase.
- 4.3 Section 3(3) of ANSI N45.2.4-1972: Checking of records is normally accomplished during periodic surveillances and audits of the storage facility. The checking of storage records for each individual item prior to installation is not planned.
- 4.4 Section 5.1.2 of ANSI N45.2.4-1972: Inspections to verify housekeeping will be done as stated in Energy Northwest position statement on Regulatory Guide 1.39.
- 4.5 Section 5.2.1 of ANSI N45.2.4-1972: Tests will include those listed as appropriate. The manufacturers' recommendations shall be considered. The test procedure will specify the actual test to be performed.
- 4.6 Section 9 of ANSI N45.2.4-1972: Energy Northwest's position, stated herein, does not address the codes and standards listed and/or referenced in this paragraph. Such position will be developed in the future, if the need arises.
- 4.7 Appendix A "Supplementary Provisions for Multi-Unit Stations" to ANSI N45.2.4-1972 is not considered applicable to Energy Northwest nuclear power plant
- 4.8 Appendix B "Additional Codes, Standards and Guides" to ANSI N45.2.4-1972: Refer to Energy Northwest Position on Section 9 of ANSI N45.2.4-1972.
- 5.0 REGULATORY GUIDE 1.33, REV. 2 (February 1978) - "Quality Assurance Program Requirements (Operation)"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.33, Rev. 2 (February 1978), subject to the following:

- 5.1 Regulatory Position C.2 of Regulatory Guide 1.33, Rev. 2 (February 1978) implies that the provisions contained in the latest revisions of the Regulatory Guides, listed therein, will be followed. Energy Northwest will follow its position statements on applicable Regulatory Guides as described throughout this Appendix.
- 5.2 Regulatory Position C.4 of Regulatory Guide 1.33, Rev. 2 (February 1978). This section establishes minimum two-year audit frequency for all safety-related functions and recommends audit frequencies specific to Corrective Action, Facility Operation, and Staff Performance, Training, and Qualifications. Energy Northwest will perform audits at frequencies as discussed in Section 18.2.4 instead of this section.

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- 5.3 Internal Audits - Section C.3.a (1) of RG 1.144 refers to RG 1.33 for requirements. A grace period of 90 days will be applied to the 24-month frequency for internal audits described in Section 4.5 of ANSI N18.7-1976, which states that audits of safety related activities are completed "within a period of two years." This grace period will be implemented in accordance with Step 2.2.8.f.
- 5.4 Section 4.3.1 of ANSI N18.7-1976/ANS-3.2: The specific areas of experience described in this section, is not applicable to the on-site safety review committee but the committee must be comprised of site operating and engineering supervisory personnel. Additionally, the off site safety review committee need contain experience in only a majority of the areas.
- 5.5 Section 5.2.13.1 of ANSI N18.7-1976/ANS-3.2: Energy Northwest takes the following exception: When purchasing commercial-grade calibration services from certain accredited calibration laboratories, the procurement documents are not required to impose a quality assurance program consistent with ANSI N45.2-1971. Alternative requirements described in Section 15.2 of this Appendix may be implemented in lieu of imposing a quality assurance program consistent with ANSI N45.2-1971.
- 5.6 Section 5.2.13.4 of ANSI N18.7-1976/ANS-3.2: The third paragraph of this section is revised to read, "Special handling tools and equipment shall be inspected and/or tested, as necessary, in accordance with written procedures and at specific times to verify that the tools and equipment are adequately maintained."
- 5.7 Section 5.2.15 of ANSI N18.7-1976/ANS-3.2: The fourth paragraph of this section is modified with the following (the remaining text of this section is unchanged):
- This section requires plant procedure review by an individual knowledgeable in the area affected by the procedure no less frequently than every two years to determine if changes are necessary or desirable. Instead of this review, controls are in effect to ensure that procedures are reviewed for possible revision upon identification of new or revised source material potentially affecting the intent of procedures.
- 5.8 Section 5.2.17 of ANSI N18.7-1976/ANS-3.2 states that inspection of operating activities may be conducted by second-line supervisory personnel or by other qualified personnel not assigned first-line supervisory responsibility for conduct of the work. Energy Northwest's position is to allow the plant operations' first-line supervisors to perform inspections of surveillance tests, provided that an after-the-fact review of surveillance documentation is performed by the second-line supervisor or by other personnel not assigned first-line responsibility for the conduct of the work.
- 5.9 Sections 5.2.19.1 and 5.2.19.2 of ANSI N18.7-1976/ANS-3.2 describe rules of practice for preoperational and startup test program. Energy Northwest intends to comply with the provisions of these sections. In cases, where conflicts exist between these sections and Regulatory Guide 1.68, Energy Northwest will comply with the implementation of Regulatory Guide 1.68 as described in Chapter 14 "Initial Test Program" of the Final Safety Analysis Report.

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6.0 REGULATORY GUIDE 1.37, (March 16, 1973) - "Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.37, (March 16, 1973), subject to the following:

- 6.1 Regulatory Position C.4 of Regulatory Guide 1.37 (March 16, 1973) states, in part, "Chemical compounds that could contribute to intergranular cracking or stress-corrosion cracking should not be used with austenitic stainless steel and nickel-base alloys." In clarification, Energy Northwest will either follow the chemical composition limits established by its Nuclear Steam Supply System vendor or establish such limits based upon a documented engineering evaluation.
- 6.2 Regulatory Position C.5 of Regulatory Guide 1.37 (March 16, 1973) states, in part, "Specifically, tools which contain materials that could contribute to intergranular cracking or which, because of previous usage, may have become contaminated with such materials should not be used on surfaces of corrosion-resistant alloys." In clarification, Energy Northwest will either follow the chemical composition limits established by its Nuclear Steam Supply System (NSSS) vendor, or establish such limits based upon a documented engineering evaluation.
- 6.3 Section 2.1 of ANSI N45.2.1-1973 states, in part, "Planning for cleaning activities shall include a review of the system and component design specifications and drawings. In clarification of this requirement, a review of system and component design specifications and drawings will be required for only those modifications which change the design of a fluid system.
- 6.4 Section 2.3 of ANSI N45.2.1-1973, last sentence, is revised to read, "Test reports shall include an evaluation of the acceptability of inspection and test results and provide for identifying the individual who performed the evaluation."
- 6.5 Section 3.1.2.1 of ANSI N45.2.1-1973 states, in part, "Scattered areas of rust are permissible provided the aggregate area of rust does not exceed two square inches in any one square foot area." Energy Northwest considers this two square inch limit as a guide only. Adequate discretion by experienced personnel will be used in all cases.
- 6.6 Section 3.1.2.5 of ANSI N45.2.1-1973 states, in part, "There shall be no evidence of organic contamination in the effluent water or on the filter." The presence of organic contamination will be determined visually or by feel.
- 6.7 Section 4 of ANSI N45.2.1-1973, second sentence, is revised to read, "Inspections, examinations, or tests for cleanliness shall be performed if it is suspected that cleanliness has been affected by transportation to, or storage at the installation site."
- 6.8 Section 7.4 of ANSI N45.2.1-1973 requires checking of cleaning solutions for effectiveness of inhibitors (if used). In clarification of this requirement, the effectiveness of inhibitors (if used) will be determined by documentation in technical literature or manufacturer's or vendor's recommendations.

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7.0 REGULATORY GUIDE 1.38, REV. 2 (May 1977) - "Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage and Handling of Items for Water-Cooled Nuclear Power Plants"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.38, Rev. 2 (May 1977), subject to the following:

- 7.1 Section 3.2.1 (1) of ANSI N45.2.2-1972: Temperature and humidity control considerations for packaging of Level A items are not considered applicable to nuclear fuel assemblies unless recommended otherwise by the nuclear fuel manufacturer. Energy Northwest will abide by the manufacturer's recommendation.
- 7.2 Section 3.5.2 of ANSI N45.2.2-1972, last sentence, is revised to read as, "Tapes used for identification rather than sealing which are not near a welding operation may remain indefinitely (see also Appendix Section 3.5.2 for additional requirements)."
- 7.3 Section 3.7.1 (1) of ANSI N45.2.2-1972: Energy Northwest may use cleated, sheathed boxes for loads up to 1,000 pounds rather than 500 pounds limit imposed here. This type of box has been tested by the Columbia Generating Station Nuclear Steam Supply System vendor and found safe for loads up to 1,000 pounds. Other national standards allow the 1,000 pound designation (see Federal Specification PPP-B-601).
- 7.4 Section 6.1.2 (1) of ANSI N45.2.2-1972: Temperature and humidity controls required for storage of Level A items are not considered applicable for nuclear fuel assemblies unless recommended otherwise by the nuclear fuel manufacturer. Energy Northwest will abide by the manufacturer's recommendation.
- 7.5 Section 6.4.2 of ANSI N45.2.2-1972: gives detailed requirements for care of items in storage. In clarification, Energy Northwest will either follow manufacturer's recommendation or follow its own requirements, established based upon a documented engineering evaluation, concerning maintenance of protective covers, seals, and caps; maintenance of preservatives and inert atmosphere; energization of instrument racks and space heaters; insulation resistance testing; and rotation of shafts for rotating equipment.
- 7.6 Appendix Sections A3.4.1 (4) and A3.4.1 (5) of ANSI N45.2.2-1972: During printing of the standard, a transposition occurred between the last sentences of these sections. Energy Northwest will comply with the correct wording which reads as follows:
- 7.6.1 A3.4.1 (4), last sentence: However, preservatives for inaccessible inside surfaces of pumps, valves and pipe for systems containing reactor coolant water shall be the water flushable type.
- 7.6.2 A3.4.1 (5): The name of the preservative used shall be indicated to facilitate touch up.

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8.0 REGULATORY GUIDE 1.39, REV. 2 (September 1977) - "Housekeeping Requirements for Water-Cooled Nuclear Power Plants"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.39, Rev. 2 (September 1977), subject to the following:

8.1 Section 2.1 of ANSI N45.2.3-1973 requires the establishment of cleanness requirements for housekeeping activities on the basis of zone designations. Energy Northwest considers these zone designations and the requirements associated with each zone as impractical for implementation during the operations phase. Procedures or instructions for housekeeping activities, which include the applicable requirements outlined in Section 2.1 of ANSI N45.2.3-1973 and which take into account the radiation control considerations, security considerations and cleanness requirements, will be developed on case by case basis for maintenance and modification work to be performed.

9.0 REGULATORY GUIDE 1.58, REV. 1 (September 1980) - "Qualification of Nuclear Power Plant Inspection, Examination and Testing Personnel"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.58, Rev. 1 (September 1980), subject to the following:

9.1 Regulatory Position C.5 of Regulatory Guide 1.58, Rev. 1 (September 1980) implies that individuals who review and approve inspection, examination, and testing procedures and those who evaluate the adequacy of such procedures to accomplish the inspection, examination, and test objectives, should meet the Level III capability requirements delineated in Table I of ANSI/ASME N45.2.6-1978. Not all Energy Northwest personnel performing the types of cited functions will meet the Level III capability requirements of Table 1 of ANSI/ASME N45.2.6-1978. However, personnel performing the cited functions will be determined by Energy Northwest management (through evaluation of their education, training, and experience) to be fully qualified and competent. The basis for the determination will be documented.

9.2 Section 1.2 of ANSI/ASME N45.2.6-1978, fourth paragraph, states that the requirements of this Standard apply to personnel of the owners and their suppliers. In clarification, the extent of application of the requirements of ANSI/ASME N45.2.6-1978 to Energy Northwest suppliers will depend upon the nature and extent of materials or services furnished, and as further described in Energy Northwest positions on Section 2.4 and 3 of ANSI/ASME N45.2.6-1978.

9.3 Section 1.2 and 2.1.2 of ANSI/ASME N45.2.6-1978 implies that personnel performing non-NDE type of inspections, examinations, and testing will be formally certified. Energy Northwest does not plan this formal certification. Instead, Energy Northwest will select such personnel to predetermined qualification requirements for the specific task based on their education, experience, and training. Formal training records, when used as the basis for qualification, will be maintained on file.

9.4 Section 2.3 of ANSI N45.2.6-1978 states that "Any person who has not performed inspection, examination, or testing activities in their qualified area for a period of one year shall be reevaluated. "A 90-day grace period can be applied to this activity."

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9.5 Section 2.4 of ANSI/ASME N45.2.6-1978 requires issuance of formal certification to individuals and specifies the details of the information to be included in the certificate. Energy Northwest does not plan to issue formal certificates to individuals within the scope of ANSI/ASME N45.2.6-1978 and Regulatory Guide 1.8. However, information similar to that described in this section of the Standard will be available in documented form attesting that the individual is capable of performing the assigned task(s). Energy Northwest will use a similar approach in evaluating supplier compliance with this section of the Standard.

9.6 Section 3 of ANSI/ASME N45.2.6-1978 divides the capability requirements of inspection, examination, and testing personnel into three levels, namely Level I, Level II, and Level III. Energy Northwest will not assign these levels to all personnel performing inspection, examination, and testing activities. When the designated levels are not used, the selection of personnel for particular tasks will be such as to match the capabilities to the types of tasks and maintain the intent of the three levels. The judgment to determine that a person's qualifications and capabilities meet the intent of a certain level of inspection, examination, and testing function is made through the normal management process by using established administrative and personnel procedures. Documentation for such justification will be maintained on file. A similar approach will be used to evaluate the qualifications of non-NDE personnel of Energy Northwest suppliers.

10.0 REGULATORY GUIDE 1.64, REV. 2 (June 1976) - "Quality Assurance Requirements for the Design of Nuclear Power Plants"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.64, Rev. 2 (June 1976), subject to the following:

10.1 Regulatory Position C.2 of Regulatory Guide 1.64, Rev. 2 (June 1976) states that individuals performing design verification should not have immediate supervisory responsibility for the individual performing the design. It further states that while design verification by the immediate supervisor is encouraged, it should not be construed that such verification constitutes the required independent design verification. It is Energy Northwest's position that if the designer's immediate supervisor is the most technically qualified individual available in the organization to perform a design verification by design review, this review may be conducted by the supervisor, providing that:

10.1.1 The justification is individually documented and approved in advance by the supervisor's management and

10.1.2 Quality Assurance audits surveillances or assessments cover the frequency and effectiveness of use of supervisors as design verifiers to guard against abuse.

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11.0 REGULATORY GUIDE 1.74 (February 1974) - "Quality Assurance Terms and Definitions"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.74 (February 1974), subject to the following:

- 11.1 Regulatory Position "C" of Regulatory Guide 1.74 (February 1974) specifies certain documents recommended be included in the definition of "procurement documents", defined in ANSI N45.2.10-1973. Energy Northwest will use the following definition:

Procurement Documents - Purchase requisitions, purchase orders and contracts with attachments necessary to specify/verify requirements.

- 11.2 Section 2 of ANSI N45.2.10-1973: The definition of "specification" is revised to read as follows:

Specification - A statement of a set of requirements to be satisfied by a product, a material, a service or process indicating, whenever appropriate, the procedure by means of which it may be determined whether the requirements given are satisfied.

12.0 REGULATORY GUIDE 1.88, REV. 2 (October 1976) - "Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.88, Rev. 2 (October 1976), subject to the following:

- 12.1 Regulatory Position C.2 of Regulatory Guide 1.88, Rev. 2 (October 1976) endorses the 4-hour fire rating requirements for a single records storage facility as described in Section 5.6 of ANSI N45.2.9-1974. Energy Northwest modifies this 4-hour rating requirement of ANSI N45.2.9-1974 to 2-hour fire rating requirement. Accordingly, Energy Northwest will comply with a substitute to the third, fourth, and fifth paragraphs of Section 5.6 of ANSI N45.2.9-1974 which reads, "Where a single record storage is maintained, the QA records shall be maintained in any one of the following four (4):

12.1.1 A 2-hour vault meeting NFPA (National Fire Protection Association) No. 232-1975 without additional provisions.

12.1.2 2-hour rated file containers meeting NFPA No. 232-1975 (Class B) without additional NFPA provisions.

12.1.3 2-hour rated fire resistant file room meeting NFPA No. 232-1975 with the following additional provisions:

- a. Early warning fire detection and automatic fire suppression shall be provided, with electronic supervision at a constantly attended central station.

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- b. Records shall be stored in fully enclosed metal cabinets. Records shall not be permitted on open steel shelving. No storage of records shall be permitted on the floor of the facility. Adequate access and aisle ways shall be maintained at all times throughout the facility.
- c. Work not directly associated with records storage or retrieval shall be prohibited within the records storage facility. Examples of such prohibited activities include but are not limited to: records reproduction, film developing, and fabrication of microfiche cards.
- d. Smoking and eating/drinking shall be prohibited throughout the records storage facility.
- e. Ventilation, temperature, and humidity control equipment shall be protected inside with standard fire-door dampers where they penetrate fire barriers bounding the facility.

12.1.4 A 2-hour fire rated facility meeting the following criteria and provisions:

- a. Reinforced concrete, concrete block, masonry, or equal construction.
- b. Floor and roof with drainage control. If floor drain is provided, a check valve (or equal) shall be included.
- c. Doors, structure and frames, and hardware shall be designed to comply with the requirements of a minimum 2-hour fire rating.
- d. Sealant applied over walls as a moisture or condensation barrier.
- e. Surface sealant on floor providing a hard wear surface to minimize concrete dusting.
- f. Foundation sealant and provisions for drainage.
- g. Forced air circulation with filter system.
- h. Fire Protection System.
- i. Only those penetrations used exclusively for fire protection, communication, lighting, or temperature/humidity control are allowed; all such penetrations shall be sealed or dampered to comply with the minimum 2-hour fire protection rating.
- j. The construction details shall be reviewed for adequacy of protection of contents by a person who is competent in the technical field of fire protection and fire extinguishing.

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- k. If the facility is located within a building or structure, the environment and construction of that building can provide a portion or all of the criteria (1) through (9).

12.2 Section 3.2.2 of ANSI N45.2.9-1974 is revised to read, "Index - The quality assurance records shall be indexed. The indexing system(s) shall include, as a minimum, record retention times and the location of the records within the record system. The indexing system(s) shall provide sufficient information which can be used to identify item(s) or activity(ies)."

12.3 Section 5.4.3 of ANSI N45.2.9-1974 is revised to read, "Special Processed Records - Provisions shall be made for special processed records (such as radiographs, photographs, negatives, and microfilm) to prevent damage from excessive light, stacking, electromagnetic fields, and temperature. These provisions will be delineated in procedures and/or instructions which will incorporate, or take into consideration, available manufacturers' recommendations."

12.4 Section 5.2 of ANSI N45.2.9 - 1974 is revised by adding a new second paragraph as follows:

Quality Assurance records may be maintained in temporary storage with the originating organization until transfer to the permanent plant file. Written storage procedures shall be prepared and a custodian designated with the responsibility to enforce the procedures. Storage procedures shall, at a minimum, address the following:

- 12.4.1 Identification of the records that may be maintained in temporary storage, the type of storage (single or dual) and the record storage location.
- 12.4.2 Use of lockable temporary storage containers with a minimum one hour fire rating and an Underwriters' Laboratory (UL) label (or equivalent). If the container does not have a fire rating label, the container should be certified by an individual competent in the field of fire protection.
- 12.4.3 Use of "out" cards or other similar methods to track records removed from the file.
- 12.4.4 Designation of a custodian with the authority to enforce the storage procedures.
- 12.4.5 Provisions shall be made in the storage arrangement to prevent damage from condensation.
- 12.4.6 Records shall not be stored loosely. Records shall be firmly attached in binders or placed in folders or envelopes for storage on shelving in containers. Steel file cabinets are preferred.
- 12.4.7 Provisions shall be made for special processed records (such as radiographs, photographs, negatives, and microfilm) to prevent damage from excessive light, stacking, electromagnetic fields, and temperature. These provisions shall be delineated in procedures and/or instructions which will incorporate, or take into consideration, available manufacturers' recommendations.

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13.0 REGULATORY GUIDE 1.94, REV. 1 (April 1976) - "Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Steel During the Construction Phase of Nuclear Power Plants"

Regulatory Guide 1.94, Rev. 1 (April 1976) is not considered applicable to operations phase activities. However, the Regulatory Position of Regulatory Guide 1.94, Rev. 1 (April 1976), where appropriate, will be implemented for those applicable operational phase activities that are comparable to construction phase activities using current codes and standards.

14.0 REGULATORY GUIDE 1.116, REV. 0-R (May 1977) - "Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.116, Rev. 0-R, (May 1977), subject to the following:

- 14.1 Regulatory Position C.3 of Regulatory Guide 1.116, Rev. 0-R (May 1977) recommends that the requirements of Section 5 of ANSI N45.2.8-1975 pertaining to preoperational tests, cold functional tests, and hot functional tests should be used in conjunction with Regulatory Guide 1.68. Energy Northwest will comply with the implementation of Regulatory Guide 1.68 as described in Chapter 14, "Initial Test Program," of the Final Safety Analysis Report.
- 14.2 Section 2.3 of ANSI N45.2.8-1975, last sentence is revised to read, "Test reports shall include an evaluation of the acceptability of inspection and test results and provide for identifying the individual who performed the evaluation."
- 14.3 Section 2.8.2 of ANSI N45.2.8-1975 states, "Records of calibration shall be included in inspection and test results." Energy Northwest does not intend to include calibration records in inspection and test results. Instead, the calibration records will be maintained in a separate file.
- 14.4 Section 2.9.e(6) of ANSI.2.8.1975 states, "Evidence that engineering or design changes are documented and approved prior to installation." Energy Northwest may permit installation of an item prior to approval of the related engineering or design change provided procedural controls, requiring evidence of engineering or design change approval prior to placing the affected item into service, are instituted.
- 15.0 REGULATORY GUIDE 1.123, REV. 1 (July 1977) - "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants"
- Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.123, Rev. 1 (July 1977), subject to the following:
- 15.1 Section 1.3 of ANSI N45.2.13-1976: Energy Northwest will comply with the definition of "procurement documents" as stated in its position statement on Regulatory Guide 1.74 (February 1974).

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- 15.2 Section 3.2, of ANSI N45.2.13-1976: "Content of the Procurement Documents," Subsection 3.2.3, "Quality Assurance Program Requirements," Energy Northwest takes the following exception:

When purchasing commercial-grade calibration services from calibration laboratories accredited by a nationally-recognized accrediting body, the procurement documents are not required to impose a quality assurance program consistent with ANSI N45.2-1971. In such cases, accreditation may be accepted in lieu of the Purchaser imposing a QA Program consistent with ANSI N45.2-1971, provided each of the following are met:

1. The purchase documents impose any additional technical and administrative requirements, as necessary, to comply with Energy Northwest's QA Program and technical provisions. At a minimum, the purchase documents must require the calibration certificate/report include the identification of the laboratory equipment/standard used.
2. The accreditation is to ANSI/ISO/IEC 17025.
3. The calibration supplier holds an accreditation by any one of the following domestic (United States) accrediting bodies, which are recognized by the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA):
 - a. National Voluntary Laboratory Accreditation Program (NVLAP), administered by the National Institute of Standards & Technology (NIST);
 - b. American Association for Laboratory Accreditation (A2LA);
 - c. ACLASS Accreditation Services (ACLASS);
 - d. International Accreditation Service (IAS);
 - e. Laboratory Accreditation Bureau (L-A-B);
 - f. Perry Johnson Laboratory Accreditation, Inc. (PJLA);
 - g. Other NRC-approved laboratory accrediting body.
4. The published scope of accreditation for the calibration laboratory covers the necessary measurement parameters, range, and uncertainties.
5. The purchase documents require reporting as-found calibration data when calibrated items are found to be out-of-tolerance.

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16.0 REGULATORY GUIDE 1.144, REV. 1 (September 1980) - "Auditing of Quality Assurance Programs for Nuclear Power Plants"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.144, Rev. 1 (September 1980), subject to the following:

Supplier Audits - Section C.3.b(2) of Reg. Guide 1.144. Revision 1 states that audits be performed on a "triennial basis." A 90-day grace period can be applied to this activity.

Supplier Evaluations - Section C.3.b(2) of Reg. Guide 1.144 Revision 1 states that documented evaluations be performed "annually." A 90-day grace period can be applied to this activity.

Revised commitment to perform vendor audits from "at least every three years" to "on a triennial basis" to be consistent with the wording used in RG 1.144, Revision 1, Section C.3.b(2).

16.1 Section 4.4.4 of ANSI N45.2.12-1977 requires the audit report to include an evaluation statement regarding the effectiveness of the quality assurance program elements that were audited. Since the audit by its very nature is an evaluation of the quality assurance program effectiveness, the audit report itself is considered to be an evaluation of the quality assurance program effectiveness. Therefore, this section of the Standard is revised to read "A Summary of Audit Results."

16.2 Regulatory Guide 1.144, Section C.3.b(2) requirements of this section are accepted with the following interpretation:

When purchasing commercial-grade calibration services from calibration laboratories accredited by a nationally-recognized accrediting body, the accreditation process and accrediting body may be credited with carrying out a portion of the Purchaser's duties of verifying acceptability and effective implementation of the calibration service supplier's quality assurance program.

In lieu of performing an audit, accepting an audit by another licensee, or performing a commercial-grade supplier survey, a documented review of the supplier's accreditation shall be performed by Energy Northwest. This review shall include, at a minimum, verification of all the following:

1. The accreditation is to ANSI/ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

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2. The accrediting body is recognized by the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) and is one of the following:
 - a. National Voluntary Laboratory Accreditation Program (NVLAP), administered by the National Institute of Standards & Technology (NIST);
 - b. American Association for Laboratory Accreditation (A2LA);
 - c. ACLASS Accreditation Services (ACLASS);
 - d. International Accreditation Service (IAS);
 - e. Laboratory Accreditation Bureau (L-A-B);
 - f. Perry Johnson Laboratory Accreditation, Inc. (PJLA);
 - g. Other NRC-approved laboratory accrediting body.
3. The procured calibration service is within the published scope of accreditation, and covers the necessary measurement parameters, ranges, and uncertainties.

17.0 REGULATORY GUIDE 1.146, (August 1980) - Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.146 (August 1980) to ANSI N45.2.23-1978, subject to the following:

- 17.1 Section 2.3.4 of ANSI N45.2.23: Prospective lead auditors shall demonstrate their ability to effectively implement the audit process and lead an audit team. They shall have participated in at least one audit within the year preceding the individual's effective date of qualification. Upon successful demonstration of the ability to effectively lead audits, licensee management may designate a prospective lead auditor as a "lead auditor".
- 17.2 Sections 3.2 and 5.3 of ANSI N45.2.23-1978: This section requires that an annual assessment be performed of each lead auditor's qualification and that each lead auditor's records be updated annually. A 90-day grace period can be applied to this activity.

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18.0 REGULATORY GUIDE 1.189, (April 2001) - "Fire Protection for Operating Nuclear Power Plants"

Energy Northwest will implement the Regulatory Position of Regulatory Guide 1.189 (April 2001), Section 1.7, "Quality Assurance," subject to the following:

- 18.1 NRC Regulatory Guide 1.189, Section 1.7.10.1, "Annual Fire Protection Audit," states, for those licensees who have relocated audit requirements from their Technical Specifications to the QA program, "annual" fire protection audits may be changed to a "maximum interval of 24 months," by implementation of a performance based schedule, if justified by performance reviews, provided that the maximum audit interval does not exceed the two year interval specified in ANSI N18.7.
- 18.2 Energy Northwest has implemented a performance-based schedule as part of a Continuous Monitoring Program. Implementation and maintenance of the Fire Protection Program are periodically assessed and results reported. These assessments include reviews of self-assessments, performance indicators, inspection results from outside agencies, and corrective action implementation. A Fire Protection Program audit performed at a maximum interval of 24 months will include all requirements of the biennial and triennial frequencies referenced in Regulatory Guide 1.189, Section 1.7.10, "Audits."

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APPENDIX III

"ADDITIONAL QUALITY PROGRAM REQUIREMENTS"

This Appendix identifies additional quality program requirements that were formerly located in the plant Technical Specification, Section 6.0, Administrative Controls or in the plant FSAR. The following requirements have been incorporated by Energy Northwest organizations into their procedures and/or instructions. This Appendix will be revised, when necessary, in accordance with the provisions of Section 2 of the QA Program.

1.0 INDEPENDENT TECHNICAL REVIEWS

- 1.1 The manager responsible for quality assurance is responsible for independent oversight activities performed to accomplish the independent technical reviews. QA independent oversight activities shall be performed in accordance with implementing procedures to ensure the completion of independent technical reviews. Independent technical reviews shall be used to observe and verify that activities are performed correctly and human errors are reduced as much as practical. Independent technical reviews shall include, but not be limited to, the following activities: unit-operating characteristics, Nuclear Regulatory Commission issuances, industry advisories, licensee event reports, other sources of unit design and operating experience information, including units of similar design, which may indicate areas for improving unit safety, plant operations, maintenance activities, and equipment modifications.
- 1.1.1 As determined by Quality management, several personnel performing independent technical reviews will be required to have a degree in engineering or related science and at least three years of professional level experience in the nuclear field.
 - 1.1.2 Personnel performing independent technical reviews should be independent of performance function, signoff function, and the plant management chain while performing this oversight activity.
 - 1.1.3 The results of independent technical reviews will be periodically transmitted to appropriate line and senior management, the Corporate Nuclear Safety Review Board, and the Chief Executive Officer for review and/or action and advise management on the overall quality and safety of operations.
 - 1.1.4 Conditions adverse to quality and recommendations identified during the performance of independent technical reviews shall be processed in accordance with the plant programs.
 - 1.1.5 Written records of activities associated with independent technical reviews shall be prepared, maintained, and forwarded to the manager responsible for quality assurance.

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2.0 REVIEW AND AUDIT

2.1 Plant Operations Committee (POC)

The POC shall function to advise the manager responsible for plant operations and ISFSI on all matters related to nuclear safety.

- 2.1.1 The POC shall be composed of site operating and engineering personnel.
- 2.1.2 The manager responsible for plant operations and ISFSI shall appoint, in writing, the POC Chair, the POC Vice Chair, and individual members. The qualifications of all members shall meet the requirements of ANSI/ANS-3.1-1981, Section 4.7.
- 2.1.3 All POC alternate members shall be appointed in writing by the Plant General Manager or POC Chair to serve on a temporary basis.
- 2.1.4 The Plant Operations Committee shall meet at least once per calendar month and as convened by the POC Chair or designated alternate.
- 2.1.5 The quorum of the POC necessary for the performance of the POC responsibility and authority provisions of these requirements shall consist of the Chair or Vice Chair and four members including alternates. No more than two alternates shall make up the quorum.
- 2.1.6 In discharging its independent review responsibilities, POC shall keep safety considerations paramount when opposed to cost schedule considerations. Should a voting member have direct responsibility for the preparation or technical review of the item requiring POC independent review, where a conflict of such considerations is likely, that member shall be replaced (to fill the quorum) by another voting member not having such potential conflict.
- 2.1.7 The POC shall be responsible for:
 - a. Review of the evaluations for (1) changes to procedures, equipment or systems and (2) tests or experiments completed under the provision of 10 CFR 50.59 and 10 CFR 72.48 to verify that such actions did not require prior NRC approval;
 - b. Review of proposed changes to procedures, equipment, or systems which require prior NRC approval as defined in 10 CFR 50.59 and 10 CFR 72.48;
 - c. Review of proposed tests and experiments that affect nuclear safety; including those which require prior NRC approval as defined in 10 CFR 50.59 and 10 CFR 72.48;
 - d. Review of all proposed changes to the plant or ISFSI Technical Specifications or the Operating License;

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- e. Review of all proposed changes or modifications to plant or ISFSI system or equipment that affect nuclear safety;
- f. Review of all violations of applicable codes, regulations, orders, technical specifications, license requirements, cask certificate of compliance requirements, or internal procedures or instructions that affect nuclear safety. The results of those reviews will be forwarded to the CEO and to the Corporate Nuclear Safety Review Board;
- g. Review of all REPORTABLE EVENTS, as specified in 10 CFR 50.73 and 10 CFR 72.75;
- h. Review of plant and ISFSI operations to detect potential hazards to nuclear safety;
- i. Performance of special reviews, investigations, or analyses and reports thereon as requested by the manager responsible for plant operations and ISFSI or the Corporate Nuclear Safety Review Board;
- j. Review of the Security Plan and submittal of recommended changes to the Corporate Nuclear Safety Review Board;
- k. Review of all proposed changes to the Emergency Plan;
- l. Review of any accidental, unplanned, or uncontrolled radioactive release including the preparation of reports covering evaluation, recommendations, and disposition of the corrective action to prevent recurrence and the forwarding of these reports to the CEO and to the Corporate Nuclear Safety Review Board; and
- m. Review of changes to the PROCESS CONTROL PROGRAM and the OFFSITE DOSE CALCULATION MANUAL.

2.1.8 The POC shall:

- a. Recommend in writing to the manager responsible for plant operations and ISFSI approval or disapproval of items considered under Appendix III, 2.1.7a. through e. prior to their implementation.
- b. Render determinations in writing with regard to whether or not each item considered under Appendix III, 2.1.7a. through e. requires prior NRC approval as defined in 10 CFR 50.59 and 10 CFR 72.48.
- c. Provide written notification within 24 hours to the CEO and the Corporate Nuclear Safety Review Board of disagreement between the POC and the manager responsible for plant operations and ISFSI; however, the manager responsible for plant operations and ISFSI shall have responsibility for resolution of such disagreements.

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- d. Maintain written minutes of each POC meeting that, at a minimum, document the results of all POC activities performed under the responsibility provisions of these Specifications. Copies shall be provided to the CEO and the Corporate Nuclear Safety Review Board.

2.2 Corporate Nuclear Safety Review Board (CNSRB)

- 2.2.1 The CNSRB shall function to provide independent review of activities in the areas designated in Appendix III, 2.2.7 and 2.2.8. The CNSRB will report to and advise the CEO on those areas of responsibility.
- 2.2.2 The CNSRB shall be composed of at least nine and no more than twelve members, appointed in writing by the CEO from the technical staff and / or from outside Energy Northwest. The CEO shall designate from the members a Chairman and an Alternate Chairman. The qualifications of all members shall meet the minimum requirements of Section 4.7 of ANSI/ANS 3.1-1981.
- 2.2.3 All alternate members shall be appointed in writing by the CNSRB Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in CNSRB activities at any one time.
- 2.2.4 Consultants shall be utilized as determined by the CNSRB Committee to provide expert advice to the CNSRB.
- 2.2.5 The CNSRB shall meet at least once per calendar quarter during the initial year of unit operation following fuel loading and at least once per 6 months thereafter.
- 2.2.6 The quorum of the CNSRB necessary for the performance of the CNSRB review and audit functions of these specifications shall consist of the Chairman or the alternate Chairman and at least four CNSRB members including alternates. The quorum shall consist of not less than the majority of the members, or duly appointed alternates. No more than a minority of the quorum shall have line responsibility for operation of the unit.
- 2.2.7 The CNSRB shall review:
 - a. Violations of applicable codes, regulations, orders, technical specifications, license requirements, cask certificate of compliance requirements, or internal procedures or instructions that affect nuclear safety;
 - b. Significant operating abnormalities or deviations from normal and expected performance of unit equipment that affect nuclear safety;
 - c. All REPORTABLE EVENTS, as specified in 10 CFR 50.73 and 10 CFR 72.75;
 - d. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety;

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- e. Reports and meeting minutes of the POC, which shall include the effectiveness of evaluations for changes to procedures, equipment or systems, and tests or experiments completed under the provision of 10 CFR 50.59 and 10 CFR 72.48 to ensure that such actions did or did not require prior NRC approval; and
- f. Audit reports and summary reports of audits.

2.2.8 Program reviews and audits of unit activities shall be performed under the cognizance of the CNSRB. Audit schedules assure that audits are conducted at the required frequencies or more frequently as performance dictates. All completed audit reports are to be distributed to the CNSRB.

2.2.9 Records of CNSRB activities shall be prepared, approved, and distributed as indicated below:

- a. Items identified at each CNSRB meeting that require actions shall be identified and tracked. These actions shall be resolved in a time frame commensurate with their importance to safety.
- b. Reports of each CNSRB meeting shall be prepared, approved, and forwarded to the CEO within 30 days promptly following each meeting.
- c. Reports of reviews encompassed by Appendix III, 2.2.7 above, shall be prepared, approved, and forwarded to the Chief Executive Officer within 30 days following completion of the review.

3.0 PROCEDURES AND PROGRAMS

3.1 Each procedure required by plant and ISFSI Technical Specifications and changes thereto, shall be reviewed and approved as specified by Appendix III, 4.0, prior to implementation.

3.2 Temporary changes to procedures of plant and ISFSI Technical Specifications may be made provided:

3.2.1 The intent of the original procedure is not altered.

3.2.2 The change is approved by two members of the unit management staff, at least one of these individuals shall be the supervisor in charge of the shift and holds a Senior Operator license on the unit affected.

3.2.3 The change is documented and reviewed by the appropriate member(s) of plant management within 14 days of implementation.

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4.0 REVIEW AND APPROVAL OF PROGRAMS AND PROCEDURES

- 4.1 The procedure review and approval process shall be controlled and implemented by administrative procedure(s).
- 4.2 Each program and procedure required by plant and ISFSI Technical Specifications and other procedures that affect nuclear safety, and changes thereto, shall be reviewed by a minimum of two technical reviewers; i.e., the procedure sponsor and a Qualified Procedure Reviewer who are knowledgeable in the affected functional area. The Qualified Procedure Reviewer shall not be the individual who prepared the procedure or procedure change. The Qualified Procedure Reviewer, or procedure sponsor shall determine the need for cross-disciplinary reviews. All required cross-disciplinary reviews of new procedures, procedure revisions or changes thereto shall be completed prior to approval.
- 4.3 Qualified Procedure Reviewer(s) shall meet or exceed the qualifications described in Section 4 of ANSI N18-1971 for applicable positions, with the exclusion of the positions identified in Section 4.3.1 and 4.5. Individuals whose positions are described in Section 4.3.1 and 4.5 may qualify as qualified procedure reviewers provided they have a high school diploma or equivalent, and two years experience in their specialty of which a minimum of one year shall be nuclear power plant experience.
- 4.4 Each program and procedure required by plant and ISFSI Technical Specifications and other procedures that affect nuclear safety, and changes thereto, shall be reviewed to determine if a 10 CFR 50.59 or 10 CFR 72.48 Evaluation is required. This review shall be accomplished by two individuals, who are knowledgeable in the affected functional area. These individuals shall meet or exceed the qualifications described in Section 4 of ANSI N18.1-1971 for the applicable positions. Evaluations, when required, shall be reviewed by POC per OQAPD, Appendix III, 2.1.7.a.
- 4.5 Nuclear safety related procedures and procedure changes shall be reviewed and approved, prior to implementation, by the appropriate member(s) of management, as determined by the manager responsible for plant operations and ISFSI and as specified in Administrative Control Procedures.
- 4.6 All changes to the Process Control Program (PCP) and the Offsite Dose Calculation Manual (ODCM) shall be reviewed by POC and approved by the manager responsible for plant operations and ISFSI prior to implementation.

5.0 RECORD RETENTION

A Records Disposition Program was established to manage the identification, retention, retirement and disposal of Energy Northwest records and documents. Refer to the Records Disposition Program to ensure compliance with various Federal and Washington State record retention requirements.

- 5.1 In addition to the applicable record retention requirements of Title 10, Code of Federal Regulations, the following records shall be retained for at least the minimum period indicated.

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- 5.2 The following records shall be retained for at least 5 years:
- 5.2.1 Records and logs of plant operation covering time interval at each power level.
 - 5.2.2 Records and logs of principal maintenance activities, inspections, repair, and replacement of principal items of equipment related to nuclear safety.
 - 5.2.3 ALL REPORTABLE OCCURRENCES submitted to the Commission.
 - 5.2.4 Records of surveillance activities, inspections, and calibrations required by the plant and ISFSI Technical Specifications.
 - 5.2.5 Records of changes made to the procedures required by plant and ISFSI Technical Specifications.
 - 5.2.6 Records of radioactive shipments.
 - 5.2.7 Records of sealed source and fission detector leak tests and results.
 - 5.2.8 Records of annual physical inventory of all sealed source material of record.
- 5.3 The following records shall be retained for the duration of the plant Operating License and the duration of the certificate of compliance for the ISFSI granted under Subpart K of 10 CFR 72:
- 5.3.1 Records and drawing changes reflecting unit design modifications made to systems and equipment described in the plant or ISFSI Final Safety Analysis Report (FSAR).
 - 5.3.2 Records of new and irradiated fuel inventory, fuel transfers, and assembly burnup histories.
 - 5.3.3 Records of radiation exposure for all individuals entering radiation control areas.
 - 5.3.4 Records of gaseous and liquid radioactive material released to the environs.
 - 5.3.5 Records of transient or operational cycles for those unit components identified in the plant Technical Specification 5.5.5.
 - 5.3.6 Records of reactor tests and experiments.
 - 5.3.7 Records of training and qualification for current members of the plant and ISFSI staff.
 - 5.3.8 Records of inservice inspections performed pursuant to the plant and ISFSI Technical Specifications.
 - 5.3.9 Records of quality assurance activities required by the Operational Quality Assurance Manual not listed in Appendix III, 5.2.

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- 5.3.10 Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59 and 10 CFR 72.48.
- 5.3.11 Records of meetings of the POC and the CNSRB.
- 5.3.12 Records of the service lives of all hydraulic and mechanical snubbers required by the plant Snubber Program including the date at which the service life commences and associated installation and maintenance records.
- 5.3.13 Records of analysis required by the radiological environmental monitoring program that would permit evaluation of the accuracy of the analysis at a later date. This should include procedures effective at specified times and QA records showing that these procedures were followed.
- 5.3.14 Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM.

6.0 OPERATING EXPERIENCE

(TMI ITEM I.C.5)

- 6.1 An Operating Experience (OE) Program is established and the program procedure describes how industry-operating experience is identified, reviewed, evaluated, and documented. The industry operating experience information includes, but is not limited to, NRC Bulletins and Notices, INPO Significant Operating Experience Reports, INPO Event Reports, Significant Event Reports, Significant Event Notifications and vendor information, such as GE Service Information Letters.
- 6.2 The Operating Experience program administrator will perform the initial document review. The information that is applicable to the plant or ISFSI will be identified, evaluated and documented in accordance with the approved procedure. The operating experience information will be evaluated by the applicable knowledgeable organization. To prevent conflicting or contradictory information being conveyed to plant personnel, industry information processed via the Operating Experience Program is evaluated prior to use in the training program.
- 6.3 Internal Operating Experience information identified via the Corrective Action Program will be evaluated for transmittal to the industry.
- 6.4 Independent periodic evaluations of the Operating Experience review process will be performed by the Quality Organization.