WordPerfect Document Compare Summary

Original document: P:\RG 1.206 draft\C.I.17.wpd Revised document: @PFDesktop\:MyComputer\C:\ADAMS\Cache\ML0624903550.wpd Deletions are shown with the following attributes and color: Strikeout, Blue RGB(0,0,255). Deleted text is shown as full text. Insertions are shown with the following attributes and color: Double Underline, Redline, Red RGB(255,0,0).

The document was marked with 221 Deletions, 285 Insertions, 0 Moves.

C.I.17. Quality 17 Quality Assurance & and Reliability Assurance

Consistent with the approach taken in the new update to Chapter 17 of the <u>Standard NUREG-0800</u>, <u>"Standard</u> Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants" (hereafter referred to as the <u>SRP</u>), Sections <u>C.</u>I.17.1, <u>C.</u>I.17.1, <u>C.</u>I.17.2, and <u>C.</u>I.17.3 of this chapter point the reader to Section-<u>C.</u>I.17.5 for the required format and content of a <u>quality assurance (QA)</u> program during design, construction, and operation.

C.I.17.1 Quality Assurance During the Design and Construction Phase

<u>Combined license (COL)</u> applicants should refer to Section <u>C.</u>I.17.5 for a complete discussion of the required format and content of a QA program during design, construction, and operation.

C.I.17.1.1 Early Site Permit Quality Assurance Measures

COL applicants should refer to Section <u>C.I.17.5</u> for a complete discussion of acceptable format and content of a QA program during design, construction, and operation. This section will identify those aspects of a <u>quality assurance program description (QAPD</u> associated with early site permits, versus other applications, such as design certification and COL.

C.I.17.2 *Quality Assurance* **d***During the Operations Phase*

COL applicants should refer to Section <u>C.</u>I.17.5 for a complete discussion of acceptable format and content of a QA program during design, construction, and operation.

C.I.17.3 Quality Assurance Program Description

COL applicants should refer to Section $\underline{C.I.17.5}$ for a complete discussion of acceptable format and content of a QA program during design, construction, and operation.

C.I.17.4 Reliability Assurance Program Guidance

C.I-17.4.1 New Section 17.4 in the Standard Review Plan

The Office of Nuclear Reactor Regulation (NRR) revised <u>NUREG-800</u>, <u>Standard Review Plan</u> (<u>the</u> SRP) to add <u>the</u> new Section-17.4, "Reliability Assurance Program (RAP)." This new SRP section addresses the Commission's <u>Pp</u>olicy for the RAP that is presented in <u>Item E of</u> SECY-95-132, "Policy and Technical Issues Associated with the Regulatory Treatment of Non-Safety Systems (RTNSS) in Passive Plant Designs (SECY-94-084)," <u>Item E, Reliability Assurance Program</u>, dated June 28, 1995. <u>SRP</u>-Section 17.4 <u>of the SRP</u> is the <u>principleprincipal</u> guidance for <u>U.S. Nuclear Regulatory Commission</u> (NRC) reviews of a RAP submitted by <u>a</u> COL-an applicant.

C.I.17.4.2 <u>Reliability Assurance Program Scope, Stages, and Goals</u>

The RAP applies to those plant structures, systems, and components (SSCs) that are identified as being risk-significant (or significant contributors to plant safety), as determined by using a combination of probabilistic, deterministic, or other methods of analysis, including information obtained from sources such as plant- and site-specific probabilistic risk assessment (PRA), nuclear plant operating experience, relevant component failure <u>data basesdatabases</u>, and expert panels. The purposes of the RAP are<u>is</u> to provide reasonable assurance <u>thatof the following four considerations</u>:

- (1) \underline{aA} reactor is designed, constructed, and operated in <u>a</u> manner that is consistent with the assumptions and risk insights for these risk-significant SSCs;
- ÷
- (2) t<u>The risk-significant SSCs do not degrade to an unacceptable level during plant operations.</u>
- (3) t<u>T</u>he frequency of transients that challenge SSCs is minimized, and.
- (4) t<u>These SSCs function reliably when challenged</u>.

The RAP is implemented in two stages. The first stage applies to reliability assurance activities that occur before the initial fuel load. The goal of the RAP during this stage is to ensure that the reactor design meets the <u>purposesconsiderations</u> identified above, through the reactor design, procurement, fabrication, construction, and preoperational testing activities and programs. The second stage applies to reliability assurance activities for the operations phase of the plant life cycle. The <u>goal of the RAP objective</u> during this stage is to ensure that the <u>operation of the plant meets the purposes identified</u> above, through reliability for the SSCs within the scope of the RAP is maintained during plant operations. <u>Reliability assurance activities are integrated into</u> existing operational programs (e.g., <u>maintenance r Maintenance Rule</u>, surveillance testing, inservice inspection, inservice testing, and quality assurance<u>QA</u>). Individual component reliability may change throughout the course of plant life due to <u>because of</u> a number of factors, including aging and changes in suppliers and technology. Changes in individual component reliability values are acceptable as long as overall plant safety performance is maintained within the licensing basis.

C.I.17.4.3 Reliability Assurance Program Implementation

The RAP is implemented in several phases. The first phase implements the aspects of the program that apply to the <u>reactor</u> design process. During this phase, risk-significant SSCs are identified for inclusion in the program by using probabilistic, deterministic, and other methods. The design certification document addresses this phase. The design certification document also addresses a non-system based The second phase is the site-specific phase, which introduces the plant's site-specific design information to the RAP process. Tier 1 inspection, test, analysis, and acceptance criteria (ITAAC) requirementare required for RAP. The second phase is the site-specific phase, which introduces the plant's site-specific design information to the RAP process. The COL applicant performs this phase. At this phase, the RAP is modified or appended based on considerations specific to the site these phases. The COL applicant establishes the probabilistic, deterministic, and other methods to determine and maintain the site-specific list of SSCs under the scope of the RAP and ITAAC. The COL applicant is also responsible for implementing the RAP using existing operational programs describing how it will integrate reliability assurance activities into existing programs (e.g., Maintenance Rule, surveillance testing, inservice inspection, inservice testing, and QA).

C.I.17.4.4 <u>Reliability Assurance Program Information "Needed in a COL "Application</u>

<u>The provisions of Title</u> 10 CFR 50.34(h) and 10 CFR 52. Section 50.34(h) of the *Code of* <u>Federal Regulations (10 CFR 50.34(h)) and 10 CFR 52</u>.79(b) require that COL applicants include an evaluation of the facility against the SRP that is in effect 6 months prior to the docket date of the application of a new facility. A COL applicant should address<u>provide</u> the following in Chapter 17 of the <u>SARsafety analysis report</u> in accordance with the provisions in SRP Section 17.4:

- Describe<u>a description of</u> the applicant's RAP that includes:, including scope, purpose, and objectives.
- <u>Tthe process deterministic or other methods used</u> for evaluating, identifying, and prioritizing the site-specific SSCs; according to their degree of risk significance.
- The methods used to (probabilistic/PRA methods and results for evaluating, identifying, and prioritizing SSCs to be addressed in Section C.I.19)
- <u>a prioritized list of SSCs designated as risk-significant based on deterministic or other methods (a</u> <u>prioritized list of SSCs designated as risk-significant based on probabilistic/PRA methods to be</u> <u>addressed in Section C.1.19</u>)
- <u>the quality controls (organization, design control, procedures and instructions, records, corrective</u> action, and audit plans) for developing and implementing the RAP
- <u>how procurement, fabrication, construction, and test specifications for the SSCs within the scope</u> <u>of the RAP</u> ensure that significant assumptions, such as equipment reliability and unavailability, are realistic and achievable
- A prioritized list of site-specific SSCs designated as risk-significant.
- The quality controls for developing and implementing the RAP.
- The design and operational information used for plant reliability assurance activities.
- <u>Procurementhow QA requirements are implemented during the procurement</u>, fabrication, installation, construction, and testing requirements for risk-significant<u>of</u> SSCs. within the scope of the RAP
- **T**the integration of the RAP into the applicant's existing operational programs (e.g., \underline{mM} aintenance \underline{rR} ule, surveillance testing, inservice testing, inservice inspection, and quality assurance <u>OA</u>).
- <u>**T**t</u>he process for providing corrective action for design and operation errors that degrade nonsafety-related, risk-significant SSCs.

If more detailed information is provided in SSCs within the scope of the RAP

- <u>ITAAC for the RAP</u>
- expert panel qualification requirements, if an expert panel is used

<u>If</u> other sections or chapters of the applicant's <u>final safety analysis report (FSAR) provide more</u> <u>detailed information</u> regarding particular aspects of <u>the</u> RAP (e.g., the use of the plant- and site-specific PRA, the methods used in identifying and prioritizing SSCs in accordance with their risk significance), it is acceptable to provide a cross-reference to the specific section or chapter. -Describing these aspects of the applicant's RAP in <u>FSAR</u> Chapter 17 <u>of the FSAR</u> in accordance with the provisions in SRP Section 17.4 is an acceptable method for meeting the Commission's policy for a RAP in SECY-<u>9</u>5-132.

<u>C.I.</u>17.5 *Quality Assurance Program Guidance*

C.I.17.5.1 COL Applicant QA Program Responsibilities

An applicant is responsible for the establishment and implementation of a quality assurance (QA) program applicable to activities during design, fabrication, construction, testing, and operation of the

nuclear power plant. The minimum QA Information required to be provided in the FSAR is described in 10 CFR 50.34 content of 10 CFR 50.34, "Contents of Applications; Technical Information" (referenced from 10 CFR 52.79, "Contents of Applications; Technical Information"), describes the minimum QA information that the FSAR must provide.

C.I. 17.5.2 Updated SRP Section 17.5 and the QA Program Description

The Office of Nuclear Reactor Regulation (NRR) revised NUREG-800, Standard Review Plan (SRP) to add

<u>NRR revised the SRP to add the</u> new Section 17.5, "Quality Assurance Program Description-—Design Certification, Early Site Permit and New License Applicants." This new SRP section addresses QA program description (QAPD) provisions for combined license (COL) applicants. NRR reviews and evaluates QAPDs in accordance with the applicable sections of the SRP. SRP-Section 17.5 <u>of the SRP</u> is the <u>principleprincipal</u> guidance for NRC reviews of a QAPD submitted by <u>a</u> COL-an applicant. A COL applicant's QAPDapplicant may be submitted <u>submit its QAPD</u> in two phases. The first phase could apply to design, fabrication, construction, and testing QA activities, and the second phase could apply to operational QA activities. The requirements for the two phases are fully defined in <u>SRP 17.5</u>. Regardless of the approach, the <u>QAPD(s)NRC</u> would be reviewed and evaluated by the NRC prior to<u>evaluate QAPDs before</u> issuing the COL. The QAPD (or QAPDs) should be incorporated by reference in Chapter 17 of the FSAR should incorporate the QAPD (or QAPDs) by reference.

C.I. 17.5.3 Evaluation of the QAPD Against the SRP and QAPD Submittal Guidance

COL applicants may use an existing QAPD that is the NRC has approved by the NRC for current use for either or both phases, provided that they identify and justify alternatives to, or differences from the SRP in effect 6-months prior to the docket date of the application of a new facility are identified and justified.

Chapter 17 of the FSAR should also describe the extent to which the applicant will delegate the work of establishing and implementing the QA program or any part thereof to other contractors. The FSAR should clearly delineate those QA functions which<u>that</u> are implemented within the applicant's QA organization and those which<u>that</u> are delegated to other organizations. The FSAR should describe how the applicant will retain responsibility for and maintain control over those portions of the QA program delegated to other organizations. The FSAR should identify the responsible organization and the process for verifying that delegated QA functions are effectively implemented. The FSAR should identify major work interfaces for activities affecting quality and <u>should</u> describe how clear and effective lines of communication between the applicant and its principal contractors are maintained to assure coordination and control of the QA program.

C.I.17.6- Description of <u>the</u> Applicant¹'s Program for Implementation of 10 CFR 50.65, the Maintenance Rule

For requested information that is not known at the time of COL application, <u>the applicant should</u> explain why it is not known and <u>should</u> estimate when the information will become available.

C.I.17.6.1 Program Procedures

D<u>The applicant should d</u>escribe program procedures for Maintenance Rule implementation in accordance with <u>NUMARC 93-01, Nuclear Management and Resources Council (NUMARC) 93-01,</u> <u>"Industry Guidance for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants,"</u> as endorsed by Regulatory Guide 1.160, <u>"Monitoring the Effectiveness of Maintenance at Nuclear Power Plants,"</u> including, but not limited to the following <u>three</u> areas:

- (1) Note 1: D<u>The applicant should explain and justify d</u>eviations from the guidance in NUMARC 93-01 and <u>RGRegulatory Guide</u> 1.160-should be explained and justified.
- (2) Note 2: While the Maintenance Rule does not require procedures or documentation, the NRC needs this information to obtain reasonable assurance of consistent compliance.
- (3) Note 3: I<u>The applicant should include the procedures</u> status in the procedural hierarchy; whether treated as safety-related or non-safety-related, nonsafety-related; level of compliance expected; and responsibility for preparation, review, approval, use, compliance oversight, and disposition. SThe staff does not desire or require submission of actual procedures or software for review is not desired or required for the COL application.

C.I.17.6.1.1 Scoping per 10 CFR 50.65(b)

<u>LApplicants should list</u> and provide information on the structures, systems, or components (SSCs) within the scope of <u>yourthe</u> proposed Maintenance Rule (MR) program to the extent that this information is known at the time of the COL application. For each SSC in within scope, provide the following:

- (1) SProvide specific MR requirement(s)Maintenance Rule requirements in 10 CFR 50.65(b) that require it to be in scope. Provide data for each subparagraph, (i.e., 10 CFR 50.65(b)(1)(i), (b)(1)(ii), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), (b)(2)(iii]) through 10 CFR 50.65(b)(1)(iii) and 10 CFR 50.65(b)(2)(I) through 10 CFR 50.65 (b)(2)(iii)).
- (2) For each SSC, indicate for each applicable paragraph (b) scoping criterion the function(s)functions that require the SSC to be in scope.
- (3) For each SSC, indicate for each applicable paragraph (b) scoping criterion, the failure modes and effects that required the SSC to be in scope, as applicable.
- (4) For each SSC scoping function or vulnerability, indicate the functional performance requirements/success criteria and/or functional failure definitions and implications.

<u>C.I.</u>17.6.1.2 Reactor Safety Significance Classification and Other Factors Considered by <u>the</u> Expert Panel

Describe the process for safety significance classification (i.e., HSS or LSS) of in-scope SSCs and the bases thereof, including risk metrics/importance measures and values, operating experience, vendor information, and any other factors to be considered by the expert panel.

C.I.17.6.1.3 Scoping Procedures

Identify and describe the program procedures and documents (including computer software and data) that prescribe or govern scoping, including the items above.

<u>C.I.</u>17.6.2 <u>Monitoring per 10 CFR 50.65(a) and 10 CFR 50.65(a)(2)</u>

For each SSC, indicate its standby or continuously operating status and associated type (i.e., availability availability, reliability, or condition) and level (i.e., component, system, pseudo=system, train, or plant) of monitoring/tracking. Describe the process for determining which $SSCs^{!'}_{-}$ performance or condition will be monitored initially per paragraph<u>10 CFR</u> 50.65(a)(1) and which will be tracked per <u>5010 CFR 50.65(a)(2)</u>.

C.L.17.6.3 Periodic Evaluation per 10 CFR 50.65(a)(3)

Identify the plant¹/₂'s refueling cycle. Identify and describe the program procedures and documents (including computer software and data) that prescribe or govern periodic evaluation of the Maintenance Rule program in accordance with $10 \text{ CFR}_{50.65(a)(3)}$. Ensure <u>that this information</u> includes the following four considerations are included:

- (1) <u>howusing procedures to govern the scheduling and timely performance of 10 CFR 50.65(a)(3) evaluations</u>
- (2) documenting, reviewing<u>a</u> and approving evaluations<u>, as well as</u> providing and implementing results
- (3) making adjustments to achieve or restore balance between reliability and availability
- (4) <u>applying</u> industry operating experience (IOE), including the following:

C.I.17.6.4 Risk Assessment and Management per 10 CFR 50.65(a)(4)

Identify and describe the program procedures and documents (including computer software and data) that prescribe or govern maintenance risk assessment and management \underline{in} accordance with $\underline{50}\underline{10}$ CFR $\underline{50}$.65(a)(4), including, but not limited to the following nine areas:

- (1) determination of the scope (or limited scope) of SSCs to be included in 10 CFR 50.65(a)(4) risk assessments
- (2) risk assessment and management during work planning
- (3) risk assessment and management of emergent conditions and updating risk assessments as maintenance situations and plant conditions and configurations are changed
- (4) assessment (quantitative and qualitative capabilities) and management of risk of <u>internal flooding</u> <u>and</u> external events or conditions, including fire (internal, external, and fire-risk-sensitive maintenance activities), severe weather, external flooding, landslides, seismic activity and other natural phenomena; <u>and</u> grid/offsite power reliability for grid-risk-sensitive maintenance activities (respond to or refer to responses to <u>MR-related Maintenance Rule-related</u> questions in NRC <u>GL 2006-02</u>), and internal flooding<u>Generic Letter2006-02</u>, "<u>Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power,</u>" <u>dated February 2, 2006</u>)
- (5) assessment and management of risk of maintenance activities affecting containment integrity
- (6) assessment and management of risk of maintenance activities when at low power or when shut down (including implementation of NUMARC 91-06)
- (7) assessment and management of risk associated with the installation of plant modifications and assessment and management of risk associated with temporary modifications in support of maintenance activities (in lieu of screening in accordance with 10 CFR 50.59, <u>"Changes, Tests and Experiments"</u>), in accordance with latest revision of <u>Nuclear Energy Institute (NEI)</u> 96-07, as endorsed by <u>the</u> latest revision of <u>RGRegulatory Guide</u> 1.187, <u>"Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments"</u>
- (8) risk assessment and management associated with risk-informed technical specifications
- (9) Hif known at the time of COL application, describe the scope and level of the probabilistic risk analysis (ie.eg., operational modes, Level I or II, internal or external events, etc.) and risk assessment tool or process to be used for 10 CFR 50.65(a)(4) risk assessments and its capabilities and limitations (otherwise, this information willto be reviewed during inspection)

C.I.17.6.5 Maintenance Rule Training and Qualification

Describe the program, including procedures and documentation, for Maintenance Rule training and qualification consistent with the provisions of Section C.I.13 of this guide as applicable.

C.I.17.6.6 Maintenance Rule Program and Operational Reliability Assurance Program Interface

Describe the relationship and interface between <u>MRthe Maintenance Rule</u> and the Operational Reliability Assurance Program (ORAP) (<u>Ssee</u> Section C.I.17.4), including how functions are coordinated and procedures overlap and/or are cross-referenced. <u>Note:</u> If the scope of the ORAP is enveloped by the Maintenance Rule <u>Program'sprogram</u> SSCs classified as HSS <u>envelop the scope of the ORAP</u>, the Maintenance Rule <u>Pprogram is an acceptable method of implementation of the ORAP</u>.

C.I.17.6.7 Maintenance Rule Program Implementation

Describe the plan or process for implementing the <u>MRMaintenance Rule</u> program as described in the COL application, including sequence and milestones for establishing program elements, <u>and</u> commencing monitoring or tracking of <u>the</u> performance and/or condition of SSCs as they become operational.

inary Use

C.I.17.7 __ References

- 10 CFR Part 21
 10 CFR Part 50
- → 10 CFR Fait 30
- → 10 CFR 50.34(a)(7)
- → 10 CFR 50:34(b)(6)(ii) → 10 CFR 50:34(f)(3)(ii)
- → 10 CFR 50.34(f)(3)(iii)
- → 10 CFR 50.34(g)
- → 10 CFR 50.54(a)
- → 10 CFR 50.55(e)(4)
- → 10 CFR 50.55(f)
- → 10 CFR 50.55a(b)(1)(iv)
- → 10 CFR 50.55a(b)(2)(x)
- → 10 CFR 50.55a(b)(3)(I)
- → 10 CFR 50.65
- <u>Code of Federal Regulations</u>
- (1) <u>10 CFR Part 21, "Reporting of Defects and Noncompliance"</u>
- (2) 10 CFR Part 50, Appendix B
- <u>10 CFR Part 52</u>
- 10 CFR 52.47(a)(1) [cross references to other regulatory requirements]
- the second second
- 10 CFR 52.81 [cross references to other regulatory requirements]
- 10 CFR 52.83 [cross references to other regulatory requirements]

<u>"Domestic Licensing of Production and Utilization Facilities"</u>

(3) <u>10 CFR Part 52, "Early Site Permits; Standard Design Certifications; and Combined Licenses for</u> <u>Nuclear Power Plants"</u>

Regulatory Guidance Documents

- (1) NUREG-0800, "Standard Review Plan"
- Plan for the Review of Safety Analysis Reports for Nuclear Power Plants"
- (2) <u>Review Standard</u> RS-002, "Processing Applications for Early Site Permits," May 2004 → RISPermits"
- (3) <u>Regulatory Issue Summary</u> 00-018<u></u>. "Guidance on Managing Quality Assurance Records in Electronic Media"
- (4) ► <u>RGRegulatory Guide</u> 1.189, "Fire Protection for Operating Nuclear Power Plants"

→ RG

- (5) <u>Regulatory Guide</u> 1.155, "Station Blackout"
- → RG
- (6) <u>Regulatory Guide</u> 1.26, "Quality Group Classifications and Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants"
- (7) ← RG<u>Regulatory Guide</u> 1.29, "Seismic Design Classification"

→ RG

(8) <u>Regulatory Guide</u> 1.54, "Service Level I, II, and III Protective Coatings Applied to Nuclear Power Plants"

→ RG

(9) <u>Regulatory Guide</u> 1.97, "Instrumentation f"Criteria For Accident Monitoring Instrumentation F or Light-Water Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident"

→ RG 1.142 Revision 2Plants"

(10) <u>Regulatory Guide 1.142</u>, "Safety-Related Concrete Structures for Nuclear Power Plants (Other Than Reactor Vessels and Containments)<u>"</u> <u>Revision 2</u>

(11/01<u>11</u>)

➤ RG <u>Regulatory Guide</u> 1.143, "Design Guidance for Radioactive Waste Management Systems, Structures, and Components Installed in Light-Water-Cooled Nuclear Power Plants"

→ RG

(12) <u>Regulatory Guide</u> 1.152, "Criteria for Digital Computers in Safety Systems of Nuclear Power Plants"

→ RG

(13) <u>Regulatory Guide</u> 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 2, March 1997

► RGPlants"

(14) <u>Regulatory Guide</u> 1.168, "Verification, Validation, Reviews, and Audits for Digital Computer Software Uses in Safety Systems of Nuclear Power Plants"

→ RG

(15) <u>Regulatory Guide</u> 1.169, "Configuration Management Plans for Digital Computer Software Used in Safety Systems of Nuclear Power Plants"

→ RG

(16) <u>Regulatory Guide</u> 1.170, "Software Test Documentation for Digital Computer Software Used in Safety Systems of Nuclear Power Plants"

→ RG

(17) <u>Regulatory Guide</u> 1.171, "Software Unit Testing for Digital Computer Software Used in Safety Systems of Nuclear Power Plants"

→ RG

(18) <u>Regulatory Guide</u> 1.172, "Software Requirements Specifications for Digital Computer Software Used in Safety Systems of Nuclear Power Plants"

→ RG

- (<u>19</u>) <u>Regulatory Guide</u> 1.173, "Developing Software Liv<u>f</u>e Cycle Processes for Digital Computer Software Used in Safety Systems of Nuclear Power Plants"
- (20) <u>Regulatory Guide</u> 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants," May 2000

→ RGPlants"

(21) <u>Regulatory Guide</u> 1.200, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities"

→ RG

(22) <u>Regulatory Guide</u> 4.15, "Quality Assurance for Radiological Monitoring Programs (Normal Operations) - Effluent_Effluent Streams and the Environment"

→ RG

- (23) <u>Regulatory Guide</u> 7.10, "Establishing Quality Assurance Programs for Packaging Used in Transport of Radioactive Material"
- (24) NUMARC 93-01, "Industry Guidance for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 2, dated April 1996

February 22, 2000, revision to Section 11 of NUMARC 93-01Plants"

(25) <u>Section 11</u>, "Assessment of Risk Resulting from Performance of Maintenance Activities-,"

	→ <u>of NUMARC 93-01, Revision, February 22, 2000</u>
<u>(26)</u>	NUREG- <u>-</u> 1070, "NRC Policy on Future Reactor Designs," July 1985
	→ <u>Design"</u>
<u>(27)</u>	NUREG- <u>-</u> 1462, "Final Safety Evaluation Report Related to the Certification of the System 80+ Design," August 1994
	→ <u>Design"</u>
<u>(28)</u>	NUREG- <u>-</u> 1503, "Final Safety Evaluation Report Related to the Certification of the Advanced Boiling Water Reactor Design," July 1994
	→ <u>Design"</u>
<u>(29)</u>	NUREG- <u>-</u> 1512, "Final Safety Evaluation Report Related to the Certification of the AP600 Standard Design," September 1998
<u>(30)</u>	NUREG- <u>-</u> 1793, "Final Safety Evaluation Report Related to the Certification of the AP1000 Standard Design," September 2004
	→ <u>Design"</u>
<u>(31)</u> Applica	NUREG/CR- <u>-</u> 3385, "Measures of Risk Importance and Their Applications," May 1986 <u>ations"</u>
•	-Generic Letters
<u>(1)</u>	Generic Letter 83-28, "Required Actions Based on Generic Implications of Salem ATWS Events," July 8, 1983
	• <u>Events</u> "
<u>(2)</u>	Generic Letter 85-06, "Quality Assurance Guidance for ATWS Equipment That Is Not Safety Related," January 16, 1985
	→ <u>Related"</u>
<u>(3)</u>	Generic Letter 89-02, "Actions to Improve the Detection of Counterfeit and Fraudulently Marketed Products," March 21, 1989
	→ <u>Products"</u>
<u>(4)</u>	Generic Letter 91-05, "Licensee Commercial-Grade Procurement and Dedication Programs," April 9, 1991
	→ <u>Programs"</u>
<u>(5)</u>	Generic Letter 2006-02, "Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power," February 1, 2006
Power"	
•	-Commission Papers
	▶
<u>(1)</u>	SECY- <u>-</u> 89-013, "Design Requirements Related to the Evolutionary Advanced Light-Water
	Rev. 0 of RG 1.206, Page C.I.17-11

Reactors (ALWR)," January 19, 1989

(2) SECY-<u>-</u>93-087, "Policy, Technical, and Licensing Issues Pertaining to Evolutionary and Advanced Light-Water Reactor Designs," April 2, 1993

→ <u>Designs</u>"

- (3) SECY-<u>-</u>94-084, "Policy and Technical Issues Associated with Regulatory Treatment of Non-Safety Systems in Passive Plant <u>Designs," March 28, 1994</u><u>Designs"</u> and related Staff Requirements Memorandum, dated June 30, 1994
- (<u>4</u>) SECY-<u>-</u>95-132, "Policy and Technical Issues Associated with Regulatory Treatment of Non-Safety Systems (RTNSS) in Passive Plant <u>Designs," May 22, 1995</u>

Designs" Issued for

Preliminary Use