



## U.S. NUCLEAR REGULATORY COMMISSION

# STANDARD REVIEW PLAN

### 17.6 MAINTENANCE RULE

#### REVIEW RESPONSIBILITIES

**Primary** - Organization responsible for the review of operations support and maintenance

**Secondary** - None

#### I. AREAS OF REVIEW

This SRP section addresses the Maintenance Rule program based on the requirements of 10 CFR 50.65 and the guidance in NUMARC 93-01 as endorsed by Regulatory Guide (RG) 1.160. For 50.65(a)(4), the guidance contained in the February 22, 2000, revision to Section 11 of NUMARC 93-01, as endorsed by RG 1.182, is effective until this guidance has been incorporated into a revision of NUMARC 93-01 later than Revision 3 and endorsed by a revision of RG 1.160 later than Revision 2, which will supersede RG 1.182.

The specific areas of review are as follows:

1. Scoping in accordance with 10 CFR 50.65(b)
2. Monitoring in accordance with 10 CFR 50.65(a)
3. Periodic evaluation in accordance with 10 CFR 50.65(a)(3)
4. Maintenance risk assessment and management in accordance with 10 CFR 50.65(a)(4)

Revision 1 - August 2007

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### USNRC STANDARD REVIEW PLAN

This Standard Review Plan (SRP), NUREG-0800, has been prepared to establish criteria that the U.S. Nuclear Regulatory Commission staff responsible for the review of applications to construct and operate nuclear power plants intends to use in evaluating whether an applicant/licensee meets the NRC's regulations. The Standard Review Plan is not a substitute for the NRC's regulations, and compliance with it is not required. However, an applicant is required to identify differences between the design features, analytical techniques, and procedural measures proposed for its facility and the SRP acceptance criteria and evaluate how the proposed alternatives to the SRP acceptance criteria provide an acceptable method of complying with the NRC regulations.

The standard review plan sections are numbered in accordance with corresponding sections in Regulatory Guide 1.70, "Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants (LWR Edition)." Not all sections of Regulatory Guide 1.70 have a corresponding review plan section. The SRP sections applicable to a combined license application for a new light-water reactor (LWR) are based on Regulatory Guide 1.206, "Combined License Applications for Nuclear Power Plants (LWR Edition)."

These documents are made available to the public as part of the NRC's policy to inform the nuclear industry and the general public of regulatory procedures and policies. Individual sections of NUREG-0800 will be revised periodically, as appropriate, to accommodate comments and to reflect new information and experience. Comments may be submitted electronically by email to [NRR\\_SRP@nrc.gov](mailto:NRR_SRP@nrc.gov).

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5. Maintenance Rule Training and Qualification
6. Interface with the Reliability Assurance Program (RAP) in the Operations Phase
7. Maintenance Rule Program Implementation
8. Inspection, Test, Analysis, and Acceptance Criteria (ITAAC)

None for this operational program

9. COL Action Items and Certification Requirements and Restrictions

The Maintenance Rule program is an operational program addressed in a COL application.

10. Operational Program Description and Implementation

For a COL application, the staff reviews the Maintenance Rule program description and the proposed implementation milestones. The staff also reviews final safety analysis report (FSAR) Table 13.x to ensure that the Maintenance Rule program and associated milestones are included.

#### Review Interfaces

Other SRP sections interface with this section as follows:

1. The RAP in the operational phase reviewed in SRP Section 17.4, "Reliability Assurance Program," may be implemented by the maintenance rule program in conjunction with the quality assurance program, reviewed in SRP Section 17.5, "Quality Assurance Program Description - Design Certification, Early Site Permit and New License Applicants," and the underlying maintenance and surveillance programs.
2. For COL reviews of operational programs, the review of the applicant's implementation plan is performed under SRP Section 13.4, "Operational Programs."

The specific acceptance criteria and review procedures are contained in the referenced SRP sections.

## II. ACCEPTANCE CRITERIA

### Requirements

Acceptance criteria are based on meeting the relevant requirements of the following Commission regulations:

1. 10 CFR 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants."

2. 10 CFR 52.79(a)(15), which requires that a COL FSAR contain a description of the program, and its implementation, for monitoring the effectiveness of maintenance necessary to meet the requirements of 10 CFR 50.65.

### SRP Acceptance Criteria

Specific SRP acceptance criteria acceptable to meet the relevant requirements of the NRC's regulations identified above are as follows for the review described in this SRP section. The SRP is not a substitute for the NRC's regulations, and compliance with it is not required. However, an applicant is required to identify differences between the design features, analytical techniques, and procedural measures proposed for its facility and the SRP acceptance criteria and evaluate how the proposed alternatives to the SRP acceptance criteria provide acceptable methods of compliance with the NRC regulations.

1. NUMARC 93-01 as endorsed by RG 1.160 represents an acceptable approach for implementing a Maintenance Rule program in accordance with 10 CFR 50.65. For 50.65(a)(4), the guidance contained in the February 22, 2000, revision to Section 11 of NUMARC 93-01, as endorsed by RG 1.182, is effective until this guidance has been incorporated into a revision of NUMARC 93-01 later than Revision 3 and endorsed by a revision of RG 1.160 later than Revision 2, which will supersede RG 1.182.

The applicant's program should be consistent with the industry guidance as endorsed. Deviations should be explained and justified.

2. Operational Programs

For COL reviews, the description of the operational program and proposed implementation milestones for the Maintenance Rule program are reviewed in accordance with 10 CFR 50.65. The implementation milestones are plant specific except that 50.65 will require that the program be fully implemented by the time fuel load is authorized.

### III. REVIEW PROCEDURES

The reviewer will select material from the procedures described below, as may be appropriate for a particular case.

These review procedures are based on the identified SRP acceptance criteria. For deviations from these acceptance criteria, the staff should review the applicant's evaluation of how the proposed alternatives provide an acceptable method of complying with the relevant NRC requirements identified in Subsection II.

In general, the staff reviews the description of program procedures and computer software, if any, for Maintenance Rule (MR) implementation in accordance with NUMARC 93-01 as endorsed by Regulatory Guide 1.160, including, but not limited to the following areas:

Note 1: Deviations from the guidance in NUMARC 93-01 as endorsed by RG 1.160 should be explained and justified.

Note 2: At the time of the review, the NRC-endorsed version of the industry guidance on implementation of 50.65(a)(4) may still be contained in the February 22, 2000, revision to Section 11 of NUMARC 93-01, which was endorsed by RG 1.182. This is the effective guidance until the NRC endorses a later revision of NUMARC 93-01 (later than Revision 2) that incorporates this guidance through a later revision of RG 1.160 (later than Revision 2) which will supersede RG 1.182. RG 1.182 will then be withdrawn.

Note 3: Applicants referencing a certified design must address the COL application information or action items relevant to the MR in Chapter 17 of the SER-approved generic design certification document.

Note 4: Submission of actual procedures or software for review is not required or expected for the COL application, but they must be available for NRC inspection by the time the program is required to be implemented, *i.e.*, by the time fuel load is authorized.

Note 5: If an applicant proposes to use the existing MR program used for its operating plants for new plants, applicability to, and adjustments required by, the new plant design must be addressed.

1. Scoping in accordance with 10 CFR 50.65(b)

The applicant should describe its process for determining which plant structures, systems, and components (SSCs), will be included in the scope of the Maintenance Rule (MR) program in accordance with 50.65(b) of the rule and the NRC-endorsed guidance. The program description should identify that additional SSC functions may be added to or subtracted from the MR scope prior to fuel load, as appropriate, as additional information is developed (*e.g.*, emergency operating procedures (EOPs)) after the license is issued. The description of the MR scoping process should address:

- A. The criteria for including safety-related SSCs relied upon to remain functional during and following design-basis events in accordance with 50.65(b)(1).
- B. The criteria for including nonsafety-related SSCs in accordance with 50.65(b)(2)
  - (i) The accidents or transients referred to in 50.65(b)(2)(i) are those described in the FSAR.
  - (ii) SSCs that are “used in plant emergency operating procedures (EOPs)” in accordance with 50.65(b)(2)(i), are as described in Paragraph 1.1.2 of RG 1.160, Revision 2. This differs from the corresponding description in NUMARC 93-01, Revision 2. The applicant’s program should reflect the description in RG 1.160, Revision 2, until this description, currently under review for revision, is changed in a future revision of NUMARC 93-01 and RG 1.160. The latest revision of RG 1.160 in effect at the time of the COL application should be followed.

NOTE: The NRC’s interpretation of the meaning of the phrase “used in ...EOPs” is explained in the statements of considerations for the MR and will be amplified and clarified in a future revision to RG 1.160; this is expected to be reflected in a future revision to NUMARC 93-01. The amplified and clarified definition is expected to be similar to the following:

SSCs used in the EOPS that are required to be in the scope of the MR program are those that (1) are directly used to mitigate accidents or transients (explicitly mentioned in the EOPs or in steps of referenced procedures needed to accomplish the EOP step), (2) have mitigating functions explicitly mentioned in backup or lower-tier methods in the EOPS that provide reasonable assurance of successful accomplishment of a mitigation function (as may be determined through risk-informed methods) and (3) those whose use is implied and that are essential to the performance of one or more EOP steps and for which there are no reliable and consistently readily available (under EOP conditions) alternatives. SSCs that do not provide or support a mitigating function, but are included in the EOPs for other reasons, e.g operator convenience or simplifying EOP compliance, event recovery, equipment protection, etc., are not required to be in the MR scope under 50.65(b)(2)(i); nor are SSCs used in the Severe Accident Mitigation Guidelines (SAMGs). Note that as used in this context, the word “recovery” refers to long-term or supplementary recovery actions to restore normal plant conditions; not immediate recovery actions to put the plant in a safe, stable condition.”

If the amplified and clarified definition is in effect at the time of the COL application, the applicant should describe the process for identifying SSCs explicitly mentioned in the EOPs (including those mentioned in referenced procedures), but that are proposed not to be included in the MR scope. The process for exclusion from scope should address the bases for exclusion from scope (e.g., not used for accident or transient mitigation), the bases for inclusion in the EOPs (e.g., operator convenience, equipment protection), the portion of any and all mitigating functions provided, the expectation of reliability in EOP application(s), and the means by which operators are alerted (e.g., procedural warnings, cautions, disclaimers, signs, etc.) to reduced assurance or expectation of reliability.

- (iii) SSCs whose failure could prevent safety-related SSCs from fulfilling their safety-related functions in accordance with 50.65(b)(2)(ii). The applicant should describe how the process considers system interdependencies, including failure modes and effects of nonsafety-related SSCs (e.g., support systems) that could directly affect safety-related functions.
- (iv) SSCs whose failure could cause scrams or unwanted engineered safeguard feature actuations and those whose failure caused a reactor SCRAM or actuation of safety-related systems at the applicant’s plant or plants of similar design in accordance with 50.65(b)(2)(iii). The applicant should describe the process for identifying and using relevant utility-specific and industry-wide operating experience.

NOTE: If at the time of the COL application, the Commission has approved the applicant’s program for implementing 10 CFR 50.69 for its new reactor plant, the requirements of 50.69 may be followed instead of those of 50.65 for risk-informed safety classification (RISC)-3 and RISC-4 SSCs in the scope of the MR except for the purposes of 50.65(a)(4). In this case, the applicant should describe its process for identifying RISC-3 SSCs among those in MR scope

under 50.65(b)(1), and RISC-4 SSCs among those in MR scope under 50.65(b)(2) and for treatment under 50.69 of those RISC-3 and RISC-4 SSCs that would otherwise be treated in accordance with 50.65. Deviations in this process from SSC risk classification and treatment in accordance with NUMARC 93-01, as endorsed by RG 1.160, where it would result in classifying as RISC-3 or RISC-4 an SCC that otherwise would be classified as high-safety-significant (HSS) under NUMARC 93-01, as endorsed by RG 1.160, or would otherwise be classified as HSS consistent with a new reactor design, should be identified and explained.

- C. Specific information on the actual SSCs within the scope of the MR program will be reviewed as part of the operational program implementation inspection by the NRC, including, for each SSC in scope, the following:
- i. Specific MR requirement(s) in 50.65(b) that require the SSC to be in scope.
  - ii. For each SSC, for each 50.65(b) scoping criterion, the function(s) that require the SSC to be in scope.
  - iii. For each SSC, for each 50.65(b) scoping criterion, as applicable, the failure modes and effects that require the SSC to be in scope.
  - iv. For each SSC scoping function or vulnerability, the functional performance requirements/success criteria and/or functional failure definitions and implications.
- D. The applicant's submittal should describe the process for determining the safety/risk significance classification of SSCs within the scope of the MR program, including risk metrics/importance measures and values, operating experience, vendor information, RAP scope (modified for the operations phase as necessary), and any other factors considered by the expert panel. The MR program description should address the criteria for risk ranking of passive components in the new plant designs, especially if it involves a deviation from NUMARC 93-01 and RG 1.160.
- E. If the applicant proposes to credit its MR program (along with its QA, testing, surveillance and underlying maintenance programs) when implementing the RAP in the operations phase, the applicant should include a description of how the RAP SSCs (as identified in SRP Section 17.4) will be included in the MR program scope and also included in the high-safety-significant (HSS) category.

In addition, the process controlling how the RAP SSC list may be modified by site-specific requirements and information (e.g., SSCs included in the EOPs) should be described. Because not all modifications, if any, to the RAP list are expected to be available at the time of the COL application (e.g., the EOPs are not expected to be fully developed at this time), it is important that information provided in the FSAR clearly identifies the scope, purpose and essential elements of the program, such that there is assurance that the design reliability established by the RAP will be maintained.

The safety/risk classification and treatment of SSCs in the MR program scope, including those in the RAP scope, and the modified RAP scope for the operations phase, will be reviewed during NRC inspection.

- F. The applicant's submittal should describe the process for determining the type of monitoring (i.e., performance (availability and/or reliability) and/or condition) and level (e.g, component, system, classes of components, train, or plant) of monitoring/tracking. Classes of components means SSCs or equipment (e.g., circuit breakers, motorized valve actuators, etc.) that may need to be monitored/tracked at the component level or in special component classes or "pseudo systems" that may involve applications in multiple systems and the bases thereof (e.g., industry operating experience (IOE), common failure modes, etc.).

The standby or continuously operating status and associated type of monitoring and level of monitoring/tracking and the basis thereof of each SSC within the scope of the MR program will be reviewed by NRC inspection.

2. Monitoring in accordance with 10 CFR 50.65(a):

Specific SSCs, if any, whose performance or condition will be monitored initially in accordance with 50.65(a)(1) and the basis thereof will be reviewed by NRC inspection.

The program description for monitoring in accordance with 50.65(a)(1) should address the following:

- A. The process for establishing performance or condition monitoring goals for SSCs in 50.65(a)(1) status, including how goals are ensured to be commensurate with safety and how IOE is taken into account. For each SSC to be in 50.65(a)(1) status, the performance monitoring (availability and reliability) or condition monitoring goals established, the basis thereof, how the goals are commensurate with safety and how IOE was taken into account will be reviewed during NRC inspection.
- B. The process for disposition of SSCs in 50.65(a)(1) status that do not meet goals, including administration of corrective action. The applicant should describe how the program will ensure prompt, comprehensive and thorough corrective action that (a) addresses the proximate and ultimate causes of degraded performance or condition, (b) encompasses the extent of condition, and (c) institutes preventive measures, including changes that may be required in maintenance and/or maintenance support practices, procedures and training. This discussion should also address how failures will be evaluated against MR functions, since not all failures that cause loss of some function are MR functional failures, and also how maintenance-preventable functional failures will be identified and dispositioned.

Any plant management policies, procedures or practices that involve the 50.65(a)(1) status of MR SSCs, e.g., for MR staff performance evaluation, etc., will be reviewed during inspection.

C. The process for determining which SSCs within the scope of the MR program will be tracked to demonstrate effective control of their performance or condition in accordance with 50.65(a)(2). The 50.65(a)(2) process should address the following:

- i. The process for developing performance criteria or condition monitoring criteria used to demonstrate effective control of performance or condition for SSCs in 50.65(a)(2) status. The applicant's submittal should explain how the program ensures that performance criteria are commensurate with safety (including PRA insights). It should also take good engineering practices and industry operating experience into account. The performance criteria should be reasonable and verifiable, *i.e.*, achievable and sufficiently sensitive to degraded performance or condition such that meeting these criteria would demonstrate effective control of the performance or condition of the SSC through appropriate preventive maintenance and the SSC would remain capable of performing its function(s) and not fail in a manner adverse to safety.

The program description should address how effective control of performance or condition of SSCs in 50.65(a)(2) status will be demonstrated including condition monitoring of passive SSCs (*e.g.*, structures) and SSCs for which the reliability performance criterion has been set to zero failures allowed, if any.

For each SSC to be in 50.65(a)(2) status, performance (availability and/or reliability) criteria or condition monitoring criteria will be reviewed during NRC inspection.

- ii. For reliability performance criteria, the process for defining, determining and treating functional failures, MR functional failures (MRFFs), maintenance-preventable functional failures (MPFFs), and repetitive MPFFs
- iii. For availability performance criteria, the process for defining and tracking availability or unavailability (planned and unplanned), including exceptions and credits and the basis thereof
- iv. For condition monitoring criteria, the process that addresses sensing, surveillance, tracking and trending, action levels (predictive maintenance)
- v. The process for disposition of SSCs for which effective control of performance or condition is not demonstrated (including not meeting performance criteria or condition monitoring criteria). Conditions under which the expert panel may justify not placing an SSC in 50.65(a)(1) status when performance criteria are not met or are exceeded as appropriate should be described
- vi. The process for identification and treatment of SSCs categorized in a "run-to-failure" status



NOTE: The NRC and industry are considering amplification and clarification of the guidance on “run-to-failure” SSC screening and treatment considerations. This will also be reviewed during inspection.

3. Periodic Evaluation in accordance with 10 CFR 50.65(a)(3):

The program description for periodic evaluation in accordance with 50.65(a)(3) should address the following:

- A. Scheduling and timely performance of 50.65(a)(3) evaluations
- B. Documenting, reviewing and approving evaluations, providing and implementing results
- C. Review of 50.65(a)(1) goals and 50.65(a)(2) performance criteria, condition monitoring criteria, SSC performance and condition history, and effectiveness of corrective action
- D. Making adjustments to achieve or restore balance between reliability and availability
- E. Applying Industry operating experience (IOE)

4. Maintenance Risk Assessment and Management in accordance with 10 CFR 50.65(a)(4):

The program description for maintenance risk assessment and management in accordance with 50.65(a)(4) should address how removing SSCs from service will be evaluated, since it is important to be aware of what MR function(s) is/are being lost so the impact of removing multiple SSCs from service can be determined. For qualitative risk assessments, the program description should explain how the risk assessment and management program will preserve defense-in-depth and plant-specific key safety functions. The maintenance risk assessment and management area of the program description should address (but not be necessarily limited to) the following areas:

- A. Determination of the scope (or limited scope) of SSCs to be included in 50.65(a)(4) risk assessments
- B. Risk assessment and management during work planning, addressing qualitative, quantitative or blended approach in different modes of plant operation, pre-established plant risk categories or bands and basis (e.g., baseline core damage frequency multiples (address time limits), and/or incremental conditional core damage probability), defense-in-depth, preservation of key safety functions, standard risk management actions for the various risk bands, provisions for configuration-specific risk management plans
- C. Risk assessment and management of emergent conditions and updating risk assessments as maintenance situations and plant conditions and configurations are changed

- D. Assessment (quantitative and qualitative capabilities) and management of risk of external events or conditions

NOTE: The NRC and industry are considering amplification and clarification of the guidance on consideration and management of the risk of external events or conditions to better address fire (internal, external, and fire-risk-sensitive maintenance activities), severe weather, internal and external flooding, landslides, seismic activity and other natural phenomena, and grid/offsite power reliability for grid-risk-sensitive maintenance activities (as addressed in NRC Generic Letter (GL) 2006-02). The need for this amplification and clarification is expected to be explained in an NRC generic communication. Improved guidance is expected to be provided in a future revision of NUMARC 93-01 and will be endorsed by a future revision to RG 1.160.

- E. Assessment and management of risk of maintenance activities affecting containment integrity
- F. Assessment and management of risk of maintenance activities when at low power or when shut down (including implementation of NUMARC 91-06)
- G. 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, "Changes, Tests and Experiments"), in accordance with latest revision of NEI 96-07, as endorsed by the latest revision of RG 1.187, "Guidance for Implementation of 50.59, Changes, Tests, and Experiments"
- H. Risk assessment and management associated with risk-informed technical specifications that uses the existing (a)(4) risk assessment process

5. Maintenance Rule Training and Qualification

The applicant should describe the program for selection, training and qualification of personnel with MR-related responsibilities consistent with the provisions of SRP Chapter 13, "Conduct of Operations," as applicable. Training should be commensurate with maintenance rule responsibilities, including MR program administration, the expert panel process, operations, engineering, maintenance, licensing, and plant management.

6. Interface with the Reliability Assurance Program (RAP) in the Operations Phase:

As discussed in detail above, the applicant should describe the relationship and interface between MR and RAP (See SRP Section 17.4). The NRC has determined that the reliability assurance program may be implemented in the operations phase by (a) the 10 CFR Part 50, Appendix B, quality assurance (QA) program, (b) the maintenance and surveillance program, and (c) the maintenance rule (MR) program. If the applicant's MR program is to be used in implementation of RAP, in conjunction with the QA program and the underlying maintenance and surveillance programs, the COL application submittal should describe how the maintenance rule program will ensure that all RAP SSCs (consistent with operational and plant-specific considerations) are included within the MR scope in the HSS category.

7. Maintenance Rule Program Implementation:

The applicant should describe the plan or process for implementing the MR program as described in the COL application, including sequence and milestones for establishing program elements, commencing monitoring or tracking of performance and/or condition of SSCs as they become operational. The maintenance rule will require that the program be implemented by the time that fuel load is authorized.

8. ITAAC

There are no ITAAC associated with this SRP section

9. COL Action Items and Certification Requirements and Restrictions

The Maintenance Rule program is an operational program addressed in a COL application.

10. Operational Programs

The reviewer verifies that the Maintenance Rule Program is fully described and that implementation milestones have been identified. "Fully described" for operational programs, in accordance with SECY 05-197, includes identification of the plant-specific program choices made by the applicant where allowed by the regulations and NRC-endorsed guidance. A range of choices is acceptable where they would not significantly impact the programs. The reviewer verifies that the program and implementation milestones are included in FSAR Table 13.x.

Implementation of this program will be inspected in accordance with NRC Inspection Manual Chapter IMC-2504, "Construction Inspection Program - Non-ITAAC Inspections," specifically, IP 62706.52, "Maintenance Rule Program Implementation Inspection."

IV. EVALUATION FINDINGS

The reviewer verifies that the applicant has provided sufficient information to fully describe the Maintenance Rule Program, *i.e.*, in particular in areas involving applicant choices, those choices are stated and explained in accordance with SECY 05-197. A satisfactory finding is that the staff is satisfied that the applicant's proposed Maintenance Rule program, as described, is sufficient for a finding of reasonable assurance that the program when implemented satisfies 10 CFR 50.65, for issuance of a COL.

V. IMPLEMENTATION

The staff will use this SRP section in performing safety evaluations of DC applications and license applications submitted by applicants pursuant to 10 CFR Part 50 or 10 CFR Part 52. Except when the applicant proposes an acceptable alternative method for complying with specified portions of the Commission's regulations, the staff will use the method described herein to evaluate conformance with Commission regulations.

The provisions of this SRP section apply to reviews of applications submitted six months or more after the date of issuance of this SRP section, unless superseded by a later revision.

## VI. REFERENCES

1. 10 CFR 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants," and the associated Statements of Considerations (SOCs)
2. 10 CFR 52.79(a)(15)
3. NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants"
4. RG 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants"
5. The February 22, 2000, revision to Section 11 of NUMARC 93-01 (if a revision of NUMARC 93-01 later than Revision 2 has not been endorsed by the NRC at the time of the review)
6. RG 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants," (unless canceled or superseded by a revision of RG 1.160 later than Revision 2 at the time of the review)
7. NRC Generic Letter 2006-02, "Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power," dated February 1, 2006

The following references will be required for inspection of operational programs:

1. NRC Inspection Manual Chapter IMC-2504, "Construction Inspection Program - Non-ITAAC Inspections"
2. IP 62706.52, "Maintenance Rule Program Implementation Inspection"

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### **PAPERWORK REDUCTION ACT STATEMENT**

The information collections contained in the Standard Review Plan are covered by the requirements of 10 CFR Part 50 and 10 CFR Part 52, and were approved by the Office of Management and Budget, approval number 3150-0011 and 3150-0151.

### **PUBLIC PROTECTION NOTIFICATION**

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

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**SRP Section 17.6**  
Description of Changes

Changes incorporated into Revision 1

1. The technical basis for the revision is to revise the expected level of detail necessary to fully describe the Maintenance Rule program such that the staff can obtain a reasonable assurance finding of acceptability. Consistent with SECY 05-197, Review of Operational Programs in a Combined License Application and Generic Emergency Planning Inspections, Tests, Analyses, and Acceptance Criteria,” dated October 28, 2005, and the associated Staff Requirements Memorandum, dated February 22, 2006, the level of detail should be described at a functional level and at an increased level of detail where implementation choices could materially and negatively affect the program effectiveness and acceptability. With respect to the Maintenance Rule program, the SRP acceptance criteria have not been revised. The description and implementation will be in accordance with NUMARC 93-01 as endorsed by Regulatory Guide 1.160. The following changes have been made to the Review Procedures section:
  - a. Deletion of Note 4 under Review Procedures: Identification of program procedures is appropriately addressed within NUMARC 93-01.
  - b. Paragraph 1.A was renumbered to Paragraph 1 and modified such that the description of how structures, systems, and components (SSCs) are included within the program does not have to go down to “functional” detail, however, the description was expanded to include how SSCs are added and/or deleted from the program.
    - i. Paragraphs under 1.A.i were deleted and 1.A.i was renumbered to Paragraph 1.A (all subsequent paragraphs were renumbered). The specific citation to 10 CFR 50.65(b)(1) provides a sufficient level of information.
    - ii. Additional guidance was provided within 1.B related to criteria for including nonsafety-related SSCs, specifically SSCs that are used in plant emergency operating procedures.
    - iii. Added Note to 1.B that describes the applicability of 10 CFR 50.69 in determining the scope SSCs included in the maintenance rule program.
    - iv. The new Section 1.D was revised to emphasize program description not procedures and clarify that there is no O-RAP rather reliability assurance program in the operation phase.
    - v. The new Section 1.E was revised to limit the guidance to the process not procedures. In addition the third paragraph describing a licensee’s use of an expert panel in modifying the RAP scope in the operations phase was deleted as being unnecessary detail.
    - vi. The March 2007 Sections 1.E and 1.F were combined into a new Section 1.F.

- c. Section 2, Monitoring in accordance with 10 CFR 50.65(a)(2) was modified to remove information not necessary to be included within the program description.
- d. Section 3, Periodic Evaluation in accordance with 10 CFR 50.65(a)(3) was modified to remove the prescriptive information regarding operational experience.
- e. Section 4, Maintenance Risk Assessment and Management in accordance with 10 CFR 50.65(a)(4) was revised in Item D to add a note that staff and industry are considering additional guidance in this area.
- f. Section 5, Maintenance Rule Training and Qualification was revised to provide reference to training review guidance provided in SRP Chapter 13, instead of providing training-related review guidance in this SRP section.