of poultry carcasses to be imported into the United States must be shipped from the region where they were processed in closed containers sealed with serially numbered seals applied by an official of the national government of that region. The shipments must be accompanied by a certificate signed by an official of the national government of the region where the poultry was processed that lists the numbers of the seals applied and states that all of the conditions of this section have been met. A copy of this certificate must be kept on file at the processing establishment for at least 2 years.

* * * * *

Done in Washington, DC, this 13th day of July, 1999.

Charles P. Schwalbe,

Acting Administrator, Animal and Plant Health Inspection Service.

[FR Doc. 99–18320 Filed 7–16–99; 8:45 am]

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NUCLEAR REGULATORY COMMISSION

10 CFR Part 50

RIN 3150–AF95

Monitoring the Effectiveness of Maintenance at Nuclear Power Plants

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending its power reactor safety regulations to require that licensees assess the effect of equipment maintenance on the plant's capability to perform safety functions before beginning maintenance activities on structures, systems, and components (SSCs) within the scope of the maintenance rule. The amendments clarify that these requirements apply under all conditions of operation, including shutdown, and that the assessments are to be used so that the increase in risk that may result from the maintenance activity will be managed to ensure that the plant is not inadvertently placed in a condition of significant risk or a condition that would degrade the performance of safety functions to an unacceptable level. These amendments permit licensees to limit the scope of the assessments to SSCs that a risk-informed evaluation process has shown to be significant to public health and safety.

EFFECTIVE DATE: The final rule becomes effective 120 days after issuance of Revision 3 to Regulatory Guide 1.160, ''Monitoring the Effectiveness of Nuclear Power Plants.'' The NRC will publish a document in the **Federal Register** that announces the issuance of the revised guidance and that specifies the effective date.

FOR FURTHER INFORMATION CONTACT: Richard P. Correia, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, 301–415–1009, e-mail rpc@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Background

The NRC's maintenance team inspections of all nuclear power plant licensees in the late 1980s found the lack of consideration of plant risk in prioritizing, planning, and scheduling maintenance activities to be a common weakness. To address that weakness, paragraph (a)(3) of 10 CFR 50.65, the maintenance rule, currently includes the provision that ''(I)n performing monitoring and preventive maintenance activities, an assessment of the total plant equipment that is out of service should be taken into account to determine the overall effect on performance of safety functions.'' The maintenance rule was issued on July 10, 1991 (56 FR 31306).

During plant visits in mid-1994, several NRC senior managers expressed concerns that licensees were increasing both the amount and frequency of maintenance performed during power operation without adequately evaluating safety when planning and scheduling these maintenance activities. The NRC Executive Director for Operations (EDO) addressed these concerns regarding the safety implications of performing maintenance while at power to the President of the Institute of Nuclear Power Operations (INPO) in a letter dated October 6, 1994. In this letter, the EDO noted that it appeared that some licensees were either not following INPO guidelines for the conduct of maintenance and management of outages or had adopted only portions of the guidance. The EDO also recommended that INPO support the Nuclear Energy Institute (NEI) and appropriate utility managers during meetings with NRC senior managers to discuss the concerns they raised during the site visits.

The growing amount of on-line maintenance (i.e., maintenance during power operations) being performed by licensees and the quality of pre-maintenance assessments have merited the Commission's concern. To address this concern, to clarify the plant operating conditions under which the maintenance rule is applicable, and to make the requirements fully enforceable, the Commission published proposed revisions to 10 CFR 50.65 in the **Federal Register** on September 30, 1998 (63 FR 52201–52206). The 75-day comment period closed December 14, 1998.

II. Comments on the Proposed Rule

Twenty-nine comments were submitted during the comment period, and five were submitted after the comment period closed. Copies of the letters are available for public inspection and copying for a fee at the Commission's Public Document Room, located at 2120 L Street, NW (Lower Level), Washington, DC. The last public comment was received on December 29, 1998. All comments were considered in formulating the final rule. The 34 comments were submitted by 26 utilities with operating power reactors, one utility with a decommissioning status facility, three nuclear industry service companies or consultants, one individual, one State agency, NEI, and one law firm representing several utilities. Twenty-nine commentors endorsed the NEI comments. NEI stated in its comment letter that the industry generally supports the Commission's intent in the proposed rule but has a number of significant concerns that should be addressed before rulemaking proceeds. Of the commentors who did not endorse the NEI comments, one (combined State agencies) supported the concept of the proposed rule and provided comments to enhance it, and two others (an individual and a utility) provided recommendations in specific areas to enhance the proposed rule. Two of the commentors (a consultant and a consulting firm) stated that the rule was unnecessary and presented supporting reasons.

The comments have been grouped under the following general topics:

1. Rule issuance
2. New, vague, ambiguous, undefined terminology in the proposed rule
3. Scope issues
4. Suggestions for wording modifications
5. Regulatory controls overlapping technical specifications
6. Performing assessments
7. Assessing and managing risk
8. Emergent maintenance requirements
9. Documentation of the assessment
10. Definition of availability
11. Backfit and regulatory analyses
12. Regulatory analysis cost estimates
13. Application to decommissioning plants

Summaries of the grouped comments and discussions of the NRC responses follow.

1. Rule Issuance

Comment. One commentor, a utility, stated that they consider the proposed rule unnecessary, and NEI and other utilities stated that the proposed rule, as written, should be withdrawn. However, they also stated that if the rule is approved, Regulatory Guide 1.160 should be revised and issued before finalizing the changes to the rule.

Response. The NRC has determined that the rule is necessary and believes that the performance of this type of assessment is prudent because of changes in industry maintenance practices and findings during NRC inspections of maintenance rule programs. When the maintenance rule was first promulgated in 1991, the NRC had not foreseen the significant changes licensees would be making in maintenance practices. To enhance operational efficiency, made increasingly necessary by the rate deregulation of the electric utility industry, licensees are shortening their refueling outages by performing more maintenance while the plant is at power. At-power maintenance practices have evolved to the point that not only are major systems, subsystems, and components taken off line, but also multiple systems, subsystems, and components are taken off line simultaneously. Taking systems and components off line for maintenance could result in an increase in risk because of the reduced capability to mitigate the consequences of an accident or a transient, compared to risk that occurs from expected random equipment failures. In addition, although the maintenance rule baseline inspections of all operating nuclear power plant sites found that all licensees have implemented programs to perform the assessments, about half of the sites had programs with discernable weaknesses in this area, including instances in which, in accordance with the licensees' own programs, assessments should have been made but were not.

The NRC agrees that it is appropriate to revise Regulatory Guide 1.160 to incorporate clarifying guidance before the final rule's effective date. Accordingly, Revision 3 to Regulatory Guide 1.160 will be prepared for public comment and will be published in final form 120 days before the effective date of the rule.

2. New, Vague, Ambiguous, Undefined Terminology in the Proposed Rule

Comment. Most commentors identified concerns related to the proposed rule's introduction of new, vague, ambiguous, or undefined terminology and recommended that the rule be withdrawn and reissued for public comment after substantial modification. NEI and utilities indicated that terms such as ''risk-significant condition'' and ''unacceptable level'' should be explicitly defined.

Response. Paragraph (a)(4) has been reworded. Guidance for the revised terminology appears below in Item 4 of Section III, ''The Final Rule.''

3. Scope Issues

Comment. Many commentors stated that assessments required by the proposed rule should apply only to high safety-significance SSCs. NEI and utilities expressed concerns that the scope of SSCs subject to assessments was impractical. Such broad scope would dilute attention from high safety-significance SSCs by requiring too many detailed assessments.

Response. Paragraph 50.65(b) defines the scope of SSCs that are covered by the rule (with the exception of SSCs for decommissioning plants). Chapter 11.0 of NUMARC 93–01, ''Industry Guidelines for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants,'' Revision 2, dated April 1996 (which has been endorsed by Regulatory Guide 1.160, Revision 2, dated March 1997), is entitled ''Evaluation of Systems to be Removed from Service.'' Chapter 11.0 guidance makes the evaluation, or assessment, a three-step process: (1) Identify key plant safety functions to be maintained, (2) identify SSCs that support key plant safety functions, and (3) consider the overall effect of removing SSCs from service on key plant safety functions. Requiring, instead of recommending, those assessments does not change the expectation that the assessments need only involve SSCs associated with initiating and mitigating impacts on key plant safety functions. To codify this expectation, paragraph (a)(4) of the final rule contains a second sentence as follows: ''The scope of the assessment may be limited to structures, systems, and components that a risk-informed evaluation process has shown to be significant to public health and safety.''

4. Suggestions for Wording Modifications

Comment. Five commentors provided suggestions clarifying regulatory text. Two of these commentors stated that the plant configuration should be defined as ''SSCs within the scope of the rule,'' and three commentors suggested limiting the scope of maintenance activities to those that result in removing equipment from service.

Response. The NRC disagrees with these suggested language changes. The rule currently applies only to SSCs within the scope of the rule. A revision to specify that fact is not needed, although this rule is being revised to permit licensees to limit the scope of their assessments to SSCs that a risk-informed evaluation process has shown to be significant to public health and safety. Additionally, certain maintenance activities are performed that do not remove equipment from service but have the potential for challenging safety systems. One example is valve testing on certain balance-of-plant systems during which open valves are cycled shut and reopened. If such a valve were to inadvertently stick shut, a transient could ensue. Those scenarios must be assessed and managed to ensure that the risks associated with these activities are properly identified and controlled.

5. Regulatory Controls Overlapping Technical Specifications

Comment. Several commentors stated that there is a need to reconcile the overlapping regulatory regimes of the maintenance rule, technical specifications (TS), and the configuration risk management program (CRMP) (described in Regulatory Guide 1.177, ''An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications''). NEI and the utilities were mainly concerned with the overlap of regulatory controls in the revised rule and TS.

Response. The NRC agrees that some overlap exists among these regulatory controls. Under certain conditions, a plant's TS may allow an SSC to be out of service, while a pre-maintenance assessment proposing the removal of that same SSC from service may indicate a need to take other actions to preclude that configuration. It is possible that allowed outage times of TS may not be in complete agreement with reasonable out-of-service times resulting from the required assessments. However, TS limiting conditions for operation were, in part, developed to address random single failures of plant SSCs; they were not intended to be used by licensees as rationale for removing multiple SSCs from service to perform on-line maintenance. In general, TS may serve as a pre-analyzed assessment, when used with sound judgement, when a licensee proposes to remove a single SSC from service for maintenance. Paragraph (a)(4) is intended to cause the licensee to determine its options and follow a prudent course of action. Nevertheless, while performing on-line or shutdown

maintenance, the licensee will remain in conformance with its TS.

In NRC staff requirements memorandum dated June 29, 1998, for SECY–98–067, the Commission directed the NRC staff to take actions to ensure that CRMP regulatory guidance conforms to the provisions of the final maintenance rule. After revisions to the maintenance rule are completed, the NRC will expeditiously support licensee requests to remove the CRMP requirements from plant TS.

6. Performing Assessments

Comment. NEI and the utilities expressed the need for clarification of when an assessment would be required, the level of complexity necessary in the assessment, and the criteria to be used to evaluate the adequacy of the assessment process.

Response. Please refer to the discussion in Item 4 of Section III, ''The Final Rule,'' below.

7. Assessing and Managing Risk

Comment. Three commentors expressed similar views related to high-risk activities. One noted that, under suitable controls, a shorter time in a more risk-significant configuration may be safer than a longer time in a less risk-significant configuration. Another noted that high risk-significant activities should be recognized and avoided, where practical, and limited in duration when they are necessary. The third noted that the proposed rule does not address situations in which failure to perform a maintenance activity may have a greater impact on risk than performing the high safety-significant activity.

Response. The NRC agrees that the proposed rule precluded entering risk-significant configurations, no matter the duration, when, in fact, situations may exist that would yield a net safety benefit by performing maintenance in a risk-significant configuration for a short time. The rule has been revised to require licensees to understand their options with respect to risk and to manage their maintenance activities according to their best judgment, considering insights from operating experience and deterministic and probabilistic analyses.

8. Emergent Maintenance Requirements

Comment. Two commentors stated that the proposed rule does not address expectations for revising assessments upon the discovery of a previously unknown condition requiring maintenance (emergent maintenance). They also expressed concerns that if certain emergent maintenance activities are not completed immediately, the plant could be at greater risk.

Response. Under the revised rule, an assessment is required to be initiated following the discovery of emergent failures or changes in plant conditions to determine the safety impact of the failure or the change in plant conditions. For additional information on this subject, please see the discussion in Item 4 of Section III, ''The Final Rule,'' below.

9. Documentation of the Assessment

Comment. Three utility commentors stated that the proposed rule is not explicit enough regarding assessment documentation expectations.

Response. The rule has no explicit documentation requirements. Instead, the rule emphasizes performance. A licensee's assessment process is expected to identify the impact on safety that is caused by the performance of maintenance. Licensees should use documentation to the extent necessary to assure themselves that the requirement for an assessment has been acknowledged and performed adequately. NRC expectations are that a licensee will have a requirement for the assessments and an explanation of the process to be followed in its maintenance rule program, along with a description of assessment tool(s) to be used and their limitations, implementing procedures, and explicit direction covering instances when the plant configuration is or is proposed to be outside the span of the assessment tool. Further, the assessment process is expected to be incorporated into the maintenance planning and scheduling process and into work package requirements. Moreover, control room operators, who are expected to understand, use, and know the limitations of the assessment tools, generally use and maintain a variety of documents, such as logs and checklists, that contain information relating to out-of-service SSCs.

10. Definition of Availability

Comment. Three commentors stated that the definition of availability will be key to this rulemaking. They also stated that the availability definition should take into account the time required to restore the functionality of an SSC and should also be risk informed.

Response. A definition of availability for licensee maintenance rule programs is set forth in NUMARC 93–01, Revision 2, which was endorsed by the NRC in Regulatory Guide 1.160, Revision 2, of March 1997. According to that document, availability is ''(t)he time that a(n) SSC is capable of performing its intended function (expressed) as a fraction (usually as percent) of the total time that the function may be demanded.'' Also according to that document, under the definition of ''unavailability,'' is the following statement: ''An SSC that is required to be available for automatic operation must be available and respond without human action.'' Additionally, in the instance where an SSC is taken out of service for testing but could be manually activated, the NRC has accepted that, as long as the dedicated operator's written procedure specifies a single action that would permit an automatic initiation of the out-of-service SSC in the event of an accident or transient during the test, the SSC could be considered available. (Meeting Summary—November 19, 1991, NRC/NUMARC Public Meeting on the Development of Guidance Documents for the Implementation of the Maintenance Rule (10 CFR 50.65), R.P. Correia, Office of Nuclear Reactor Regulation, memorandum to E.W. Brach, Office of Nuclear Reactor Regulation, dated November 23, 1991.) The NRC's expectation is that, by procedure, the dedicated operator is stationed at the equipment and is ready and qualified to perform that single action in a moment. An acceptable single action could be the rapid repositioning of a switch or a lever; an unacceptable action would be racking in a breaker or, in some instances, opening a manual gate valve.

With respect to risk-informing the maintenance rule definition of availability, the reliance of initial availability performance measures on probabilistic risk assessment (PRA) data provided such a basis. However, in quality maintenance programs, availability is monitored to identify and trend the performance of equipment, thereby permitting certain conclusions to be drawn about the effectiveness of the equipment's maintenance program. Paragraph (a)(3) of the rule requires that the prevention of SSC failures (reliability) through maintenance is appropriately balanced against the objective of minimizing unavailability. Omitting unavailability time from the maintenance effectiveness determination analysis is flawed logic. Omitting unavailability time because, in an accident scenario, the equipment may not be needed for the time it may take to restore its safety function recognizes the role of the equipment but masks the actual requirement for maintenance. The maintenance rule requires licensees to monitor the effectiveness of their maintenance

programs. Omitting significant details, such as how much maintenance time an SSC requires in order to attain the objective of preventing failures, is contrary to the purpose of the rule.

Note also that maintenance rule ''availability'' is not technical specification ''operability.''

11. Backfit and Regulatory Analyses

Comment. One commentor stated that the regulatory analysis does not justify the expansion of the maintenance rule to ''normal shutdown operations'' and that a revision of the analysis to better consider such expansion would show through backfit considerations that the expansion is not justified. Another commentor also presented a concern that the overall implications of the rule were not supported by the backfit analysis.

Response. The new preamble to the rule is an introductory sentence clarifying that the rule applies under all operating conditions, including normal shutdown. The Commission intended the rule to apply to all operating conditions, and it has been implemented by the NRC staff consistent with such an interpretation. Moreover, Section 11.2.3 of NUMARC 93–01 specifically states that ''assessment applies during all modes of plant operation.'' The overall implications of the rule were assessed in the backfit analysis for the original maintenance rule, which was issued July 10, 1991.

12. Regulatory Analysis Cost Estimates

Comment. One commentor raised the concern that if facilities are required to develop numerical models for every combination of low safety-significance SSCs, the cost of implementing the program would be significantly higher than estimated in the regulatory analysis.

Response. The NRC does not expect licensees to develop numerical models for assessing all possible combinations of low risk-significant SSCs. The regulatory analysis states that the complexity of assessments to be performed can vary, depending upon the configuration of SSCs to be maintained on line or out of service. It was presumed that assessments involving SSCs having little bearing on safety could be performed in an uncomplicated, deterministic manner and that the cost of the overall program would be dominated by the need for assessment of combinations of SSCs, which, when taken out of service simultaneously, could have an adverse effect on the safe operation of the facility. Additionally, the licensee controls the degree of complexity of the proposed configuration and thereby controls the level of sophistication required for the assessment. Consequently, the licensee should not propose to enter a plant configuration the complexity of which exceeds the licensee's ability to assess.

13. Application to Decommissioning Plants

Comment. One commentor presented concerns regarding the application of the rule to plants in a decommissioning status. The commentor requested that, as part of this rulemaking, the NRC remove the applicability of the rule to decommissioning status plants following some modest level of fission product decay.

Response. This rulemaking is focused on requiring pre-maintenance assessments of plant risk. However, the NRC is considering the issue in a separate rulemaking activity.

III. The Final Rule

The final rule amends 10 CFR 50.65 as follows:

1. An introductory paragraph has been added to 10 CFR 50.65 clarifying that the rule applies under all conditions of operation, including shutdown. This introductory language reads as follows: ''The requirements of this section are applicable during all conditions of plant operation, including normal shutdown operations.'' The intent of this paragraph is to ensure that assessments are performed before maintenance activities when the plants are shut down as well as when the plants are at power. (Note that the word ''section,'' as used in this rulemaking, means all of § 50.65.)

2. The second sentence in paragraph (a)(3) has been revised as follows: ''The evaluations shall take into account, where practical, industry-wide operating experience.'' The change was made only to simplify the language and is purely editorial.

3. The last sentence of paragraph (a)(3), containing the current, non-mandatory provision for performing safety assessments, is deleted. The revised paragraph (a)(3) now contains only the requirement for periodic, programmatic, long-term review.

4. A new paragraph, (a)(4), has been added requiring the performance of assessments. The first sentence of the new (a)(4) paragraph states: ''Before performing maintenance activities (including but not limited to surveillance, post-maintenance testing, and corrective and preventive maintenance), the licensee shall assess and manage the increase in risk that may result from the proposed maintenance activities.'' Separating the assessment requirement from the long-term review requirement in paragraph (a)(3) will more clearly distinguish between the two types of activity.

The intent of this requirement is to have licensees appropriately assess the risks related to proposed maintenance activities that will directly, or may inadvertently, result in equipment being taken out of service and then, using insights from the assessment, suitably minimize the time needed for the proposed maintenance activities while also controlling the configuration of the total plant to maintain and support the key plant safety functions.

Risk is the result of the likelihood of an event with due consideration of the consequences of that same event. The term ''risk'' is used to address what can go wrong, its likelihood, and its consequences. The risk perspective can be assessed deterministically or probabilistically.

In general, a risk assessment is necessary before all planned maintenance activities. Assessments should also be performed when an unexpected SSC failure initiates required maintenance activities or when changes to plant conditions affect a previously performed assessment. However, the reevaluation of a previous assessment should not interfere with, or delay, the plant staff's taking timely actions to restore the appropriate SSC to service or taking compensatory actions necessary to ensure that plant safety is maintained. If the SSC is restored to service before performing the assessment, the assessment need not be conducted.

Assessments may vary from simple and straightforward to highly complex. However, the degree of sophistication required for the assessment notwithstanding, the NRC intends that the assessment process will examine the plant condition existing before the commencement of the maintenance activity, examine the changes expected by the proposed maintenance activity, and identify the increase in risk that may result from the maintenance activity. The assessments are expected to provide insights for identifying and limiting risk-significant maintenance activities and their durations.

The level of complexity necessary in the assessment would be expected to differ from configuration to configuration. When a licensee proposes to perform maintenance on a single SSC from service for maintenance while no other SSC is out of service, a simple deterministic assessment may suffice. If the SSC is covered by TS, a qualitative

assessment based on TS allowed outage time pertinent to the SSC and the informed judgement of a trained, licensed operator is sufficient. When one SSC is out of service and the licensee proposes to remove a second SSC from service for maintenance, the assessment could be simplified through the use of a table of results for pre-analyzed combinations, typically high safety-significance SSCs paired against each other. However, more detailed assessments are required if a licensee proposes to remove multiple SSCs from service during power operations or to remove from service systems necessary to maintain safe shutdown during shutdown or startup operations. These more detailed assessments are expected to involve probabilistic analyses where possible, and to also include considerations of key plant safety functions to be maintained and defense in depth.

The NRC believes that an appropriate assessment and management process should include the following considerations:

a. The likelihood that the maintenance activity will increase the frequency of an initiating event;
b. The probability that the activity will affect the ability to mitigate the initiating event;
c. The probability that the activity will affect the ability to maintain containment integrity;
d. Whether multiple trains are affected;
e. How probabilistic insights are used;
f. How non-probabilistic insights are used;
g. Component and system dependencies;
h. Measures to prevent concurrent unavailabilities of equipment necessary for accident mitigation;
i. Methods to determine the duration of the activity and account for the projected duration;
j. The analytical basis for allowed configurations (quantitative or qualitative consideration);
k. Provisions for accommodating configurations not encompassed by preanalyzed, acceptable configurations; and
l. Scope and quality of analysis for quantified assessments.

In general, it is the NRC's expectation that the processes for managing the risk are scrutable and control the risk increase of the proposed maintenance activities. This process should include an understanding of the nature (i.e., affecting the core damage, or large early release frequency) and significance of the risk implications of a maintenance configuration on the overall plant baseline risk level. For example, risk-significant plant configurations should generally be avoided, as should conditions where a key plant safety function would be significantly degraded while conducting maintenance activities. The effective control of potentially significant risk increase due to an unexpected failure of another risk-important SSC can be reasonably assured by planning for contingencies, or coordinating, scheduling, monitoring, and modifying the duration of planned maintenance activities.

5. The second sentence in the new (a)(4) paragraph states: ''The scope of the assessments may be limited to structures, systems, and components that a risk-informed evaluation process has shown to be significant to public health and safety.'' In response to public comments on the proposed rule, this second sentence has been added so that licensees may reduce the scope of SSCs subject to the pre-maintenance assessment to those SSCs which, singularly or in combination, can be shown to have a significant effect on the performance of key plant safety functions. The focus of the assessments should be on the SSCs modeled in the licensee's PRA, in addition to all SSCs evaluated as risk significant (high safety-significance) by the licensee's maintenance rule expert panel. Typically, these SSCs have been analyzed as causing potential initiating events, if failed, and as accident mitigators, or as high safety-significance SSCs with their support systems. Such SSCs may be identified by operating experience or by deterministic or probabilistic analyses.

Finding of No Significant Environmental Impact: Environmental Assessment

The Commission has determined under the National Environmental Policy Act of 1969, as amended, and the Commission's regulations in Subpart A of 10 CFR Part 51 that this final rule is not a major Federal action significantly affecting the quality of the human environment and, therefore, an environmental impact statement is not required. The environmental assessment that forms the basis for this determination reads as follows:

Identification of the Proposed Action

The Commission is amending its regulations to require commercial nuclear power plant licensees to perform assessments of changes to the plant's status that would result from maintenance activities before performing the maintenance activities on structures, systems, and components (SSCs) within the scope of 10 CFR 50.65, the maintenance rule. Thus, the maintenance rule has been modified by adding an introductory sentence to clarify that the rule applies under all conditions of operation, including normal shutdown; by making editorial revision to the second sentence of paragraph (a)(3); by deleting the last sentence of paragraph (a)(3); and by creating a new paragraph, (a)(4), that requires licensees to assess and manage the risk that may result from proposed maintenance activities and gives licensees an option to limit the scope of SSCs subject to the assessments.

The Need for the Proposed Action

Formerly, paragraph (a)(3) of the maintenance rule was in the form of a recommendation because it read as follows: ''(I)n performing monitoring and preventive maintenance activities, an assessment of the total plant equipment that is out of service should be taken into account to determine the overall effect on performance of safety functions.'' The Commission believes that the performance of this type of assessment is prudent. The maintenance rule baseline inspections, performed at each operating nuclear power plant site, found that all licensees have implemented programs to perform the assessments. However, about half of the sites had programs with discernable weaknesses in this area, including instances in which, in accordance with the licensee's own programs, assessments should have been made but were not. Because of the hortatory nature of the assessment provision in § 50.65(a)(3), the Commission cannot ensure that licensees perform the assessments. Moreover, licensees are free to remove the performance of the assessments from their programs as they so desire. This final rule permits the Commission to ensure that licensees perform the assessments, as appropriate.

Removing the provision regarding safety assessments from paragraph (a)(3) and creating for it a new, separate paragraph, (a)(4), disassociates the new requirement from the more time-dependent requirement for evaluating the program and the program's effectiveness at maintaining an appropriate balance between reliability and availability for each SSC. In the new paragraph, the requirement for assessment performance is stipulated to ensure that licensees will perform those assessments. There were questions regarding when the assessments are to be performed, which plant conditions are to be evaluated, how the assessments are to be used, and which SSCs are subject to the assessments. The new paragraph (a)(4) was revised to describe that the assessments are to be performed before proposed maintenance activities and are to examine pre-maintenance plant conditions and

expected changes as a result of the proposed maintenance activities. The assessments may be limited to SSCs that a risk-informed evaluation process has shown to be significant to public health and safety. The assessments are to be used to manage the increase in risk that may result from the maintenance activity.

Environmental Impacts of the Proposed Action

This final rule requires that commercial nuclear power plant licensees perform certain assessments of the status of plant equipment before performing proposed maintenance activities. The purpose of this change is to increase the effectiveness of the maintenance rule by requiring licensees to—

(1) Perform an assessment of the plant conditions before the proposed maintenance and the changes expected to result from the proposed maintenance activity;

(2) Ensure that the assessments are performed when the plant is shut down as well as at power; and

(3) Manage the increase in risk that may result from the proposed maintenance activity.

The Commission believes that proper implementation of the rule will reduce the likelihood and consequences of an accidental release of radioactive material caused by imprudently prioritized, planned, or scheduled maintenance.

The determination of this environmental assessment is that there will be no significant offsite impact to the public from this action. The NRC has also committed to complying with Executive Order (EO) 12898, ''Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,'' dated February 11, 1994, in all its actions. The NRC has determined that there are no disproportionate, high, or adverse impacts on minority or low-income populations. In the letter and spirit of EO 12898, the NRC requested public comment on any environmental justice considerations or questions that the public thinks may be related to this rule but somehow were not addressed. No public comments on this issue were received.

States Consulted and Sources Used

The NRC sent a copy of the proposed rule to every State Liaison Officer and requested his or her comments on the environmental assessment. No comments were received on this issue.

Paperwork Reduction Act Statement

This final rule does not contain a new or an amended information collection requirement subject to the requirements of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). Existing requirements were approved by the Office of Management and Budget (OMB), approval number 3150–0011.

Public Protection Notification

If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

Regulatory Analysis

The Commission has prepared a final regulatory analysis for this rule. The analysis examined the costs and benefits of the alternatives considered by the Commission for revising 10 CFR 50.65, the maintenance rule. Those alternatives were to (1) make no change to the rule, (2) require the safety assessments currently recommended in paragraph (a)(3) of the rule, and (3) make comprehensive revisions to paragraph (a)(3) of the rule. The analysis supported the selection of Alternative 2 as the preferred course of action. Details of the alternative selection are contained in the regulatory analysis, which is available for inspection in the NRC Public Document Room, 2120 L Street NW (Lower Level), Washington, DC. Single copies of the analysis may be obtained from Richard P. Correia, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, 301–415–1009, e-mail rpc@nrc.gov.

Regulatory Flexibility Certification

In accordance with the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the Commission certifies that this final rule will not have a significant economic impact on a substantial number of small entities. This rule affects only the operation of nuclear power plants. The companies that own these plants do not fall within the scope of the definition of small entities set forth in the Regulatory Flexibility Act or the size standards adopted by the NRC (10 CFR 2.810).

Backfit Analysis

As required by 10 CFR 50.109, the Commission has completed a backfit analysis for this final rule. The Commission has determined, on the basis of this analysis, that backfitting to comply with the requirements of this rule provides a substantial increase in protection to the public health and safety or the common defense and security at a cost that is justified by the increased protection.

When the maintenance rule was issued, the NRC had not foreseen the rate deregulation of the electric utility industry and the changes to maintenance practices that licensees would make to enhance operational efficiency. Specifically of concern is the significant increase in maintenance while the plant is at power, permitting shortened refueling outages. At-power maintenance practices have evolved to the point that multiple systems, trains, and components are simultaneously out of service. Compared to the risk that occurs from expected random equipment failures, the risk of an accident or transient caused by taking systems, trains, and components off line for maintenance or from performing maintenance on systems, trains, or components while they remain on line could be increased.

The objective of this rule is to require that—

(1) Licensees assess the impact of equipment maintenance on the capability of the plant to perform key plant safety functions; and

(2) Licensees use the results of the assessment before undertaking maintenance activities at operating nuclear power plants to manage the increase in risk caused by those activities.

Thus, the rule adds a new paragraph, (a)(4), that requires the performance of assessments, specifies that the scope of the requirement for performing those assessments covers proposed maintenance activities, specifies that the scope of SSCs to be assessed may be limited to those that a risk-informed evaluation process has shown to be significant to public health and safety, and specifies that the increase in risk that may occur from the maintenance activity must be managed.

This final rule also adds an introductory sentence to 10 CFR 50.65 clarifying that the rule applies under all conditions of operation, including normal shutdown; revises the second sentence of paragraph (a)(3) to simplify the language; and deletes the last sentence of paragraph (a)(3) of the rule.

The details of this backfit analysis have been incorporated in the regulatory analysis. For the reasons elaborated in the regulatory analysis, which also contains cost information, the Commission concludes that this modification to the maintenance rule will result in a substantial increase in the overall protection to the public health and safety, and that the net costs

of the rule are justified in view of this increased level of safety.

Small Business Regulatory Enforcement Fairness Act

In accordance with the Small Business Regulatory Enforcement Fairness Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs of OMB.

National Technology Transfer and Advancement Act

The National Technology Transfer and Advancement Act of 1995, Pub. L. 104–113, requires that Federal agencies use technical standards developed or adopted by voluntary consensus standards bodies unless the use of such a standard is inconsistent with applicable law or is otherwise impractical. There are no industry consensus standards that apply to the area of maintenance. Thus, the provisions of the Act do not apply to this rulemaking.

List of Subjects in 10 CFR Part 50

Antitrust, Classified information, Criminal penalties, Fire protection, Intergovernmental relations, Nuclear power plants and reactors, Radiation protection, Reactor siting criteria, Reporting and recordkeeping requirements.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 552 and 553, the NRC is adopting the following amendments to 10 CFR Part 50.

PART 50—DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

1. The authority citation for Part 50 continues to read as follows:

Authority: Secs. 102, 103, 104, 105, 161, 182, 183, 186, 189, 68 Stat. 936, 937, 938, 948, 953, 954, 955, 956, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2132, 2133, 2134, 2135, 2201, 2232, 2233, 2236, 2239, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 50.7 also issued under Pub. L. 95–601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5851). Section 50.10 also issued under secs. 101, 185, 68 Stat. 955, as amended (42 U.S.C. 2131, 2235), sec. 102, Pub. L. 91–190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.13, 50.54(dd), and 50.103 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138). Sections 50.23, 50.35, 50.55, and 50.56 also issued under sec. 185, 68 Stat. 955 (42 U.S.C. 2235). Sections 50.33a, 50.55a and Appendix Q also issued under sec. 102, Pub. L. 91–190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.34 and 50.54 also issued under sec. 204, 88 Stat. 1245 (42 U.S.C. 5844). Sections 50.58, 50.91, and 50.92 also issued under Pub. L. 97–415, 96 Stat. 2073 (42 U.S.C. 2239). Section 50.78 also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Sections 50.80–50.81 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Appendix F also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

2. In § 50.65, an introductory paragraph is added, paragraph (a)(3) is revised, and a new paragraph (a)(4) is added to read as follows:

§ 50.65 Requirements for monitoring the effectiveness of maintenance at nuclear power plants.

The requirements of this section are applicable during all conditions of plant operation, including normal shutdown operations.

(a) * * *

(3) Performance and condition monitoring activities and associated goals and preventive maintenance activities shall be evaluated at least every refueling cycle provided the interval between evaluations does not exceed 24 months. The evaluations shall take into account, where practical, industry-wide operating experience. Adjustments shall be made where necessary to ensure that the objective of preventing failures of structures, systems, and components through maintenance is appropriately balanced against the objective of minimizing unavailability of structures, systems, and components due to monitoring or preventive maintenance.

(4) Before performing maintenance activities (including but not limited to surveillance, post-maintenance testing, and corrective and preventive maintenance), the licensee shall assess and manage the increase in risk that may result from the proposed maintenance activities. The scope of the assessment may be limited to structures, systems, and components that a risk-informed evaluation process has shown to be significant to public health and safety.

* * * * *

Dated at Rockville, Maryland, this 13th day of July, 1999.

For the Nuclear Regulatory Commission.

Annette Vietti-Cook,

Secretary of the Commission.

[FR Doc. 99–18325 Filed 7–16–99; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 98–ANE–42–AD; Amendment 39–11225; AD 99–15–06]

RIN 2120–AA64

Airworthiness Directives; AlliedSignal Inc. (Formerly Textron Lycoming) Model ALF502R–5 and ALF502R–3A Turborfan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to AlliedSignal Inc. Model ALF502R–5 and ALF502R–3A turbofan engines, that requires incorporation of an improved fan core inlet anti-ice system. This amendment is prompted by reports of uncommanded reduction of engine thrust (rollback) and loss of thrust control in icing conditions. The actions specified by this AD are intended to prevent ice accretion on the fan core inlet stator vane surfaces, which can result in engine rollback and loss of thrust control in icing conditions.

DATES: Effective September 17, 1999.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the **Federal Register** as of September 17, 1999.

ADDRESSES: The service information referenced in this AD may be obtained from AlliedSignal Engines, P.O. Box 5218, Phoenix, AZ 85072–2181; telephone (602) 365–2493, fax (602) 365–5577. This information may be examined at the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Eugene Triozzi, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803–5299; telephone (781) 238–7148, fax (781) 238–7199.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to AlliedSignal Inc. Model ALF502R–5 and ALF502R–3A turbofan engines was published in the **Federal Register** on December 14, 1998