

## **RULEMAKING ISSUE AFFIRMATION**

October 15, 2008

SECY-08-0152

FOR: The Commissioners

FROM: R. W. Borchardt  
Executive Director for Operations

Karen D. Cyr  
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SUBJECT: FINAL RULE—CONSIDERATION OF AIRCRAFT IMPACTS FOR NEW  
NUCLEAR POWER REACTORS (RIN 3150-A119)

PURPOSE:

The purpose of this paper is to request Commission approval to publish in the *Federal Register* the enclosed final rule, "Consideration of Aircraft Impacts for New Nuclear Power Reactors." This rule amends certain requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," and Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants." Specifically, the rule requires applicants for new nuclear power reactors to perform a rigorous assessment of the design to identify design features and functional capabilities that could provide additional inherent protection to avoid or mitigate the effects of an aircraft impact.

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SUMMARY:

The U.S. Nuclear Regulatory Commission (NRC or the Commission) staff (the staff) is seeking Commission approval of final amendments to its regulations to require applicants for new nuclear power reactors to perform a design-specific assessment of the effects of the impact of a large, commercial aircraft. The applicant would be required to identify and incorporate into the design those design features and functional capabilities that avoid or mitigate, to the extent practical and with reduced reliance on operator actions, the effects of the aircraft impact on the following key safety functions:

- core cooling capability
- containment integrity
- spent fuel cooling capability
- spent fuel pool integrity

In addition, these amendments contain requirements for control of changes to any design features or functional capabilities credited for avoiding or mitigating the effects of an aircraft impact. These requirements apply to the following:

- applicants for and holders of new construction permits
- applicants for and holders of new operating licenses that reference a new construction permit
- applicants for new standard design certifications
- applicants for new standard design approvals
- applicants for and holders of combined licenses
- applicants for and holders of manufacturing licenses
- the four currently approved design certifications if they are referenced in a combined license

The impact of a large, commercial aircraft is a beyond-design-basis event and the NRC's requirements that apply to the design, construction, testing, operation, and maintenance of design features and functional capabilities for design basis events will not apply to design features or functional capabilities selected by the applicant solely to meet the requirements of this rule. The objective of this rule is to require nuclear power plant designers to perform a rigorous assessment of design features and functional capabilities that could provide additional inherent protection to avoid or mitigate, to the extent practical and with reduced reliance on operator actions, the effects of an aircraft impact.

BACKGROUND:

By order dated February 25, 2002, the Commission required all operating power reactor licensees to develop and adopt mitigative strategies to cope with large fires and explosions from any cause, including beyond-design-basis aircraft impacts (67 FR 9792; March 4, 2002). The Commission first proposed incorporating the continuing requirement to provide for such mitigative measures in the NRC's regulations in the proposed 10 CFR Part 73 power reactor security requirements (71 FR 62664; October 26, 2006). During development of the power reactor security final rule, the staff determined that several significant changes to the proposed rule language would be needed to adequately address stakeholder comments and associated

implementation concerns. To address these comments and concerns, the NRC proposed to relocate the provisions from 10 CFR Part 73 to a new paragraph (hh) in 10 CFR 50.54, "Conditions of Licenses," in a supplement to the power reactor security requirements proposed rule (73 FR 19443; April 10, 2008). Should these requirements, which are promulgated on the basis of adequate protection of public health and safety and common defense and security, be finalized, all current and future power reactors would be required to comply with them. The current requirements, in conjunction with the currently proposed revisions to 10 CFR 50.54 to address loss of large areas of the plant due to explosions or fires, will continue to provide adequate protection of the public health and safety and the common defense and security. The staff is recommending also requiring applicants for new nuclear power reactors to incorporate into their design additional practical features that would avoid or mitigate the effects of an aircraft impact.

The Commission considered the appropriate location for requirements on an aircraft impact assessment during its deliberations on the security assessment rulemaking (draft 10 CFR 73.62) proposed by the staff in SECY-06-0204, "Proposed Rulemaking—Security Assessment Requirements for New Nuclear Power Reactor Designs (RIN 3150-AH92)," dated September 28, 2006. In its staff requirements memorandum on SECY-06-0204, dated April 24, 2007, the Commission disapproved the staff's recommended rulemaking as described in SECY-06-0204. The Commission directed the NRC staff to include the aircraft impact assessment requirements in 10 CFR Part 52 to encourage reactor designers to incorporate practical measures at an early stage in the design process.

As a result of the Commission's staff requirements memorandum, the NRC published a proposed rule in the *Federal Register* (72 FR 56287; October 3, 2007). The proposed rule would have required applicants to assess the effects of the impact of a large, commercial aircraft on the nuclear power facility. Based on the insights gained from the assessment, the applicant would have been required to include in its application a description and evaluation of design features, functional capabilities, and strategies to avoid or mitigate, to the extent practicable, the effects of the aircraft impact with reduced reliance on operator actions.

In addition to preparing the proposed rule, the staff also initiated interactions with the Nuclear Steam Supply System vendors who have received or are seeking certification of new designs. Between June and December 2007, these vendors—Westinghouse, GE-Hitachi Nuclear Energy (GEH), Mitsubishi Heavy Industries, Ltd. (MHI), and AREVA Nuclear Power (AREVA)—were all provided the Safeguards-level aircraft impact assessment parameters that the staff considered appropriate for use in performing an assessment as described in the proposed aircraft impact rule. In addition, the staff has briefed Westinghouse, GEH, and AREVA on the results of the staff's aircraft impact assessments for their respective designs. The staff has recently completed its assessment of the MHI Advanced Pressurized Water Reactor and is arranging a briefing for MHI personnel. The staff also briefed South Texas Project Nuclear Operating Company (STPNOC) personnel on the NRC's Advanced Boiling Water Reactor (ABWR) assessment in April 2008 and subsequently provided them with the Safeguards-level aircraft impact parameters because STPNOC indicated their intent to perform an aircraft impact assessment for the ABWR design. STPNOC has submitted an application for a combined license for two ABWRs, the proposed South Texas Project Units 3 and 4. The staff has confirmed that plant designers do not need to receive or generate Secret information to support the aircraft impact assessments. The staff also briefed the Advisory Committee on Reactor Safeguards (ACRS) on the results of the staff's assessments for the ABWR, U.S. Evolutionary

Power Reactor, AP1000, and Economic Simplified Boiling Water Reactor designs on November 1, 2007.

The staff has also been interacting with industry to develop guidance on implementation of the aircraft impact assessment rule. The staff expects to issue new regulatory guidance on the requirements in the aircraft impact assessment rule to endorse guidance being prepared by the Nuclear Energy Institute (NEI). This guidance is intended to provide an acceptable method by which relevant applicants can perform the assessment of aircraft impacts to meet the proposed requirements of 10 CFR 52.500, which are largely unchanged in the staff's final rule. The staff has also had preliminary discussions with the vendors, which are in various stages of performing aircraft impact assessments. Upon finalization of the rule, the staff plans to evaluate the implementation of the rule by the reactor vendors and affected combined license applicants. The staff will also review the associated changes to the design control documents and plant-specific final safety analysis reports as part of the certification and licensing processes.

#### DISCUSSION:

##### **Public Comments**

The public comment period for the proposed rule closed on December 17, 2007. During the public comment period, the NRC held a public meeting to discuss and address questions on the proposed rule. The NRC received 32 comment letters from industry representatives, State agencies, public interest groups, and concerned citizens. Of those comments, 31 commenters were in favor of requiring aircraft impact assessments on nuclear power plants; one commenter was against requiring an aircraft impact assessment. No commenters supported the rule exactly as proposed. These comments are summarized in the enclosed *Federal Register* notice and are also discussed in detail in Enclosure 3, "Analysis of Public Comments on Consideration of Aircraft Impacts for New Nuclear Power Reactor Designs, RIN 3150-A119." Public comments that had a substantive effect on the final rule are addressed in the following paragraphs.

##### **Major Changes Made in the Final Rule**

Summaries of the major changes from the proposed rule to the final rule are provided below. All of these changes are discussed in more detail in the *Federal Register* notice.

##### *Assessment Criteria*

The NRC requested comments on the desirability of adding an additional acceptance criterion in the final rule beyond the proposed rule's practicability criterion. The proposed rule provided the following example:

The application must also describe how such design features, functional capabilities, and strategies will provide reasonable assurance that any release of radioactive materials to the environment will not produce public exposures exceeding 10 CFR Part 100 guidelines.

The three industry commenters who addressed this issue opposed the use of 10 CFR Part 100, "Reactor Site Criteria," dose limits as acceptance criteria for the aircraft impact rule. As an alternative, NEI suggested that the NRC adopt functional acceptance criteria that would:

(1) demonstrate that the reactor core remains cooled or the containment remains intact; and (2) demonstrate that spent fuel cooling or spent fuel pool integrity is maintained. The staff partially adopted NEI's suggestion in the final rule. The final rule requires the assessment to address the effects of the aircraft impact on the key safety functions of core cooling capability, containment integrity, spent fuel cooling capability, and spent fuel pool integrity. The designer must then determine, as part of the assessment, whether there are practical design features and functional capabilities that avoid or mitigate the effects of the aircraft impact. In performing the practicality evaluation, the staff expects applicants to first consider the effects of the aircraft impact on core cooling capability and spent fuel cooling capability. If core cooling capability can be maintained with the applicant's identified design features and functional capabilities, then no further consideration of practical design features and functional capabilities to maintain containment integrity is necessary. Likewise, if spent fuel cooling capability can be maintained with the applicant's identified design features and functional capabilities, then no further consideration of practical design features and functional capabilities to maintain spent fuel pool integrity is necessary. However, if there are no practical means to maintain core cooling capability, then the applicant must also consider practical design features and functional capabilities to maintain containment integrity. Likewise, if there are no practical means to maintain spent fuel cooling capability, then the applicant must also consider practical design features and functional capabilities to maintain spent fuel pool integrity. The initial aircraft impact assessment, however, must consider the effects of the aircraft impact on all four key safety functions—core cooling capability, containment integrity, spent fuel cooling capability, and spent fuel pool integrity.

In arriving at the proposed approach, the staff placed importance on the designation of the aircraft impact assessment (AIA) as a beyond design basis event and maintaining the historical treatment of such events. This ensures that the AIA rule is consistent with other Commission decisions including: the decision that implementation of mitigation strategies against large fires and explosions is sufficient to provide adequate protection of public health and safety; and the decision to exclude aircraft impacts from the Design Basis Threat. As stated in the proposed rule, the goal of AIA rule is to ensure that opportunities are not missed to consider and, where practical, address aircraft impacts during the design of new reactors but, ultimately, the assurance of no undue risk to public health and safety is provided by other NRC regulations. This distinction may also be important to achieving other goals, such as expanding the scope of the rule to previously certified designs. In applying the provisions of 10 CFR 52.63(a)(1)(vi) for existing design certifications and amendments thereto, the NRC is required to find that the safety benefits warrant the direct and indirect costs of implementation.

Should the Commission decide to revise the draft final rule to include more specific acceptance criteria, the staff suggests maintaining the historical treatment of beyond design basis events by avoiding phrases such as "provide reasonable assurance" in connection with a design basis standard (e.g. 10 CFR Part 100 guidelines). This could be accomplished by requiring analyses with realistic methods to produce an "expected result," rather than a conservative or bounding analysis typical of design basis event analysis. Alternatively, the Commission could impose acceptance criteria more suitable to beyond-design-basis scenarios (e.g., no loss of core cooling or no loss of intact containment or no large early release of radioactivity). Finally, the Commission could incorporate both of these suggestions, that is, an acceptance criterion calling for a realistic analysis to demonstrate no loss of core cooling or no loss of intact containment.

*Class of Applicants to Whom the Rule Applies*

A number of public comments addressed the scope of applicants and licensees to which the rule should apply. Some commenters suggested that the rule should not only apply to new, uncertified reactors but also to all currently operating nuclear power reactors, reactors with spent fuel in onsite pool storage structures, combined license applicants (regardless of the design being referenced), and currently approved design certifications. Other commenters suggested not applying the rule to currently operating reactors. The staff made two major changes to the proposed rule's applicability requirements. The first is the requirement making the final rule applicable to 10 CFR Part 50 license applicants in addition to applicants under 10 CFR Part 52. The staff believes it is important to strive for consistency in the technical requirements that are applied to new applicants under 10 CFR Parts 50 and 52. The draft final rule requires both new power reactor construction permit and operating license applicants to perform the required assessment and include the description of the identified design features and functional capabilities in their applications. The staff is recommending applying the final rule to applicants at both construction permit and operating license stage because it is not until the operating license stage that the applicant is required to provide the NRC with its final design. These requirements would not apply to operating license applications with underlying construction permits that were issued before the effective date of this final rule. This is because existing construction permits are likely to involve designs which are essentially complete and may involve sites where construction has already taken place. Thus, under the staff's proposal, any current or future applicant for an operating license with an underlying construction permit that was issued before the final aircraft impact rule becomes effective would not be required to comply with the aircraft impact rule.

The second major change that the staff is recommending to the applicability requirements in the proposed rule is that the final rule be made applicable to the four existing design certifications in 10 CFR part 52, appendices A through D, but only if they are referenced in a combined license. The staff agreed with the majority of commenters who stated that the underlying objectives of the aircraft impact rule would not be fully achieved if a subset of future nuclear power plant applicants - namely, those applicants who reference one of the four existing design certifications - are not required to comply with the aircraft impact rule. This recommendation stems not only from acknowledgement of the views expressed by a wide range of stakeholders in favor of requiring all future nuclear power plants to meet the requirements of the aircraft impact rule, but also on the staff's assessment that some of the certified designs may not be built in the U.S., thus making compliance with the rule unnecessary for those designs. Thus, the staff recommends that all future nuclear power plants in the U.S. be required to use designs that comply with the aircraft impact rule.

In evaluating this change, the staff considered regulatory approaches that could be used if a combined license application references one of the four currently approved standard design certifications in Appendices A through D of 10 CFR Part 52. The staff considered whether the combined license applicant should be required to perform the assessment of aircraft impacts itself and use the design features and functional capabilities identified as the result of its assessment in the design of their plant, but with no obligation to modify the referenced design certification. A second approach considered by the staff would require that the four currently approved design certifications be amended by the original design certification applicant to

comply with the aircraft impact rule within a short period of time after issuance of the final aircraft impact rule. The staff also considered a third approach, whereby the NRC would require that the four currently approved design certifications be amended to comply with the aircraft impact rule (without specifying who is responsible for prosecuting the amendment), but only if they are referenced in a combined license application. This approach would also restrict the NRC from issuing a combined license referencing one of the four currently approved design certifications, unless it had been amended to comply with the aircraft impact rule (again, without specifying who is responsible for prosecuting the amendment). The staff has determined that the third approach, i.e., requiring the four currently approved design certifications to be amended to comply with the final aircraft impact rule, but only if they are referenced in a combined license, should be adopted as the rulemaking approach. The staff believes that the draft final rule, as applied to the four currently approved design certifications, meets the criteria in 10 CFR 52.63(a)(1)(vi) and (vii) governing changes to design certifications. The NRC believes that performing the assessment required by the rule, and the incorporation of design features and functional capabilities identified by the assessment, would constitute substantial increases in overall protection of public health and safety and that implementation costs are justified in view of the increased safety. Performing the assessment itself provides a substantial safety benefit in reducing licensee and regulatory uncertainty regarding the capability (and vulnerability) of the design to the impact of a large, commercial aircraft. The staff also believes that this approach will preserve the level of standardization achieved through certification of these designs, without imposition of undue burdens on any of the original design certification applicants in circumstances where the designs are not likely to be used, as well as leaving to commercial considerations the entity who will actually prosecute the amendment of the design certification to meet the aircraft impact rule. Standardization is thereby enhanced, which is consistent with the Commission's "Policy Statement on Standardization of Nuclear Power Plants" (52 FR 34884; September 15, 1987). Accordingly, the staff has adopted the third approach in the draft final aircraft impact rule.

However, the staff also recommends that if any of the four currently approved design certifications are not referenced in the first 15-year duration of effectiveness under 10 CFR 52.55, then the design should be amended to comply with the aircraft impact rule if it is renewed under the provisions of 10 CFR 52.57 through 10 CFR 52.61. As discussed above, the staff recommends that if one of the four currently approved design certifications is referenced in a combined license application and that design certification has not been amended to comply with the aircraft impact rule, then the NRC should not issue the combined license unless the referenced design certification is amended to comply with the aircraft impact rule. The net effect of this regulatory regime is that if any one of the currently approved design certifications has not been updated at the time of renewal, then there will be no combined licenses that reference that design. Accordingly, there will be no nuclear power plant licensees who would be adversely affected by the mandatory updating requirements of 10 CFR 52.63(a)(3). In this situation, the staff believes that regulatory predictability, efficiency, and public confidence in the regulatory process all favor requiring any of the four current design certifications which have not been amended to meet the aircraft impact rule at the time of renewal of the design certification to comply with the aircraft impact rule as part of the renewal process.

Implementation of the staff's recommended approach for the currently approved design certifications will have a practical effect on one of the existing combined license applications: STPNOC's application for a combined license for two ABWRs (proposed South Texas Project

Units 3 and 4). Under the staff's approach in the draft final rule, STPNOC will need to amend its application to reference either:

1. An amendment to the ABWR design certification in 10 CFR Part 52, Appendix A, which reflects compliance with the aircraft impact rule;
2. An application for an amendment to the ABWR approved design certification, where the design is being amended to comply with the aircraft impact rule; or
3. An application for a new design certification (presumably based on the ABWR design certification but updated to comply with the aircraft impact rule) which has been docketed but not granted.

Should the Commission approve the staff's approach in the draft final rule, the staff intends to work with STPNOC to assess the impact of implementation of the final rule on the combined license review schedule.

The NRC requested comments in the proposed rule on whether it should use the same criterion to judge voluntary amendments to an existing design certification as it would use on a new design certification applicant who would be required to comply with the rule. Commenters stated that the NRC should use the same criteria for evaluating amendments to existing design certifications as it would use for evaluating new applications for design certifications. The staff agreed with the commenters that, to ensure consistency among all new reactor designs, the NRC should use the same criteria for evaluating voluntary requests for amendments to existing design certifications as it uses for evaluating new applications for design certifications.

#### *Relocation of Aircraft Impact Assessment Requirements to 10 CFR Part 50*

The NRC requested comments on the desirability, or lack thereof, of relocating the proposed aircraft impact requirements from 10 CFR 52.500 to a new section in 10 CFR Part 50. One industry commenter stated that the requirements should be placed in 10 CFR Part 52 because the assessment relates to a beyond-design-basis event and is intended to apply to design certifications. One industry commenter stated that if the aircraft impact requirements are to be imposed on future 10 CFR Part 50 construction permit applicants, then the requirements should be included in 10 CFR Part 50, consistent with the general principle established in the recent 10 CFR Part 52 rulemaking. Because the final rule is applicable to applicants under both 10 CFR Part 50 and 10 CFR Part 52, the staff has relocated the aircraft impact assessment requirements that were contained in proposed 10 CFR 52.500 to a new section 10 CFR 50.150 in the final rule. This change is consistent with the 2007 revision to 10 CFR Part 52. In making conforming changes involving 10 CFR Part 50 provisions in that rulemaking, the NRC adopted the general principle of keeping technical requirements in 10 CFR Part 50 and maintaining applicable procedural requirements in 10 CFR Part 52. Therefore, the staff has relocated the proposed aircraft impact requirements from proposed 10 CFR 52.500 to 10 CFR 50.150.

#### *Issue Resolution and Regulatory Implementation*

Several public comments addressed issue resolution and regulatory implementation issues. Some commenters suggested that the final rule should clarify that the assessment and evaluation are part of the design certification rulemaking and provide issue resolution for subsequent combined license applicants, and that contentions on their adequacy will not be entertained in individual combined license proceedings. The final rule reflects that the aircraft



impact assessment will be subject to inspection by the NRC but that the applicant is not required to submit the aircraft impact assessment. The staff expects that, generally, the information that it needs to perform its review of the application to assess the applicant's compliance with 10 CFR 50.150 will be that information contained in the applicant's Preliminary or Final Safety Analysis Report. Therefore, the adequacy of the impact assessment will not be a matter which may be the subject of a contention submitted as part of a petition to intervene under 10 CFR 2.309, "Hearing Requests, Petitions to Intervene, Requirements for Standing, and Contentions." For design certifications, design approvals, and manufacturing licenses which are subject to and/or have been determined by the NRC to be in compliance with the aircraft impact rule, issue resolution (in accordance with the applicable NRC regulations and law) will be accorded to the aircraft impact assessment, the descriptions of the design features and functional capabilities required to be included in the application, and the description of how the identified design features and functional capabilities meet the requirements of this rule. Furthermore, the staff has concluded that issue resolution should also extend to the exclusion of design features and functional capabilities which have not been included in the facility design. This position represents a change from the NRC's proposed position as presented in the proposed rule's statement of consideration (see 72 FR 56292; October 3, 2007). The staff's changed position on this matter stems from a review of the issue resolution provision in design certification rulemakings. Under the "Issue Resolution" section for each of the four current design certifications, the NRC included the following statement:

A conclusion that a matter is resolved includes the finding that *additional or alternative structures, systems, and components, design features, design criteria, testing, analyses, acceptance criteria or justification are not necessary* for the [design which is certified].

(10 CFR Part 52, Appendices A through D, paragraph IV.A. (emphasis added)).

There is nothing exceptional about the technical requirements in the aircraft impact rule which suggests that this provision on issue resolution should not apply to matters addressed by the aircraft impact rule. Accordingly, as part of this final rulemaking, the staff proposes that the Commission's position on the scope of issue resolution associated with the aircraft impact rule be conformed to the scope of issue resolution reflected in the currently approved design certifications.

### *Terminology Changes*

In the proposed rule, 10 CFR 52.500 stated that applicants for new nuclear power reactors were required to perform a design-specific assessment of the effects of the impact of a large, commercial aircraft on the designed facility. Based on the insights gained from that assessment, applicants would have been required to include a description and "evaluation" of the design features, functional capabilities, and strategies to avoid or mitigate the effects of the aircraft impact. Reference to such an "evaluation" was made throughout the statement of considerations in the proposed rule. However, the staff determined that the term "evaluation" was used in more than one context and concluded that such inconsistent use could cause confusion. In the final rule, the NRC has eliminated the use of the term "evaluation" in the rule language. The new requirements governing what covered applicants are required to submit in their applications (10 CFR 50.150(c)) states that applicants must submit the following:

1. A description of the design features and functional capabilities identified in the assessment; and
2. A description of how the design features and functional capabilities avoid or mitigate, to the extent practical and with reduced reliance on operator actions, the effects of the aircraft impact.

The NRC was also concerned that its use of the term “strategies” in the requirement for new reactor applicants to include a description of the design features, functional capabilities, and strategies to avoid or mitigate the effects of the aircraft impact (proposed 10 CFR 52.500(c)) could cause confusion. Neither the proposed rule nor its statement of considerations defined “strategies.” Upon consideration, the staff has decided to eliminate that term in the final rule. A “strategy” is typically associated with human action and may therefore appear to conflict with the direction in 10 CFR 50.150(b)(1) of the final aircraft impact rule that there should be “reduced reliance on operator action.” In addition, the aircraft impact rule is focused only on design, and was not intended to address or impose requirements on the operation of a facility. By using the term, “strategies” in the proposed aircraft impact rule, there is a real possibility that stakeholders may erroneously interpret the aircraft impact rule as requiring a designer to address as part of the aircraft impact rule the requirements in NRC’s proposed changes to 10 CFR 50.54(hh) to mitigate the effects of large fires and explosions. This would be an unnecessary duplication of effort, and would require consideration of procedural and operational matters at an early stage, which is not the staff’s intent and may not be the optimal time period for consideration of operational matters. For these reasons, the staff is dropping its use of the term strategies in the final rule. Thus, under 10 CFR 50.150(c), the relevant applicants need only include in their applications a description of the relevant identified design features and functional capabilities, and need not address strategies.

The staff’s decision to remove the need for the designer to identify design “strategies” does not, however, obviate the need for the designer to determine, when considering potential design features and functional capabilities, whether there are responsive actions and strategies (e.g., firefighting) that the nuclear power plant licensee could take to mitigate the effects of the impact of a large commercial aircraft that would be made possible, or whose effectiveness could be enhanced, by inclusion of such features and capabilities in the design. The staff believes that it is reasonable for the designer to include appropriate design features and functional capabilities to support practical responsive actions and strategies that the plant licensee could implement. The plant licensee should not be precluded from using an effective responsive action and strategy, simply because the designer failed to include a well-placed design feature that is necessary for an effective responsive action (e.g., a wall, a water outlet, a control panel).

The final rule statement of considerations also provides additional guidance on what is meant by the rule’s use of the phrases, “to the extent practical” and “with reduced reliance on operator actions.” The staff also evaluated whether there would be further merit in providing definitions in the final aircraft impact rule for any of the regulatory terms for which a discussion was provided in the statement of considerations. The staff believes that the explanatory discussion of those regulatory terms in the statement of considerations, and the opportunity to provide further explanation in future regulatory guidance, will suffice to provide clarity and consistency in the application of these terms, and offers some additional flexibility to the NRC as it gains experience with the rule during its implementation. Therefore, the staff decided not to include definitions of any regulatory terms in the final rule language.

COMMITMENT:

The staff will issue regulatory guidance to describe an acceptable method to implement the requirements of this rule and to assist the NRC staff in verifying that such requirements have been met.

RECOMMENDATIONS:

That the Commission:

1. Approve for publication in the *Federal Register* the enclosed notice of final rulemaking (Enclosure 1).
2. Find that imposition of the final aircraft impact rule on the four currently approved design certifications in Appendices A-D of 10 CFR Part 52 meets the criteria in 10 CFR 52.63(a)(1)(vi) and (vii) governing changes to design certifications.
3. Certify that this rule, if promulgated, will not have significant impact on a substantial number of small entities. This certification is included in the enclosed *Federal Register* notice. This will satisfy the requirement of the Regulatory Flexibility Act, 5 U.S.C. 605 (b).
4. Note the following:
  - a. That a final regulatory analysis has been prepared for this rulemaking
  - b. The staff has determined that this action is not a "major rule," as defined in the Congressional Review Act of 1996 [5 U.S.C. 804(2)] and has confirmed this determination with the Office of Management and Budget (OMB). The appropriate Congressional and Government Accountability Office contacts will be informed
  - c. That a final environmental assessment and finding of no significant impact has been prepared (Enclosure 2)
  - d. That the appropriate congressional committees will be informed
  - e. That a press release will be issued by the Office of Public Affairs when the NRC files a final rulemaking with the Office of the Federal Register
  - f. That the final rule contains amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501, et seq.) that must be submitted to the OMB for its review and approval before publication of the final rule in the *Federal Register*.

RESOURCES:

Resources required to complete this rulemaking (including issuance of the regulatory guidance) have been requested in the fiscal year 2009 budget as follows: 1.0 FTE for the Office of New Reactors (NRO), 0.5 FTE for the Office of Nuclear Reactor Regulation (NRR), and 0.4 FTE for the Office of the General Counsel (OGC). No additional resources are necessary to complete this rulemaking.

COORDINATION:

The staff briefed the ACRS on this final rule on July 9, 2008, and received the Committee's recommendation for approval by letter on July 18, 2008 (ADAMS Accession No. ML081930284). OGC has no legal objection to this paper. The Office of the Chief Financial Officer has also reviewed this paper for resource implications and has no objections. This paper has been coordinated with NRO, NRR, the Office of Nuclear Regulatory Research, and the Office of Nuclear Security and Incident Response.

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Enclosures:

1. *Federal Register* Notice
2. Environmental Assessment
3. Analysis of Public Comments

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WITS 200700155 / EDATS: SECY-2007-0133 & WITS200700156 / EDATS: SECY-2007-0432  
ADAMS Accession No.: ML082670873(Package); ML081050227(SECY Paper) \* **by email**

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