

RULEMAKING ISSUE  
(Affirmation)

February 23, 2012

SECY-12-0030

FOR: The Commissioners

FROM: R. W. Borchardt  
Executive Director for Operations

SUBJECT: FINAL RULE: REQUIREMENTS FOR MAINTENANCE OF  
INSPECTIONS, TESTS, ANALYSES, AND ACCEPTANCE CRITERIA  
(RIN 3150-AI77)

PURPOSE:

To obtain the Commission's approval to publish in the *Federal Register* (FR) a final rule that amends the requirements relating to verification of nuclear power plant construction activities through inspections, tests, analyses, and acceptance criteria (ITAAC) under a combined license.

SUMMARY:

The U.S. Nuclear Regulatory Commission (NRC) staff seeks Commission approval of proposed amendments to the regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 52.99, "Inspection during construction," related to verification of nuclear power plant construction activities through ITAAC under a combined license under Part 52. Specifically, the staff proposes new provisions that apply after a licensee has completed an ITAAC verification and submitted an ITAAC closure letter under § 52.99(c)(1). The new provisions would require licensees to (1) report new information materially altering the basis for determining that a prescribed inspection, test, or analysis was performed as required, or finding that a prescribed acceptance criterion is met and (2) notify the NRC of the completion of all ITAAC activities.

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In addition, the final rule contains changes to the following regulations in order to make the rule language consistent with statutory language of the Atomic Energy Act of 1954, as amended (AEA), and to more clearly describe possible ways in which a presiding officer decision may lead to a Commission decision on acceptance criteria:

- 10 CFR 2.340, “Initial decision in certain contested proceedings; immediate effectiveness of initial decisions; issuance of authorizations, permits, and licenses,” and
- 10 CFR 52.99 “Inspection during construction.”

The *Federal Register* notice of final rulemaking will also announce the issuance of RG 1.215.

#### BACKGROUND:

When the Commission first issued 10 CFR Part 52, “Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Reactors” (54 FR 15372; April 18, 1989), it included 10 CFR 52.99 to make it clear that the inspection carried out during construction under a combined license would be based on ITAAC proposed by the applicant, approved by the staff, and incorporated in the combined license. At that time, the Commission clearly stated that, although 10 CFR 52.99 envisioned a “sign-as-you-go” process in which the NRC staff would sign off on inspection units and notice of the staff’s sign-off would be published in the FR, the Commission itself would make no findings on construction until it was complete. Thereafter, the Energy Policy Act of 1992 amended Sections 185 and 189 of the AEA to address combined licenses and ITAAC.

In 2007, the Commission revised Part 52 to enhance the NRC’s regulatory effectiveness and efficiency in implementing its licensing and approval processes (72 FR 49352; August 28, 2007). In that revision, the NRC amended 10 CFR 52.99 to require licensees to notify the NRC that the prescribed inspections, tests, and analyses in the ITAAC have been completed and that the acceptance criteria have been met. The revision also requires that these notifications contain sufficient information to demonstrate that the prescribed inspections, tests, or analyses have been performed and that the prescribed acceptance criteria have been met. The NRC added this requirement to ensure that combined license applicants and holders were aware of the following: (1) that it was the licensee’s burden to demonstrate compliance with the ITAAC, and (2) that the NRC expected the notification of ITAAC completion to contain more information than just a simple statement that the licensee believes the ITAAC had been completed and the acceptance criteria met.

The notifications currently required by 10 CFR 52.99(c)(1) perform two functions, as discussed in the supplementary information for the 2007 final rule amending 10 CFR Part 52 (72 FR 49352, 49450 (second column); August 28, 2007). First, the notifications alert the NRC to the licensee’s completion of the ITAAC<sup>1</sup> and ensure that the NRC has sufficient information to complete all of the activities necessary for the Commission to find whether all of the ITAAC acceptance criteria have been or will be met before initial operation (the “will be met” finding is relevant to any hearing on ITAAC under 10 CFR 52.103, “Operation under a combined license”). Secondly, the notifications ensure that interested persons will have access to

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<sup>1</sup> In this discussion, the phrases “completion of the ITAAC” and “ITAAC completion” mean that the licensee has determined that (1) the prescribed inspections, tests, or analyses were performed and (2) the prescribed acceptance criteria are met.

information on both completed and uncompleted ITAAC at a level of detail sufficient to address the AEA Section 189a(1)(B) threshold for requesting a hearing on acceptance criteria.

After completing the 2007 rulemaking, the staff began developing guidance on the ITAAC closure process and the requirements under 10 CFR 52.99. In October 2009, the NRC issued regulatory guidance for implementing the revised 10 CFR 52.99 in Regulatory Guide (RG) 1.215, "Guidance for ITAAC Closure under 10 CFR Part 52." This RG endorsed guidance developed by the Nuclear Energy Institute (NEI) in NEI 08-01, "Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52," Revision 3, issued January 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML090270415).

After considering information presented by industry representatives in a series of public meetings, the staff realized that the various provisions in Part 52 left some additional implementation issues unaddressed. In particular, the staff determined that the combined license holder should provide additional notifications to the NRC following the notification of ITAAC completion currently required by 10 CFR 52.99(c)(1). The staff refers to the time after this ITAAC closure notification but before the date the Commission makes the finding under 10 CFR 52.103(g), as the "ITAAC maintenance period."

Since mid-2008, the staff has held numerous public meetings that have discussed the topic of ITAAC maintenance. In SECY-09-0119, "Staff Progress in Resolving Issues Associated with Inspections, Tests, Analyses, and Acceptance Criteria," dated August 26, 2009, the staff informed the Commission of its progress in resolving issues concerning ITAAC maintenance and reporting, including the threshold for notification of events that may result in the acceptance criteria of successfully completed ITAAC no longer being satisfied. That paper described new types of notifications that licensees may make to the NRC to address instances in which licensee activities affect previously completed ITAAC after the licensee submits an ITAAC closure letter to the NRC. In the paper, the staff stated its intention to propose that the Commission supplement 10 CFR Part 52 in order to include additional notification requirements to address ITAAC maintenance. The staff reiterated its plans to propose rulemaking on ITAAC maintenance in a September 22, 2009, Commission meeting on this topic.

More recently, the staff held two public meetings in March 2010 to discuss a draft proposed rule that it had made available to the public in February 2010. In developing the proposed rule, the staff considered feedback from external stakeholders during those meetings. In addition, NEI submitted written comments on the staff's plans to amend 10 CFR 52.99 in a letter dated April 29, 2010 (ADAMS Accession No. ML101300103), reiterating many of the comments made by NEI representatives in the March 2010 public meetings. The staff responded to NEI on June 21, 2010 (ADAMS Accession No. ML101590526) requesting that NEI resubmit those written comments from its letter that NEI believes are applicable to the published proposed rule. The staff addressed NEI's comments as part of the NRC's response to comments it received on the proposed rule.

In parallel with the discussions on the draft proposed rule, NEI revised its ITAAC closure guidance in NEI 08-01 to address the topic of ITAAC maintenance. On July 16, 2010, NEI submitted Revision 4 of NEI 08-01 for NRC review and endorsement (ADAMS Accession No. ML102010076). The staff has reviewed this latest revision of NEI 08-01 and issued a draft revision to RG 1.215 (DG-1250) (ADAMS Accession No. ML102530401) for public comment, endorsing NEI 08-01 and providing necessary clarifications.

As stated in the Commission's staff requirements memorandum (SRM) for SECY-11-0032, dated October 11, 2011, the staff considered how the concept of cumulative effects of regulation in the rulemaking process may apply to this rule. This rule is not expected to result in any cumulative effects in implementation because the rule's requirements apply during construction only and do not affect combined license issuance. In addition, prospective licensees that are subject to the new requirements will have significant exposure to them well before the time the requirements become effective and, therefore, have adequate time to determine how to implement the rule. Finally, the issues involving ITAAC maintenance are fundamental to the process for making the Commission's finding under 10 CFR 52.103(g), so the staff does not have latitude in determining the implementation period of the rule. Therefore, the staff concludes that no additional action to address the concept of cumulative effects of regulation is necessary.

#### DISCUSSION:

The final rule amendment includes the following new notifications after ITAAC closure:

- ITAAC post-closure notification
- All ITAAC complete notification

In general, the reasons for these proposed new notifications are analogous to the reasons presented in the 2007 rulemaking for the existing 10 CFR 52.99(c) notifications: (1) to ensure that the NRC has sufficient information, in light of new information developed or identified after the ITAAC closure notification under 10 CFR 52.99(c)(1), to complete all of the activities necessary for the Commission to make a finding on ITAAC, and (2) to ensure that interested persons have access to information on ITAAC at a level of detail sufficient to address the AEA Section 189a(1)(B) threshold for requesting a hearing. The following sections of this paper describe each of the proposed notification and documentation requirements in this rulemaking and the bases for each of the proposed requirements.

#### (1) ITAAC Post-closure Notification

The first new notification in the final rule is the ITAAC post-closure notification under 10 CFR 52.99(c)(2). When making the 10 CFR 52.103(g) finding, the Commission must have information sufficient to determine that the relevant acceptance criteria are met despite new information that materially altered the basis for (1) determining that a prescribed inspection, test, or analysis was performed as required or (2) a finding that a prescribed acceptance criterion is met (the "ITAAC determination basis"). The licensee's statement of the issue and bases for resolving the issue, discussion of any action taken, and a list of the key licensee documents supporting the resolution and its implementation will assist the NRC in making its independent evaluation of the issue. Apart from the NRC's use of the information, the staff also believes that making this information available to the public is necessary to ensure that interested persons will have sufficient information to review when preparing a request for a hearing under 10 CFR 52.103, comparable to the information provided under 10 CFR 52.99(c)(1), as described in the statements of consideration for the 10 CFR Part 52 rulemaking (72 FR 49352; August 28, 2007).

Accordingly, under 10 CFR 52.99(c)(2), the licensee is required to submit a resolution notification to the NRC in the form of an ITAAC post-closure notification. This ITAAC

post-closure notification, described in 10 CFR 52.99(c)(2), requires the licensee to submit a written notification of the resolution of the circumstances that materially altered the existing ITAAC determination basis. The ITAAC post-closure notification must contain sufficient information to demonstrate that, notwithstanding the new information of a materially altered ITAAC determination basis, the prescribed inspections, tests, or analyses have been performed as required and the prescribed acceptance criteria are met. The ITAAC post-closure notifications should explain the need for the supplemental notification, outline the resolution of the issue, and confirm that the ITAAC acceptance criteria continue to be met. The ITAAC post-closure notifications must include a level of detail similar to the level of information required in initial ITAAC closure notifications under 10 CFR 52.99(c)(1).

The staff proposes that the NRC's receipt of the notification under 10 CFR 52.99(c)(2) be published in the FR, at least until the last date for submission of requests for a hearing, under 10 CFR 52.99(e)(1). In addition, the staff proposes that the 10 CFR 52.99(c)(2) notification be available for public review under 10 CFR 52.99(e)(2). These requirements help ensure public availability and accessibility of important information on ITAAC closure.

Events that affect completed ITAAC could involve activities that include, but are not limited to, maintenance and engineering programs or design changes. The staff expects that licensees will carry out these activities under established programs to maintain ITAAC conclusions and that no supplemental notification will be necessary in most instances. The NRC can have confidence that prior ITAAC conclusions are maintained, as long as the ITAAC determination bases established by the original ITAAC closure letter are not materially altered. If the ITAAC determination bases are not materially altered, licensee activities will remain below the notification threshold of 10 CFR 52.99(c)(2). If the ITAAC determination bases are materially altered, then the licensee is required to document resolution of the issue in the ITAAC post-closure notification under 10 CFR 52.99(c)(2).

## (2) All ITAAC Complete Notification

The second new notification in the final rule is the all ITAAC complete notification under 10 CFR 52.99(c)(4). The purpose of this notification is to facilitate the required Commission finding under 10 CFR 52.103(g) that the acceptance criteria in the combined license are met. After or concurrent with the last ITAAC closure letter required by 10 CFR 52.99(c)(1) or (c)(2), the licensee would be required to notify the NRC that all ITAAC are complete. At the time the licensee submits the all ITAAC complete notification, the staff would expect that all activities requiring ITAAC post-closure notifications have been completed and that the associated ITAAC determination bases have been updated.

The staff recognizes that construction and operational readiness activities will continue even after the licensee submits the all ITAAC complete notification under 10 CFR 52.99(c)(4), and that these activities could result in new information that may materially alter the bases for a finding on acceptance criteria under 10 CFR 52.103(g). However, the staff understands that prospective licensees expect to complete the last ITAAC very close to the scheduled date for fuel load, and it expects the Commission to make the 10 CFR 52.103(g) finding on acceptance criteria shortly thereafter. The NRC's ITAAC closure notification regulatory process is structured so that the Commission is able to make a timely 10 CFR 52.103(g) finding that meets all applicable legal standards and has been developed through a process that promotes public confidence. In addition, while not addressed by the rule, industry guidance in NEI 08-01,

Revision 4, provides that licensees should expeditiously evaluate new information to determine whether the threshold for ITAAC post-closure notifications is exceeded, and, if so, “the licensee should notify the NRC within 24 hours of such a determination.”

(3) Additional Conforming Changes to 10 CFR 52.99

The final rule also contains several editorial changes to 10 CFR 52.99(b), (c)(1), (c)(2), and (d)(1). In all of these cases, the rule replaces the phrase “acceptance criteria have been met” with the phrase “acceptance criteria are met” for consistency with Section 185b of the AEA and the wording of the requirement in 10 CFR 52.103(g) on the Commission’s ITAAC finding. In addition, the staff is proposing an editorial change to 10 CFR 52.99(d)(2) to replace the phrase “ITAAC has been met” with the phrase “prescribed acceptance criteria are met” for consistency with the wording in 10 CFR 52.99(d)(1).

(4) Conforming Changes to 10 CFR 2.340

The final rule contains an associated correction to the language in 10 CFR 2.340(j). The NRC substantially revised 10 CFR 2.340 as part of the 2007 10 CFR Part 52 rulemaking to set forth (among other things) the circumstances under which the Commission may make a finding on acceptance criteria under Section 185b of the AEA and 10 CFR 52.103(g). The staff’s interactions with external stakeholders on ITAAC identified an error in the language of this section. The introductory language of 10 CFR 2.340(j) incorrectly describes the Commission’s finding under 10 CFR 52.103(g) as a finding that the acceptance criteria in a combined license “have been, or will be met.” This phrase actually describes the finding that a presiding officer makes only with respect to contested matters involving ITAAC in a hearing under 10 CFR 52.103. The presiding officer’s finding does not negate the need for the Commission (or appropriate office director, if the Commission chooses to delegate this authority) to make the overall finding on acceptance criteria as required by Section 185b of the AEA and 10 CFR 52.103(g). Accordingly, the rule contains a correcting change to 10 CFR 2.340(j) to accurately describe the Commission’s finding under 10 CFR 52.103(g) as a finding that the acceptance criteria “are met.”

In addition to correcting this error, the staff proposes to expand the language of 10 CFR 2.340(j) to (1) more clearly distinguish among adjudicatory findings on contentions (contested matters) with respect to ITAAC and the overall Commission finding on acceptance criteria under Section 185b of the AEA and 10 CFR 52.103(g) and (2) describe in more detail what findings on ITAAC must be made, depending on whether there are contested ITAAC.

(5) Changes to Proposed Rule Language, 10 CFR 52.99(e)

The draft final rule includes rule text that is substantially similar to the proposed rule with one language change to Section 52.99(e)(2) to clarify NRC notices to the public. The one language change made to the section, “NRC inspection, publication of notices, and availability of licensee notifications,” is to replace the language “The NRC shall make publicly available the licensee notifications under paragraphs (c)(1) through (4) of this section no later than the date of publication of the notice of intended operations required by 10 CFR 52.103(a)” with: “The NRC shall, no later than the date of publication of the notice of intended operation required by 10 CFR 52.103(a), make publicly available those licensee notifications under paragraph (c) of this section that have been submitted to the NRC at least seven (7) days before that notice.”

The NRC will make public all paragraph (c) ITAAC notifications that were submitted to the NRC at least 7 days before the date of publication of the notice of intended operation required by 10 CFR 52.103(a) which is, at a minimum, 180 days before the date scheduled for initial loading of fuel. A licensee could submit ITAAC notifications required by paragraph (c) later than the date of publication of the notice of intended operation required by 10 CFR 52.103(a). The NRC will continue to make these later notifications publicly available pursuant to the first sentence of 10 CFR 52.99(e)(2).

#### PUBLIC COMMENTS:

The NRC received one public comment submission from one industry organization, the Nuclear Energy Institute (ADAMS Accession No. ML11208C708). The comment submission contained 11 comments, consisting of 2 general comments and 9 specific comments. All comments and their resolution are discussed in the *Federal Register* Notice (FRN)(Enclosure 1).

The first general comment (Comment 1, p.1) on the proposed rule, Section 52.99, NEI requested including language contained within Section IX.B.1 of the design certification rules (DCR) concerning the focus of the ITAAC finding by the NRC. Referencing the Supplementary Information accompanying the ABWR design certification rule (62 FR 25813), NEI requested that the proposed 52.99(e)(1) be revised to state, "... the NRC staff's determination ~~of the successful completion of~~ that inspections, tests, and analyses contained in the license have been successfully completed and, based solely thereon, that the prescribed acceptance criteria are met." The NRC does not agree with this general comment. The change that NEI proposed is not within the scope of the ITAAC Maintenance rulemaking, as it does not address the issues of ITAAC maintenance (including public awareness of significant changes to the bases of licensee notifications under § 52.99). In addition, NEI proposed this change as part of a set of changes in their comment submission on the 2006 proposed Part 52 rule (ML011100405). In the 2007 rulemaking revising Part 52, the NRC declined to make the NEI-proposed change. See 72 FR 49352, 49385 (August 28, 2007). NEI does not present any new arguments that the staff believes should result in a change to the Commission's 2007 position rejecting the NEI proposal. No changes to the final rule language were made as a result of this comment.

The second general comment (Comment 11, p. 4) addressed the need to ensure that the NRC adequately considered the effect of 10 CFR 52.103(c). Under 10 CFR 52.103(c), the Commission may allow a period of interim operation pending completion of a hearing granted on one or more ITAAC, provided there is reasonable assurance of adequate protection to the public health and safety during the period of interim operation. The NRC staff disagrees with the comment because the relationship between § 52.103(c) and (g) is outside the scope of this rulemaking, and Section 189b(1)(B)(iii) of the AEA clearly provides the Commission with authority to allow interim operation during a pending hearing on acceptance criteria. The NRC staff will provide the Commission with a paper addressing issues associated with an interim operation finding during the pendency of hearings at a later time.

The nine specific comments received on the proposed rule contained recommendations for changes to the supplementary information to correctly reflect common terminology between the rule supplementary information, the associated RG 1.215 and the industry guidance contained within Revision 4 of NEI 08-01 (ADAMS Accession No. ML102010051). These nine specific comments focused on the supplementary information section; therefore no changes to the final

rule language were made as a result of these comments. Eight of the nine comments resulted in clarifications in the supplementary information section.

RECOMMENDATIONS:

The staff recommends that the Commission do the following:

- (1) Approve for publication in the *Federal Register* the enclosed notice of final rulemaking (Enclosure 1).
- (2) Certify that this rule, if promulgated, will not have significant impact on a substantial number of small entities, as required by the Regulatory Flexibility Act, 5 U.S.C. 605(b). This certification is included in the enclosed *Federal Register* notice.
- (3) Note the following:
  - a. The *Federal Register* notice of final rulemaking will announce the staff's issuance of the final RG 1.215 for use.
  - b. The Chief Counsel for Advocacy of the Small Business Administration will be informed of the certification and the reasons for it, as required by the Regulatory Flexibility Act (5 U.S.C. 605(b)).
  - c. 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. The staff will inform the appropriate Congressional and Government Accountability Office contacts.
  - d. The appropriate Congressional committees will be informed.
  - e. The Office of Public Affairs will issue a press release when the final rulemaking is filed with the Office of the Federal Register.



RESOURCES:

It is estimated that 0.8 full time equivalent (FTE) is needed to complete this rulemaking activity and this estimate was included in the FY 2012 Budget.

Office	Product Line	Product	FY 2012 Resources \$/FTE
NRO	Rulemaking	Rulemaking	0.5
OGC	Rulemaking	Corporate Rulemaking	0.1
OIS	Rulemaking	Rulemaking	0.1
ADM	Rulemaking	Corporate Rulemaking	0.1
Total:			0.8

If additional resources are required beyond FY 2013, they will be addressed through the Planning, Budget, and Performance Management process.

COORDINATION:

The staff briefed the Advisory Committee on Reactor Safeguards on this final rule on December 1, 2011, and received the Committee's recommendation for approval by letter on December 8, 2011 (ADAMS Accession No. ML11350A104). The OGC has no legal objection to this SECY paper, the draft final FRN, and supporting rulemaking documents. The Office of the Chief Financial Officer has reviewed this paper for resource implications and has no objections.

***/RA by Martin J. Virgilio for/***

R. W. Borchardt  
Executive Director  
for Operations

## Enclosures:

1. *Federal Register* Notice
2. Final Regulatory Analysis
3. Supporting Statement

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**WITS 201100095 / EDATS: SECY-2011-0093**

ADAMS Accession No.: ML113390314 (Package)

\*via email \*\*via memo

SECY-012

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