

UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001



May 16, 2007

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-07-0047

TITLE: STAFF APPROACH TO VERIFYING THE CLOSURE OF INSPECTIONS, TESTS, ANALYSES, AND ACCEPTANCE CRITERIA THROUGH A SAMPLE-BASED INSPECTION PROGRAM

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of May 16, 2007.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

A handwritten signature in cursive script, reading "Annette L. Vietti-Cook".

Annette L. Vietti-Cook
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Klein
Commissioner McGaffigan
Commissioner Merrifield
Commissioner Jaczko
Commissioner Lyons
OGC
EDO
PDR

VOTING SUMMARY - SECY-07-0047

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. KLEIN	X				X	5/3/07
COMR. McGAFFIGAN	X				X	4/13/07
COMR. MERRIFIELD	X					4/9/07
COMR. JACZKO	X				X	4/10/07
COMR. LYONS	X				X	4/18/07

COMMENT RESOLUTION

In their vote sheets, all Commissioners approved the staff's recommendation and some provided additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on May 16, 2007.

NOTATION VOTE
RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: CHAIRMAN KLEIN
SUBJECT: SECY-07-0047 - STAFF APPROACH TO VERIFYING
THE CLOSURE OF INSPECTIONS, TESTS,
ANALYSES, AND ACCEPTANCE CRITERIA THROUGH
A SAMPLE-BASED INSPECTION PROGRAM

Approved XX Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below _____ Attached XX None _____



SIGNATURE

5 / 3 / 2007

DATE

Entered on "STARS" Yes No _____

Chairman Klein's Comments on SECY-07-0047
Staff Approach to Verifying the Closure of Inspections, Tests, Analyses,
and Acceptance Criteria Through a Sample-Based Inspection Program

The staff is to be commended for beginning the development of a structured approach to verifying licensee completion of Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) so far in advance of when we expect to begin implementing this process. Thus, there is sufficient time to more fully develop the process, and I approve the staff's general approach, subject to the following comments.


The NRC's ITAAC review and inspection process should aim to provide confidence that the licensee's ITAAC completion and verification processes are effective, and thereby give reasonable assurance that the licensee's ITAAC completion notifications to the NRC are sufficient and accurate. The baseline ITAAC inspection program's level of effort should be planned to meet this standard, which would avoid the imposition of unnecessary regulatory burdens, keep the NRC off the critical path for construction, and ensure that government hold points would not be imposed on the licensee. The program should be structured to allow for flexible scheduling to permit expansions in inspection scope when necessary to determine extent of condition should deficiencies be identified. Finally, the NRC should inspect across the full range of inspection value targets, with effort being weighted toward the higher value targets.

I firmly agree with the staff's observation in SECY-07-0047 that 100% inspection is neither necessary nor efficient when evaluating licensee performance. That said, I am not willing, at present, to endorse the staff's projection of inspecting work related to approximately 30% of the ITAAC. It is clear that this is a very early estimate, and I believe it is premature to establish a value that could evolve into a numerical goal for our inspection program. As it continues to develop this process, the staff should use, as a benchmark for an appropriate level of inspection, the amount of effort the NRC exerts to develop reasonable assurance of adequate protection in other areas that we regulate. One example that comes to mind is the amount of inspection the NRC performs on safety related maintenance and design change activities during outages at existing nuclear power plants.

I agree with Commissioner Lyons that our finite inspection resources should be carefully and systematically targeted for maximum value, and that it would not be effective or efficient regulation if the NRC inspection program were to become a substitute for the licensee's own quality assurance program. Expanding on this point, I am concerned that an inspection effort beyond that necessary to provide reasonable assurance could run the risk of making the NRC part of the onsite ITAAC verification process, which could result in the imposition of defacto hold points.

The staff should engage stakeholders to obtain their views on the entire process outlined in SECY-07-0047 using an approach similar to what has been done for the Reactor Oversight Process (ROP). The ROP's development and refinement has relied on extensive public workshops and meetings, which has created an oversight process that is effective, robust, and, perhaps most important in the context of ITAAC verification, credible. The staff's engagement with external stakeholders should consider the issues raised in all the Commission's votes on this paper.

Commissioner Jaczko has proposed that the Advisory Committee on Reactor Safeguards (ACRS) evaluate the methodology and basis for a sample-based inspection program. I agree that an ACRS review of this nature could be beneficial. However, such an ACRS review should not divert the Committee from performing high priority reviews of safety issues pertaining to existing and future nuclear power plants. In this context, the staff and the ACRS should discuss whether it would be feasible for the Committee to review the sampling methodology and, if so, the scope and timing of the review.


Dale E. Klein 5 / 3 / 2007

NOTATION VOTE

RESPONSE SHEET

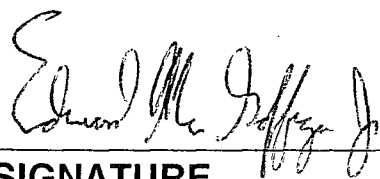
TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER MCGAFFIGAN
SUBJECT: SECY-07-0047 - STAFF APPROACH TO VERIFYING
THE CLOSURE OF INSPECTIONS, TESTS,
ANALYSES, AND ACCEPTANCE CRITERIA THROUGH
A SAMPLE-BASED INSPECTION PROGRAM

Approved Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below Attached _____ None _____

I believe the staff's sample-based inspection program for ITACC closure is a reasonable approach. It can be further refined with ACRS and stakeholder input. But I would note that it will not begin to be exercised until 2011 or 2012 at the earliest, so refining the program is not a near-term priority.



SIGNATURE

April 13, 2007

DATE

Entered on "STARS" Yes No _____

NOTATION VOTE
RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER MERRIFIELD
SUBJECT: SECY-07-0047 - STAFF APPROACH TO VERIFYING
THE CLOSURE OF INSPECTIONS, TESTS,
ANALYSES, AND ACCEPTANCE CRITERIA THROUGH
A SAMPLE-BASED INSPECTION PROGRAM

Approved Disapproved Abstain

Not Participating

COMMENTS: Below Attached None



SIGNATURE

9/9/07

DATE

Entered on "STARS" Yes No

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER JACZKO

SUBJECT: SECY-07-0047 - STAFF APPROACH TO VERIFYING
THE CLOSURE OF INSPECTIONS, TESTS,
ANALYSES, AND ACCEPTANCE CRITERIA THROUGH
A SAMPLE-BASED INSPECTION PROGRAM

Approved X Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached X None ___



SIGNATURE

9/16/07

DATE

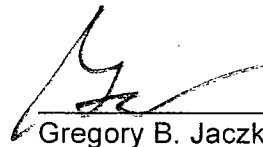
Entered on "STARS" Yes X No ___

Commissioner Jaczko's Comments on SECY-07-0047
Staff Approach to Verifying the Closure of Inspection of Inspections, Tests, Analyses,
and Acceptance Criteria Through a Sample-Based Inspection Program

I approve of the staff's plans to develop an approach for selecting inspections, tests, analyses, and acceptance criteria (ITAAC) to be given priority for inspection subject to the following comments. I believe it is important for the Commission to affirm the staff's planned approach to review ITAAC given the importance of these to the licensing process. Federal regulations require that a licensee may not operate a new facility until the Commission has approved the required inspections, tests, and analyses to have confidence these facilities are properly constructed and can satisfactorily perform according to their design. The staff asserts that 100 percent inspection is neither necessary nor efficient when evaluating a licensee's performance, and believes there is a reasonable basis that ITAAC can be met through sampling. There may be uncertainties with this approach that should be addressed for new nuclear power plants' initial operations. I appreciate the staff's efforts to develop a sample-based inspection program; however, since there is sufficient time before these actual inspections begin, I believe this is the time to consider several aspects of the plan before the Commission gives final approval. Specifically,

I believe the Advisory Committee on Reactor Safeguards (ACRS) should formally evaluate the staff's methodology and basis for a sample-based inspection program. The ACRS has previously discussed the topic in a letter to the Executive Director for Operations dated December 12, 2003 (ACRSR-2063). The staff should have ACRS review the statistical threshold and methodology for the inspections. Additionally, the significance of the ITAAC that are not inspected should be addressed to evaluate the potential impact on safety.

Staff should provide the Commission a more defined analysis of the inspection resources it will need to complete the ITAAC inspection program in addition to the non-ITAAC inspections, assessments and reviews it plans to complete. The staff should provide the Commission information on the interrelationship of completing ITAAC inspections and inspection resource requirements. The staff should be able to discuss the specific resources needed for completing higher percentages of ITAAC inspections. For example, some inspections may be relatively simple that a high percentage of ITAAC may be completed efficiently, and without significant increases in inspection resources.



Gregory B. Jaczko 4/18/07 Date

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary


FROM: COMMISSIONER LYONS

SUBJECT: SECY-07-0047 - STAFF APPROACH TO VERIFYING
THE CLOSURE OF INSPECTIONS, TESTS,
ANALYSES, AND ACCEPTANCE CRITERIA THROUGH
A SAMPLE-BASED INSPECTION PROGRAM

Approved X Disapproved Abstain

Not Participating

COMMENTS: Below Attached X None


Peter B. Lyons
SIGNATURE

4/18/07
DATE

Entered on "STARS" Yes X No

Commissioner Lyons' Comments on SECY-07-0047

I approve the staff's planned approach as outlined in this paper.

The staff's planned inspection prioritization approach provides a structured method for deciding which ITAAC to inspect and to what degree, as well as a flexible aspect allowing for the staff's judgement when inspection findings suggest an adjustment to the inspection plan is warranted. This appears to be a reasonable approach to help focus our inspection resources where they will have the greatest value. It would not be effective or efficient regulation if the NRC inspection program were to become a substitute for the licensee's own Quality Assurance Program. The roughly 15,000 hours of NRC inspection of TVA's Browns Ferry Unit 3 have successfully verified the far greater effort of the licensee in preparing that unit for restart. I have every confidence that our inspectors will approach new reactor construction inspection with the same careful and thoughtful scrutiny.

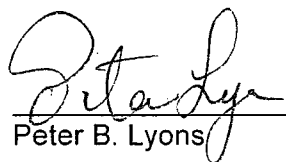
The staff's proposed sampling methodology does not seek to establish formal statistical claims of quality, which would call for perfectly random inspection samples of large homogeneous populations and other conditions that will not be reasonably achievable at construction sites. Such methods appeared to be the focus of the ACRS letter in December 2003. Rather, today the staff's methodology appears to provide for a dynamic inspection process that learns from its own implementation history.

The end result of the inspection program for new reactor construction will be the establishment of a publicly available record of independent NRC inspections. If the licensee adequately constructs and prepares the plant in accordance with its license and design certification, such records should provide a basis for the Commission to make its required finding of ITAAC completion. I also note that the staff plans to document its review of each and every ITAAC completion package submitted by the licensee. In addition, the staff plans to inspect the licensee's implementation and the effectiveness of required operational programs that are not covered under ITAAC. This combination of inspections and reviews, publicly documented to the extent possible, should give the Commission confidence in the veracity of all the licensee's documentation of ITAAC completion and implementation of programs necessary to operate the plant safely and securely.

I agree with Commissioner Jaczko that the staff could benefit from ACRS input on the inspection methodology, but because I believe the staff will need flexibility to incorporate improvements as experience is gained and to address unanticipated situations, I disagree that the staff must seek Commission approval of the inspection methodology.

I expect staff will continue to refine its inspection resource estimates and that such information will be provided to the Commission in the normal budget process and new reactors status briefings. I would not support directing staff to implement an inspection approach that increases inspection effort in a particular area simply because of the ease of inspectability. Our finite inspection resources should be carefully and systematically targeted for maximum value and I believe the staff's planned approach aims at that objective.

However, I believe that staff should engage public stakeholders in communities surrounding new construction sites at an appropriate time near the start of construction activities, to describe the construction inspection program in understandable terms and mechanisms by which results will be publicly accessible.

 4/18/07
Peter B. Lyons Date