



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, DC 20555 - 0001

December 12, 2003

Dr. William D. Travers  
Executive Director for Operations  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

Dear Dr. Travers:

SUBJECT: DRAFT 10 CFR PART 52 CONSTRUCTION INSPECTION PROGRAM  
FRAMEWORK DOCUMENT

During the 508<sup>th</sup> meeting of the Advisory Committee on Reactor Safeguards on December 3-5, 2003, we met with representatives of the NRC staff to discuss the draft 10 CFR Part 52 Construction Inspection Program Framework Document. We also had the benefit of the document referenced.

#### CONCLUSIONS AND RECOMMENDATIONS

1. The framework document provides a good basis for the development of appropriate inspection manual chapters for the certification and licensing of new plants.
2. We commend the staff for developing the "sign-as-you-go" (SAYGO) and the Construction Inspection Program Information Management System (CIPIMS) concepts. These should help make the inspection process more efficient and effective.
3. We agree with the staff that the use of statistical sampling to limit the number of required inspections, tests, analyses, and acceptance criteria (ITAAC) inspections will be valid in only a few areas.
4. We recommend that the number of ITAACs that are subjected to minimal inspection be small.

#### DISCUSSION

The staff has developed this draft framework document to provide guidance on revising construction inspection manual chapters and inspection procedures to support the 10 CFR Part 52 licensing process. The framework document meets this objective and is well written and organized. The staff has done a commendable job of outlining the needs and the required processes.

The guidance includes a SAYGO phased verification process, which will document conclusions on individual ITAACs as they are completed. It also includes an electronic information tracking and scheduling system, the CIPIMS, to track all inspection findings, conclusions, and unresolved items. The combination of the two concepts should make the inspection process more efficient and effective. We commend the staff for including these innovative concepts in the program.

The staff has concluded that it will have insufficient resources and time to inspect all ITAACs in detail. Consequently, the staff proposes implementing a statistical sampling process to limit the number of inspections required to determine that all ITAACs have been satisfied to the desired level of confidence. The staff has noted that such a statistical sampling method will be valid only for limited ITAAC areas, but has not yet identified them. We agree that a statistical sampling inspection process will be valid only for areas where the ITAAC is related to a large number of nominally homogeneous items such as welds and certain repetitive components. We look forward to reviewing the final disposition of this concept.

Some ITAACs will not have received any NRC inspection directly related to that ITAAC or to a similar one. For such ITAACs, the staff will review the documentation associated with the licensee's declaration that the ITAAC has been satisfactorily completed, which is required for all ITAACs. We recommend that the number of ITAACs that are subjected to such minimal inspection be small.

"Negative SAYGO ITAAC Conclusions" are also discussed. Such a negative conclusion would reflect a decision that the staff could not make a positive interim ITAAC conclusion on a selected construction activity. In addition, such a conclusion would indicate that deficiencies in the construction activity were not addressed by the corrective action program. Licensees would be expected to identify specific corrective actions. The staff should also require the licensee to identify and correct the weakness in its corrective action program that led to the observed deficiency. The licensee should also be required to examine the root cause of the corrective action program weakness for generic implications for other Part 52 activities.

Sincerely,

**/RA/**

Mario V. Bonaca  
Chairman

Reference:

U.S. Nuclear Regulatory Commission, Draft 10 CFR Part 52, "Construction Inspection Program Framework Document," May 2003.