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EPRI

TO:
Chairman Meserve

FOR SIGNATURE OF : ** PRI **

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Chairman Meserve

DESC:
SECY-02-0067 - Inspections, Tests, Analyses &
Acceptance Criteria (ITAAC) for Operational
Programs

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SUBJECT: Express support for the comments by the Nuclear Energy Institute (NEI) regarding SECY-02-067, Inspections, Tests, Analyses, & Acceptance Criteria (ITAAC) for Operational Programs Programs (Programmatic ITAAC)

ACTION: Signature of Chairman

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May 31, 2002

The Honorable Richard A. Meserve
Chairman
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Chairman Meserve:

The purpose of this letter is to express EPRI's strong support for the comments by the Nuclear Energy Institute (NEI) in their May 13 letter on SECY-02-0067, Inspections, Tests, Analyses, & Acceptance Criteria (ITAAC) for Operational Programs (Programmatic ITAAC).

We believe that the Commission should disapprove the recommendations contained in SECY-02-0067. In their place, the Commission should require Combined Operating License (COL) procedures that are consistent with the primary goals of 10CFR Part 52 and the Energy Policy Act of 1992 – to ensure to the maximum extent practical that safety and regulatory decisions are made, with full public participation, prior to construction start. Recommendations in SECY-02-0067 would postpone unnecessarily regulatory decisions that could be made prior to issuance of the COL or within the COL, counter to the fundamental principles of Part 52. This would introduce serious uncertainty and instability problems into the Part 52 process.

As I stated in my June 27, 2000 letter to you on SECY-00-0092 (the predecessor to SECY-02-0067 on programmatic ITAAC), EPRI and its domestic and international utility members have been working with and supporting NEI (and previously NUMARC) for over a decade in their interactions with NRC on developing improved new plant regulatory policies and provisions, aimed at enabling new plant construction.

NEI has done an excellent job of reviewing the record of NRC action and industry comments on programmatic ITAAC. That history clearly shows that ITAAC on operational programs were never contemplated by Congress or the Commission. As stated by NEI, programmatic ITAAC provide no safety benefit. Programmatic ITAAC are also unnecessary, by virtue of the fact that the regulatory basis for NRC's authority over programmatic matters already exists in regulations.

Part 52 does not require programmatic ITAAC. This term is not mentioned in Part 52. The ITAAC scope discussed in Part 52 is restricted to three matters – ITAAC that are established in the design certification (DC) and verified during construction, ITAAC for site-specific design issues (e.g., ultimate heat sink), and (later in 1992) ITAAC on emergency planning, specified in the Energy Policy Act of 1992 (EPACT), and then in Part C of Part 52 (COL). The concept of programmatic ITAAC was first introduced by the NRC staff as a new interpretation of Part 52 in the early 1990s, about two to three years after Part 52 was approved.

The Honorable Richard A. Meserve

~~May 21, 2002~~

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SECY-02-0067 is very misleading in a number of areas, as discussed later. Also, the SECY uses a number of false premises in describing how operational issues would be resolved at the time of COL, which unfairly make industry's approach appear unworkable. Industry's preference is to resolve operational issues prior to or as part of COL, and for NRC to verify conformance as part of its oversight process. The SECY presumes issue resolution prior to COL and construction will not happen, hence the need for programmatic ITAAC.

SECY-02-0067 effectively dismisses the relevance and value of the new oversight process as the primary foundation for ensuring effective operations at new plants. NRC's inspection and enforcement programs have clearly demonstrated the capability for identifying and taking effective action in instances where implementation has not met the requirements of the license. The same will be true for the resolution of such issues for new plants.

We are also concerned that the SECY reflects a growing preference to postpone regulatory decisions until construction is complete. This is counter to the principles of Part 52 and is undermining industry's confidence in Part 52 as a more efficient, predictable and stable regulatory process.

The enclosure to this letter provides some additional supporting information to complement points already made by NEI, organized for your convenience around the same eight key points in NEI's letter. We look forward to supporting NEI as they work with the NRC staff on developing a better, more efficient, effective and predictable regulatory process for licensing and construction new commercial power plants, a vital element in the nation's quest for a balanced and practical energy policy for the 21st Century.

Sincerely,



Theodore U. Marston, Ph.D.
Vice President & Chief Nuclear Officer

TUM/bjr/9695L

c: The Honorable Greta Joy Dicus
The Honorable Nils J. Diaz
The Honorable Edward McGaffigan Jr.
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**Supporting Information to EPRI's May 31 letter to Chairman Meserve on
"Programmatic ITAAC"**

1. The Atomic Energy Act and Part 52 do not require "programmatic" ITAAC

The NEI letter addresses this point very well. Added here are a few additional points specific to the issue of ITAAC on Emergency Planning, and how the SECY has inappropriately used this one specific and well-intentioned requirement from the Energy Policy Act of 1992 to extrapolate a case for ITAAC on a wide range of unrelated operational matters.

Specifically, the SECY uses the limited provision for EP ITAAC in the EPACT and Part 52, as an argument to impose fourteen (or more) programmatic ITAAC in areas outside of emergency planning. This is a major, unjustified extrapolation. SECY-02-0067 quotes the Illinois Department of Nuclear Safety interpretation of the EPACT: "...along with the specific mention of "...emergency planning..." reflects the clear intent of Congress to include operational programs within the scope of ITAAC in COL applications." In response to this argument that sweeps (by questionable inference only) all operational programs into ITAAC, the SECY states: "The staff agrees with IDNS." The staff supports this extrapolation without any justification.

When Part 52 was modified in 1992 to conform to the EPACT, a requirement for Emergency Planning (EP) ITAAC was added to section 52.97 (Issuance of Combined Licenses), but no other operational areas were addressed, indicating that as of the 1992 revision, the Commission did not envision a suite of programmatic ITAAC.

The DOE was a major proponent, along with industry, for seeking greater assurance in the law that emergency planning regulations could not be misused to prevent a safe plant, once constructed, from beginning commercial operation, as they were at Shoreham. As a result, special consideration was provided for EP ITAAC in the EPACT and thus in Part 52, to promote regulatory stability in this area. Although it is clear that Part 52 and the EPACT require ITAAC for Emergency Planning, the staff and industry have never reached agreement on the content of such ITAAC. The draft EP ITAAC attached to the SECY confirms our concern that programmatic ITAAC would do what they must not be permitted to do – provide a mechanism for transforming regulatory guidance into regulatory requirements.

Clearly the intent of Congress, the DOE, the industry, and the Commission, was to finalize emergency planning requirements within the scope of the COL, and to specify in the COL the criteria related to EP that must be met prior to operations, such that all matters of design, procedure, coordination with local authorities, etc., would be resolved with full public participation during COL proceedings.

2. Programmatic ITAAC are not needed for NRC to make all the necessary findings and assure safety prior to plant operation.

SECY-02-0067 conveys a highly misleading implication that the Commission would be excluded from programmatic decisions, if the Commission does not approve the staff's recommendations on programmatic ITAAC. The Commission has the same authority to assure

adequate safety under a COL prior to and after plant operation, as it does today under the issuance of an operating license under Part 50.

SECY-02-0067 states: “The staff believes that in order to comply with the Energy Policy Act the hearing opportunity, and the Commission’s decision on whether to allow fuel loading, should not be limited to non-programmatic areas.” Later, it states: “It was never the staff’s intention to limit the finding in 10 CFR Part 52 to hardware related issues because the Atomic Energy Act does not limit the Commission’s finding to these issues.” Later it states: “...the [Commission’s] finding is not limited to hardware issues.” These and other similar statements and implications are misleading, since they presume or imply that the Commission will be cut out of important programmatic decisions unless it approves the SECY recommendation for programmatic ITAAC, thereby establishing the staff position as the only solution to this non-problem. Contrary to the impression created by the SECY, the Commission has the full authority to make decisions on programmatic areas via its review and approval of COL applications, via orders, and via the inspection and enforcement of such areas against the Commission’s requirements and the conditions of the license.

SECY-02-0067 overplays its interpretation of the distinction NEI makes regarding “hardware” related ITAAC and “non-hardware” related ITAAC. Not only does the SECY imply that the Commission will be cut out of making findings on non-hardware matters if it does not approve programmatic ITAAC, but it often uses the phrase “regulations make no distinction between hardware and design-related issues, versus ‘programmatic topics’,” implying that the absence of an explicit distinction in Part 52 justifies ITAAC on programs as well and the physical plant.

The distinction NEI is making is simple and straightforward, but is side-stepped in the analysis in SECY-02-0067. NEI’s point is simply this: operational and programmatic topics are the subject of ongoing requirements and the Oversight Process, which assure that operational and programmatic regulations are being adhered to on a continuous basis. Design and “hardware” requirements in Part 52 have no equivalent ongoing regulatory verification process. This is the logical basis for the importance and focus of ITAAC on construction conformance with design – they are uniquely verified prior to fuel load as complete and consistent with the COL.

3. The SECY-02-0067 view that “programmatic” ITAAC are required is based on a parsing of the requirement on the scope of COL ITAAC that differs from the understanding provided by the Commission in 1989.

Throughout the development of Part 52 and through the first three years of use after approval by the Commission in 1989, the implementing phrase associated with ITAAC was well understood: “...if the inspections, tests, and analyses are performed and the acceptance criteria met, the facility has been constructed and will operate in conformity with the combined license, the provisions of the Atomic Energy Act, and the NRC’s regulations.” The second half of that phrase, “and will operate” is necessary because it conveys the confidence that if a plant is constructed in accordance with the design certification, then it can and will operate safely in accordance with the regulations – regulations which cover both design (pre-approved via DC) and operations (subject to regulations, inspection, and oversight). We believe the record of Part 52 up through the mid-1990s is clear that “will operate” [safely] naturally follows design ITAAC and EP ITAAC as a

conclusion to the process and a recognition that the Commission already has means available to ensure safe operations. In other words, authors and users alike interpreted this phrase as if there were a “thus” at its center: “...the facility has been constructed and [thus] will operate...”

If the distinction the staff is making that the phrase “and will operate” is uniquely critical to COL acceptance, as contrasted to DC which focuses on the “has been constructed” part, then it would follow that the DC approval criteria would only mention design and construction, not operations. However, that is not the case. Article 52.47(vi) states: “Proposed tests, inspections, analyses, and acceptance criteria which are necessary and sufficient to provide reasonable assurance that, if the tests, inspections and analyses are performed and the acceptance criteria met, a plant which references the design is built and will operate in accordance with the design certification.” It also follows that since the NRC did not interpret the phrase “and will operate” as requiring programmatic ITAAC as part of DC, it should correspondingly not interpret this phrase as requiring programmatic ITAAC as part of COL.

4. The existence of ITAAC in the design certifications on the Design Reliability Assurance Program has no bearing on the “programmatic” ITAAC policy issue.

SECY-02-0067 states, “The best example of a programmatic ITAAC is the design reliability assurance program (D-RAP). If programmatic ITAAC were not included in the COL application, the staff could not explain to stakeholders why D-RAP ITAAC are included in the certified design ITAAC, but similar ITAAC are not required for other programmatic areas in the COL application.” We disagree. D-RAP is primarily design related. The D-RAP was intended to assure that the detailed design maintained the reliability assumptions assumed in the approval of the certified design. D-RAP can be resolved at the time of COL issuance with the inclusion of an updated plant specific PRA. D-RAP is significantly different than operational matters being proposed for ITAAC. Stakeholders clearly see the difference.

5. In addition to satisfying all ITAAC, licensees must be in compliance with applicable NRC requirements prior to fuel load/operation, including applicable license conditions, technical specifications, regulations and orders.

We agree with NEI’s points on this matter. The argument in the SECY that NEI takes issue with is an example of how the SECY uses a false premise to support its recommendations. The staff incorrectly implies that the Commission will be powerless to prohibit operation of a plant with inadequate operational programs, unless the Commission approves programmatic ITAAC. This is an inaccurate impression to leave with the Commission.

6. SECY-02-0067 is not clear about the envisioned scope and purpose of programmatic ITAAC

SECY-02-0067 states: “The staff believes that NEI’s comment [about verification of compliance with operational program requirements] confuses the issue. In the narrow context of NEI’s position with respect to this aspect of ITAAC matters [NRC oversight of licensee performance], the issue is not NRC’s oversight function, but under what conditions a hearing will be granted after construction is completed.” This statement appears to indicate that the staff is really not very

concerned about the Commission's ability to review programmatic matters (despite invoking this concern as the basis for its position), but more concerned about providing what is effectively a second opportunity for intervention on COL matters after construction is complete.

The SECY states "ITAAC under consideration include the following..." (listing 14 potential areas), and later noting "The staff will review this historical record to determine what programs may need ITAAC under 10 CFR Part 52. The staff may identify additional programmatic ITAAC during this effort." It appears from these statements that the process of identifying the operational matters to be included under programmatic ITAAC remains an open issue with no definitive bounds. As such, the proposals described in the SECY do not reflect the fundamental tenets of Part 52: a more efficient, predictable and stable regulatory process.

We, like NEI, are concerned that the acceptance criteria for programmatic ITAAC could effectively impose additional operational requirements on Part 52 licensees. However, this would be contrary to a key ITAAC principle established in the SRM on SECY-90-377: "ITAAC should not be used to impose additional design requirements. ITAAC are to be sufficient to confirm that a plant is built and will operate in conformance with the design certification." While established in the context of DC, we believe it is clear that ITAAC should not be the vehicle for imposing new requirements of any kind.

7. This is not a safety issue.

We agree with all of NEI's points on this matter.

8. COL ITAAC must provide stability and certainty and a predictable transition to operation under Part 52

The EPACT requires the Commission to make its finding "...that there is reasonable assurance that the facility will be constructed and will operate in conformity with the license, the provisions of this Act, and the Commission's rules and regulations" – at the time it issues the COL, (thus providing stability and confidence in construction start), not after construction or fuel load.

SECY-02-0067 employs a flawed premise that the acceptability of operational programs cannot be resolved prior to construction, as well as a flawed premise that operational programs must be fully implemented at the time of COL in order to get credit for them at time of fuel load. The SECY states that "[Programmatic] ITAAC are needed to verify implementation of matters which could not be fully resolved prior to issuance of a COL." Later, it states "Applicants could develop and implement some operational programs before receiving a COL. In such a case, ITAAC may not be necessary." Few operational programs would be implemented prior to COL and construction, so this statement is not particularly helpful.

We believe these programmatic issues can be resolved prior to or during the COL proceedings, and that their implementation should be completed at the appropriate time during construction, prior to fuel load. To resolve operational issues prior to COL application, a group of utilities or NEI would need to submit standardized operational programs for review and approval. As discussed in the NEI letter, some individual applicants may prefer to model operational programs

after those already present at operating plants at an existing site. In either case, it is clear that every COL applicant will endeavor to gain NRC approval of operational programs prior to or during COL to add certainty to the process, before the expenditure of significant resources.

The SECY appears to show growing preferences for postponing regulatory decisions until construction is complete, and for avoiding opportunities to resolve issues generically. Both of these preferences contribute to regulatory uncertainty and lack of confidence by future applicants in a stable regulatory process. Delaying decisions that can be made earlier until construction is complete is counter to the principles of Part 52, and undermines industry's confidence in Part 52 as a more efficient and predictable regulatory process. Delaying opportunities to resolve issues generically impacts the industry's ability to achieve a high degree of standardization, and also contributes to regulatory instability by introducing greater likelihood for changing requirements for each subsequent applicant.

The SECY and the NEI letter both discuss the problems associated with making programmatic ITAAC sufficiently objective to avoid major uncertainty in making judgments after construction. The SECY states, "Although making ITAAC as objective as possible may be a goal, it is not a requirement. The staff tried to make ITAAC for the certified designs as self-evident and as objective as possible. The staff will do the same in developing ITAAC for a COL." We don't think this argument is convincing, because programmatic areas are inherently more subjective than design issues, making DC ITAAC a bad example to cite. Industry's experience with the more relevant historical example, Additional Applicable Regulations (AARs), gives industry little confidence programmatic ITAAC can be made objective. The staff struggled, without success, for four years to make AARs objective, prior to Commission disapproval of all AARs in Dec. 1996 (SRM on SECY-96-077).

The programmatic areas of concern to the staff are clearly appropriate for regulatory review and approval, and will be included in the COL application and review process. Each area is subject to ongoing NRC inspection and enforcement during operation, under the new oversight process. However, the staff is attempting to create an additional requirement, namely that these programs, once reviewed and approved during COL proceedings, need a special verification process beyond that provided in the oversight process. Using the existing oversight process would be more effective, and avoid the regulatory uncertainty inherent in programmatic ITAAC.

The COL should treat operational and programmatic matters with sufficient detail and finality so as to permit an applicant to demonstrate the adequate implementation of those programs prior to fuel load, using the existing oversight process. Operational programs should be developed and approved at COL so they bridge deliberately to that oversight process. Today, the Commission and the public can have high confidence that a plant verified to comply with its ITAAC, and going into operation under a much improved and effective safety focused oversight process, will operate safely.