



NUCLEAR ENERGY INSTITUTE

3/10/04  
69 FR 11464  
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May 27, 2004

Chief, Rules and Directives Branch  
Division of Administrative Services  
Office of Administration, Mail Stop T-6D59  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

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SUBJECT: *Federal Register* Notice 69 FR 11464, March 10, 2004, Workshop to Discuss Combined License Topic COL-10, 10 CFR Part 52, Subpart C, Emergency Planning Inspections, Tests, Analyses and Acceptance Criteria (ITAAC)

This letter provides industry comments, as requested in the subject *Federal Register* notice, on the NRC's draft Emergency Planning (EP) ITAAC document and the April 27 public workshop on that subject. The industry appreciates the NRC staff's efforts in engaging the industry, state and local officials, and the public on the development of EP ITAAC. We agree that ITAAC are central to assuring the predictability and workability of the 10 CFR Part 52 licensing process. We look forward to continuing the interactions on EP ITAAC to develop a practical set of ITAAC that are consistent with the concepts established in Part 52 and previous ITAAC development activities.

In regard to the NRC's initial draft EP ITAAC proposal, it does not comport with the intent of Part 52 and it is inconsistent with the ITAAC principles established during the intensive ITAAC interactions on the three designs that have been certified by the NRC. If implemented, the proposal would unnecessarily burden and complicate NRC and industry inspection, testing and verification activities as personnel grapple with well over 100 ITAAC that address many less significant EP implementation elements and details that are not necessary to support a reasonable assurance finding in a combined license.

One of the main aims of 10 CFR Part 52 is to provide for a more predictable and stable licensing process. Neither the 1992 Energy Policy Act nor Part 52 make any

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distinction between design certification ITAAC, EP ITAAC or site specific ITAAC. Accordingly, EP ITAAC should be governed by the same principles as the other ITAAC elements in Part 52. Yet, the NRC EP ITAAC proposal is not based on the ITAAC development principles. It appears to be based on the premise that ITAAC merely duplicate the implementation criteria in NUREG-0654, Rev. 1—a premise that is contrary to previous ITAAC development efforts and one that casts doubt on the predictability of the Part 52 process. In addition, the proposal includes ITAAC on offsite EP elements that are not the licensee's responsibility to perform or NRC's to verify, contrary to the provisions in Part 52 and the 1992 Energy Policy Act.

As discussed further in the enclosure, the intent of ITAAC, including EP ITAAC, is not to be as broad as possible and cover all aspects of EP implementation and inspections. Rather, ITAAC are to focus on the most significant EP implementation elements, satisfaction of which provide reasonable assurance – in conjunction with NRC regulations, oversight and the regulatory process as a whole – of adequate protection of public health and safety.

More detailed comments, with a list of the ITAAC principles established during the design certification ITAAC development are provided in the enclosure.

In the April 27 workshop, the industry recommended a distinctly different approach that is more consistent with the ITAAC development principles, while recognizing and preserving the roles of the Federal Emergency Management Agency (FEMA) and of state and local agencies with respect to EP activities. The approach flows from three of the key ITAAC principles:

- ITAAC correspond to top-level, salient requirements, i.e., significant design or performance criteria.
- ITAAC are performed by the licensee and verified by the NRC staff.
- ITAAC do not substitute for regulations or normal inspection processes; they supplement the regulations and normal inspection activities.

Accordingly, EP ITAAC should focus on the salient EP requirements. The important and risk-significant standards of an EP program have been determined through the NRC's Reactor Oversight Program's Significance Determination Process. These risk-significant EP standards should be the focus of the EP ITAAC. In addition, in accordance with the 1992 Energy Policy Act and Part 52, ITAAC should be developed only for those elements that will be performed by licensee or licensee designated persons. ITAAC should not be developed for activities that will be performed by state, local agencies, or other non-licensee staff. This is consistent

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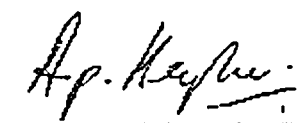
with comments made at the workshop by state and local officials, who questioned the need for ITAAC on state and local agency activities.

We emphasize that a licensee must comply with FEMA and NRC requirements, including the EP requirements in 10 CFR 50.47 and Appendix E to Part 50, no matter the scope of EP ITAAC. As such, we expect that NRC and FEMA staff will perform the standard inspections and evaluations to verify compliance with EP requirements, in addition to verifying that EP ITAAC have been satisfied.

We applaud the NRC decision at the April 27 workshop to hold additional EP ITAAC discussions as a means of arriving at a more focused and workable set of EP ITAAC based on actual EP plans before the end of 2004. In this regard, we are in the process of developing a set of site-specific EP ITAAC based on the principles and considerations described in this letter. Going forward, we envision a set of focused interactions similar to those in the 1990s that led to objective and practical ITAAC being developed for design certification. Also, we expect that these interactions would include discussion of the EP information expected to be provided in COL applications.

If there are any questions regarding the industry approach to EP ITAAC or the comments in the enclosure, please contact me (202-739-8094; [aph@nei.org](mailto:aph@nei.org)) or Russ Bell (202-739-8087; [rjb@nei.org](mailto:rjb@nei.org)).

Sincerely,

A handwritten signature in black ink, appearing to read "A.P. Heymer", enclosed in a rectangular box.

Adrian P. Heymer

Enclosure

c: James E. Dyer, NRC/NRR  
R. William Borchardt, NRC/NRR  
James E. Lyons, NRC/NRR  
Joseph M. Sebrosky, NRC/NRR  
Nader L. Mamish, NRC/NRR

## Enclosure to NEI's May 27, 2004 Comments on EP ITAAC Workshop and EP ITAAC Proposals

### Part 1 – Industry Proposed Approach to EP ITAAC

### Part 2 – Specific Comments on the NRC Staff's Jan. 29 EP ITAAC Proposal and April 27 Workshop Discussions

#### Part 1 – Industry Proposed Approach to EP ITAAC

The Part 52 process has three subparts: Early Site Permits, Design Certification and Combined Licenses. These subparts have common concepts and principles. From a regulatory predictability and stability perspective, it is important for these common concepts and principles to be maintained during the reviews, issuance and implementation of the Part 52 subparts. ITAAC requirements are in both the design certification and in combined license subparts: 10 CFR 52.47, 52.79, 52.99 and 52.103.

Neither the 1992 Energy Policy Act nor Part 52 make any distinction between design certification ITAAC, EP ITAAC or site specific ITAAC. Accordingly, EP ITAAC should be governed by the same principles as the other ITAAC elements in Part 52. As a result, we disagree with the NRC staff assertion in the April 27 workshop that the application of principles underpinning design certification ITAAC to the development of EP ITAAC is inappropriate. (See transcript at pp. 48-49).

#### ITAAC Principles

As input to the staff's workshop preparations, we provided the attached set of ITAAC basic principles, which are derived from the regulations and our prior experience with the NRC on design certification ITAAC. Our proposed approach to EP ITAAC is based on these principles. In particular, the industry approach and differences from that proposed by the NRC staff flow from the following three key principles:

1. *ITAAC correspond to top-level, salient requirements, i.e., significant design or performance criteria.*

Adherence to this principle is important to ensure that the set of EP ITAAC focuses on the most significant EP elements. ITAAC are to be established on top-level, salient requirements, verification of which provides reasonable assurance – in conjunction with 10 CFR Part 50, Appendix B, other license requirements and the regulatory process as a whole – that a facility has been constructed and will be operated in conformance with the license, the AEA

and NRC regulations.

Addressing less significant EP implementation elements in ITAAC, or addressing essentially all EP elements, would likely lead to ITAAC that include EP details that are subject to change and thus not amenable to treatment in ITAAC due to the need to request a license amendment for post-COL ITAAC changes. The level of detail that could be subject to change was an important consideration in the development of design certification ITAAC.

Moreover, as identified in our September 15, 2003, letter on programmatic ITAAC, the scope of the post-construction hearing corresponds to the scope of ITAAC. The industry fully accepts the litigation risk associated with ITAAC that are necessary for a reasonable assurance finding. Prospective applicants will weigh this risk and many other factors in making their business decision on a new nuclear plant project. ITAAC should not be established for less significant EP items that are not necessary to make a reasonable assurance finding. To do so would impose additional and unnecessary regulatory burden on the licensee.

2. *ITAAC are performed by the licensee and verified by the NRC staff.*

This principle is derived from the language of Section 185(b) of the Atomic Energy Act (as amended by the Energy Policy Act) and 10 CFR 52.79(c), which explicitly state that the "licensee shall perform" the ITAAC, "including those applicable to emergency planning." This principle has important implications for EP ITAAC because both the licensee and state and local government agencies have specific responsibilities under the regulations for meeting EP requirements.

The licensee is responsible for performing on-site activities and establishing interfaces with offsite emergency response organizations. As such it is appropriate to establish ITAAC on the significant aspects of these licensee responsibilities. Conversely, it would be inappropriate for ITAAC to encompass offsite EP requirements based on statements in the Act and in Part 52. This is because compliance with offsite EP requirements is demonstrated by state and local emergency response organizations, and not the licensee.

The adequacy of offsite emergency plans and responses will be determined by the Federal Emergency Management Agency (FEMA), consistent with existing requirements and past practice under 10 CFR Part 50, i.e., without ITAAC. If FEMA identifies a problem in the implementation of the offsite emergency plans, FEMA will inform the NRC, and if the problem is not corrected, the NRC can take enforcement action, including, as appropriate, issuance of an order preventing fuel load or operation.

After listening to discussion of the industry approach to EP ITAAC at the April 27 workshop, officials from the states of Virginia and Illinois expressed no concern about a lack of ITAAC on offsite EP elements. Indeed, the representative from the Illinois Emergency Management Agency expressed concerns regarding the staff's proposal for offsite EP ITAAC and suggested that past practice under Part 50 regarding FEMA review of offsite activities (without ITAAC) is sufficient (See transcript pp. 86-87).

3. *ITAAC do not substitute for regulations or normal inspection processes; they supplement the regulations and normal inspection activities.*

FEMA and NRC requirements, including EP requirements in 10 CFR 50.47 and Appendix E, are applicable and must be met by plants licensed under Part 52. All existing EP requirements must be met. NRC and FEMA will perform their normal inspections and evaluations to verify compliance and assure adequate protection of the public health and safety. The EP ITAAC scoping issue relates the inspection, tests and analyses that are required in addition to the normal inspection actions to support licensing under Part 52.

### Identifying Significant EP Elements

At the workshop, the NRC staff explained that its proposed EP ITAAC were developed by taking each of the criteria in NUREG-0654 and developing an ITAAC for each criterion that could not be satisfied at the time of COL issuance. Such an approach resulted in ITAAC for matters that are not material for a reasonable assurance finding. This approach is inconsistent with the established ITAAC principles.

For design certification, the plant designers, potential licensees and NRC staff expended substantial resources identifying those matters that should be elevated to the status of ITAAC based upon their safety significance. These top-level, salient design requirements and performance standards for the systems, structures and components (SSCs) were highlighted as "Tier 1" information for the standard designs under review. This effort was critically important for two reasons. First, the resultant so-called "Tier 1" design became that which is certified by the NRC and subject to stringent change controls and backfit protection. Second, the scope of top-level, Tier 1 design information determined the scope of corresponding ITAAC that were established for each standard design.

For EP, the top-level, salient requirements and performance standards are those that relate to the most important (risk-significant) EP standards. These important standards have been identified through implementing the NRC's new risk-informed Reactor Oversight Program. In this program the NRC evaluated the 16 emergency planning standards in 10 CFR 50.47(b) to determine the risk-significant EP

elements. This effort is analogous to the earlier efforts to define the set of Tier 1 information for design certification. The method to identify the most significant EP program elements for ITAAC purposes is appropriate and consistent with the increased NRC use of risk insights to guide safety regulation. Also, risk insights were used in the deliberations on the design certifications to determine the need for specific Tier 1 requirements and ITAAC on key SSCs.

As a result of the NRC evaluation of EP requirements, which included substantial stakeholder participation, four risk-significant planning standards were identified in NRC in Inspection Manual Chapter IMC-0609, Appendix B:

- §50.47(b)(4) – Emergency classification system
- §50.47(b)(5) – Public alert and notification system
- §50.47(b)(9) – Accident assessment
- §50.47(b)(10) – Protective response

The industry believes that the EP ITAAC should focus on these risk-significant planning standards.

Other EP planning standards and related regulations are of relatively lesser safety significance, as confirmed by IMC-0609, and are not material to a reasonable assurance finding. For example, 10 CFR 50.47(b)(7) requires the identification of principal points of contact with the news media. While such information is useful and must be established to comply with the regulations, adequate emergency planning can be accomplished without such information. Similarly, 10 CFR 50.47(b)(14) requires periodic exercises. While such exercises will be conducted per the regulations, the exercise itself should not be the subject of an ITAAC. Instead, salient features of implementation of the EP plan should be the subject of the ITAAC; these features in turn may be demonstrated by the exercise or other means.

There is no requirement that every provision in NRC's regulations have an ITAAC. For example, the design certification ITAAC did not address various provisions in the General Design Criteria (GDC) in Appendix A to Part 50 that require that certain systems be designed to permit periodic inspections. Such provisions were not deemed sufficiently significant to warrant coverage by ITAAC. Similarly, not every provision in Section III of the ASME Code has an ITAAC, even though the Code is incorporated by reference in 10 CFR 50.55a.

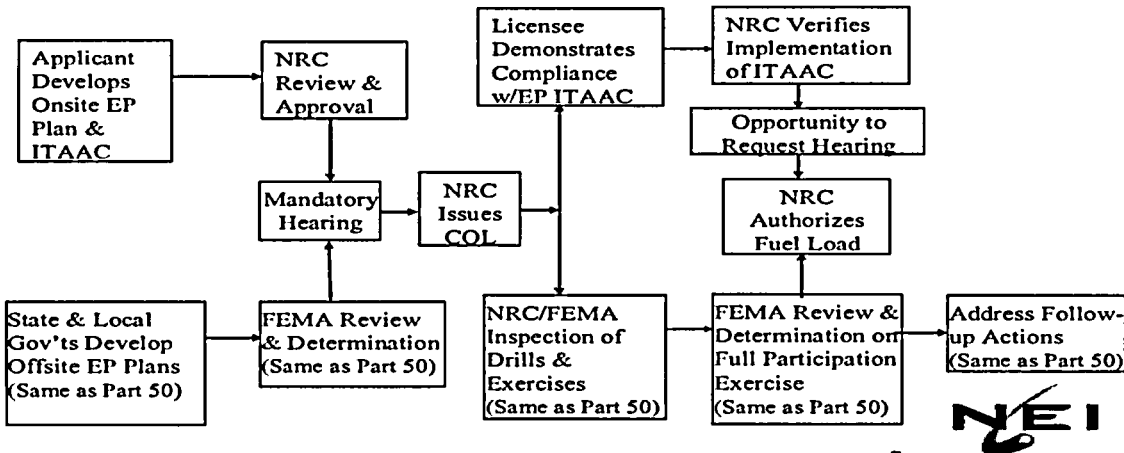
### Emergency Planning Process under Part 52

At the April 27 workshop, the industry presented Figure 1 to underscore certain key points. First, Figure 1 depicts that for plants licensed under Part 52; FEMA will review and make determinations on development and implementation of offsite emergency response plans by state and local organizations in the same way as it

has for plants licensed under Part 50. NRC will do likewise for the on-site EP elements by the licensee and will consider the offsite determinations by FEMA when making overall EP determinations required prior to COL issuance and prior to fuel load.



**Figure 1: PART 52 PROCESS FOR EMERGENCY PLANNING**



Note – A person may raise a concern any time after the COL is issued under normal NRC procedures.

In addition to the normal inspections, evaluations and determinations by FEMA and the NRC, Part 52 licensees must also satisfy EP ITAAC established in the license, and the NRC staff must verify prior to fuel load that all ITAAC have been satisfactorily completed. As shown in Figure 1 and consistent with the principles outlined above, EP ITAAC should focus solely on significant on-site EP elements and offsite interfaces.

There is no change in the roles and responsibilities of FEMA or of state and local emergency response organizations due to the additional NRC requirement for EP ITAAC under the Part 52 licensing process. Moreover, ITAAC should cause no change in the processes or actions of Federal, state and local agencies related to offsite EP. Structured properly, separate, parallel activities of NRC and the licensee related to ITAAC should be essentially invisible to Federal, state and local agencies.

A second key point of the figure is that Part 52 provides for more timely and meaningful public consideration and participation in the licensing process regarding proposed emergency plans. Complete on-site and offsite emergency plans are developed by the licensee and state and local governments, respectively, and are subject to review in a mandatory hearing prior to license issuance. This is the public's principal opportunity to participate in decision-making concerning the



adequacy of proposed emergency plans, and it comes at a time when questions and concerns can most efficiently and effectively be addressed – before the plant is built. One of the objectives of the Part 52 combined license (COL) proceeding is to resolve all issues except those that by their nature cannot be resolved until later, such as the adequacy of construction or, for EP, the ability to contact offsite emergency responders as required by plans approved in the license.<sup>1</sup> The Commission has indicated that the scope of issues not resolved at COL and left to ITAAC is to be very narrow.

Figure 1 also highlights that FEMA will provide its determinations to NRC as it always has on the adequacy of offsite emergency plans (prior to COL issuance) and on the full participation exercise (prior to fuel load authorization).

We agree with the views expressed by the NRC at the April 27 workshop that (1) NRC could make its reasonable assurance finding with respect to offsite EP prior to issuance of the COL (See transcript at p. 20); and (2) for an existing reactor site, proposed offsite emergency plans could be tested as part of the biennial exercise required for the existing plant (See transcript at p. 27).

Acceptance criteria for certain EP ITAAC will likely be shown to be met during conduct of drills and exercises, including the required full participation exercise. Figure 1 shows that results from NRC and FEMA inspections of drills and exercises may provide part of the basis for licensee ITAAC conclusions that EP ITAAC have been met. For example, FEMA may provide input regarding a test of the licensee's interfaces with offsite emergency responders.

## **Part 2 - Specific Comments on the NRC Staff's Jan. 29 EP ITAAC Proposal and April 27 Workshop Discussions**

The NRC staff's proposal is inconsistent with established ITAAC principles. As discussed during the April 27 workshop, the industry's concerns fall into two broad areas. First, EP ITAAC need not and should not address offsite EP activities that are the responsibility of others to perform. And second, the EP ITAAC proposed by the staff include implementation details and less significant elements that are inappropriate for ITAAC.

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<sup>1</sup> As noted during the April 27 NRC workshop, both the industry and the NRC staff envision an EP ITAAC to verify the licensee's capability to notify offsite agencies within 15 minutes after declaring an emergency.

Comment #1 – EP ITAAC need not and should not address offsite EP activities that are the responsibility of others to perform.

The EP ITAAC proposed by the NRC staff include a large number of verifications and acceptance criteria related to offsite emergency response elements. These ITAAC call for state and local organizations to ensure that specific offsite emergency response capabilities exist. There are several problems with this

As described above, it is a basic principle of the ITAAC implementation process that ITAAC are performed by the licensee and verified by the NRC. This principle derives from the 1992 Energy Policy Act, Part 52 and extensive discussions with the NRC of ITAAC implementation issues over the past several years. In particular, the Energy Policy Act, which is now codified in Section 185(b) of the Atomic Energy Act, states “The Commission shall identify within the combined license the inspections, tests, and analyses, *including those applicable to emergency planning, that the license shall perform . . .*” (Emphasis added). It would be inconsistent with the plain language of the Energy Policy Act for entities not under the control of the licensee, such as state and local governments, to perform ITAAC.

Furthermore, it would be inappropriate to craft ITAAC that would make licensees responsible to ensure that adequate implementation of offsite EP plans. Licensees have no legal authority to inspect or oversee EP activities by state and local governments, and it is extremely unlikely that state and local governments would voluntarily authorize a licensee to oversee governmental activities.

In addition, the staff proposal for ITAAC on offsite elements calls for verification by FEMA that acceptance criteria associated with offsite EP elements are met. This is also inconsistent with existing regulations, 10 CFR 52.99, which provide that the NRC shall ensure that ITAAC are satisfactorily completed.

During the April 27 workshop, the point was made by Office of General Counsel (OGC) staff that the regulations do not explicitly preclude performance of inspections, test and analyses by other than the licensee, or verification that acceptance criteria are met by other than the NRC (See transcript at pp 122-125). However, the language and intent of the EPACT are clear - - “the *licensee shall perform*” the ITAAC. Given this clear and unambiguous instruction in the EPACT, we see no room for interpretation that third parties such as state and local governments may perform the ITAAC.

There are also important practical reasons why ITAAC on offsite EP elements would be unworkable apart from the question of what the regulations may or may not allow. As noted during the workshop, it has not in the past been a role of the licensee to inspect or evaluate the offsite emergency response of state and local

organizations, and licensees do not have the resources or expertise to do so. Indeed, under the NRC-FEMA Memorandum of Understanding (MOU), it is clearly and exclusively FEMA's responsibility to objectively assess and inform the NRC regarding the adequacy of offsite emergency preparedness.

The staff proposal would result in redundant assessments of offsite EP elements being provided to the NRC, one from the licensee related to ITAAC completion and another from FEMA under the MOU. It would fundamentally alter the relationship and roles of the licensee and state and local agencies. Only FEMA's objective assessments and determinations are necessary.

The situation of having offsite entities perform ITAAC would be even more problematic because the ITAAC determination letters from the licensee to the NRC must be provided under oath and affirmation. This would require an officer of the licensee to attest to the satisfactory completion of offsite EP activities that are the responsibility of organizations and individuals not under his or her control. Having done so, the licensee would be responsible for implementing controls over those offsite EP elements to assure that the completed status of EP ITAAC is not affected by other activities. Clearly, such controls are beyond the capability and authority of the licensee, and we expect that licensees will not accept responsibility for the completion of offsite ITAAC and the maintenance of offsite EP elements.

Lastly, as indicated earlier, it is simply unnecessary to establish ITAAC on offsite EP elements. Such ITAAC are not required by statute or regulation, and are not needed as a practical matter to assure compliance with EP requirements or the adequate protection of public health and safety. Consistent with current practice under the MOU, the NRC should rely on FEMA to evaluate and determine the adequacy of offsite EP elements as it has in the past (i.e., without ITAAC). The NRC can take enforcement based upon FEMA's findings, including if warranted issuance of an order preventing fuel load and operation.

Comment #2 – The EP ITAAC proposed by the staff include implementation details and less significant elements that are inappropriate for ITAAC.

As discussed earlier, it is an important principle of ITAAC that ITAAC focus on top-level, salient requirements, i.e., significant design or performance criteria. This principle applies equally to design-related and non-design ITAAC.

Contrary to this principle, the NRC staff's January 29 proposal includes ITAAC covering 15 EP planning standards that the staff considers applicable to EP ITAAC,<sup>2</sup> without regard for NRC guidance that concludes that certain planning standards are more safety significant than others. Moreover, within each of the 15 planning

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<sup>2</sup> The 16<sup>th</sup> EP planning standard, pertaining to plans for recovery and reentry, was determined by the staff to not be applicable to EP ITAAC.

standard areas, the staff has proposed an extraordinarily detailed array of ITAAC, including many related to offsite activities (discussed above) and many that are of relatively lesser importance and/or subject to change, and thus not appropriate for ITAAC.

For example, a number of the staff's proposed EP ITAAC pertain to the content of procedures (e.g., ITAAC ## E.2, I.1, and I.10). However, it has been established that the content of EP procedures is not material to a reasonable assurance finding and therefore is not an appropriate topic for consideration in licensing hearings. Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), ASLB-732, 17 NRC 1076, 1106-07 (1983). Therefore, it follows that it is neither necessary nor appropriate to have ITAAC on the content of EP procedures.

At the April 27 workshop, the staff acknowledged that it did not apply a significance test to candidate EP ITAAC and that its proposal reflects the broadest scope of ITAAC (See transcript at p. 145). As a result, the staff proposal includes 116 distinct EP ITAAC. For comparison, that is approximately five times the number of ITAAC established for key AP600 safety systems such as Passive Core Cooling, Passive Containment Cooling and Residual Heat Removal.

As described at the workshop, the EP ITAAC proposed by the staff correspond to the 116 review criteria from NUREG-0654, Revision 1, that it judged would not be resolved based on information expected to be provided with a COL application, assuming a "greenfield" site.<sup>3</sup> Thus the EP ITAAC proposed by the staff essentially reflect a translation into ITAAC of the NRC's principal review guidance related to EP. This approach to development of EP ITAAC for COL is a major departure from past practice. For design certification, the analog would have been to take the existing SRP for the various SSCs and translate those review criteria into ITAAC. Had this approach been used, it would have led to the same problems described above regarding the EP ITAAC proposed by the staff. Rather, as described in draft SRP 14.3, Appendix A, design aspects and level of detail to be addressed in Tier 1, and thus covered by ITAAC, were determined by engineering judgment based primarily on safety significance, critical operating parameters and the likelihood that design information would change. The SRP was just one of several sources of information that were considered in making these judgments.

Thus, design certification ITAAC were developed by determining which provisions in Tier 2 were sufficiently significant to elevate to the status of ITAAC. This stands in

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<sup>3</sup> The staff acknowledged that if a COL application was for one or more new units on an existing nuclear plant site, and referenced the existing emergency plans, many of the 116 EP ITAAC would be unnecessary, especially those pertaining to offsite EP elements. There was general agreement that most aspects offsite EP would not be affected by the addition of one or more new units on an existing site (See transcript at pp. 100-101).

stark contrast to the translation into ITAAC of all EP implementation elements from NUREG-0654, Revision 1, as proposed by the staff (See transcript at pp. 20, 24).

For design certification, top level, salient aspects covered by ITAAC on SSCs include functional arrangement, fluid system piping integrity, functional performance testing, environmental and seismic qualification, and several other key design and performance criteria. Numerous other design-related aspects, while important to the overall functionality of the SSCs over their installed life, were nonetheless determined not to rise to the level of ITAAC. These include concrete and rebar specifications, conduit and cable tray installation, subcomponent materials (e.g., elastomers), receipt inspection and warehousing, etc. Proper implementation of these and other secondary design issues is assured by the licensee's quality assurance program and normal NRC oversight thereof.

As discussed at the workshop, in order to arrive at an appropriate and workable set of EP ITAAC, a similar significance standard needs to be applied to EP planning standards and implementation elements related to on-site plans and offsite interfaces. We appreciate that during the workshop, the staff indicated willingness to consider applying such a standard (See transcript at pp. 143-145). Absent such a standard, the NRC's EP review guidance would be translated into ITAAC, essentially transforming the ITAAC into another, wholly redundant checklist of review guidance on EP implementation issues. This purpose is already well-served by NUREG-0654, Revision 1, and, is not the purpose of ITAAC.

### **Comment on the Required NRC Findings for COL and Fuel Load**

At the April 27 workshop the staff discussed that "ITAAC allow for the making of a predictive regulatory finding of reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency" (See transcript at pp. 18-20). The staff also stated that a COL is "a combined construction permit and *conditional*<sup>4</sup> operating license. The ITAAC are the conditions" (Emphasis added – See transcript at p.14).

These statements suggest that the staff views ITAAC as the sole basis for the predictive reasonable assurance finding at COL and the complete set of conditions that must be met prior to operation. Based on this view, it is not surprising that the staff has proposed a comprehensive set of EP ITAAC, rather than a set focused appropriately on significant EP implementation elements.

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<sup>4</sup> Historically, COL has stood for "combined construction permit and operating license;" however in recent workshops related to new plants, the staff has added the word "conditional." All operating licenses have conditions, so the addition of the word "conditional" is unnecessary and misleading and should be dropped.

In fact, ITAAC are not the sole basis for the predictive reasonable assurance finding at COL, nor are they the only conditions that must be met for fuel load. The required NRC findings for COL and fuel load will be based – in part – on required compliance with ITAAC, but also on compliance with 10 CFR Part 50, Appendix B, other license requirements and conditions, and a conclusion that the regulatory process as a whole will provide reasonable assurance of adequate protection of the public health and safety. In the case of EP, the regulatory process as a whole includes FEMA requirements related to assuring the adequacy of offsite EP elements.

## ITAAC Principles

1. ITAAC Definition and Purpose
  - 1.1 ITAAC are inspections, tests and analyses which are necessary and sufficient to provide reasonable assurance that 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.
  - 1.2 ITAAC are used to verify that an as-built facility conforms to the approved plant design and applicable requirements
  - 1.3 ITAAC do not substitute for regulations or normal inspection processes; they supplement the regulations and the inspection processes.
2. ITAAC Implementation
  - 2.1 ITAAC are performed by the licensee and verified by the NRC staff
  - 2.2 ITAAC must be completed before fuel load
  - 2.3 As a minimum, a license amendment is required to change an ITAAC.
3. ITAAC Scope and Content
  - 3.1 A COL must contain ITAAC on 1) nuclear island and BOP SSCs (may be part of a standard design); 2) site-specific SSCs; and 3) emergency planning
  - 3.2 ITAAC correspond to top-level, salient requirements, i.e., significant design or performance criteria.
  - 3.3 The scope of ITAAC reflects consideration of risk insights and assumptions from the PRA
  - 3.4 COL ITAAC must include ITAAC contained in any referenced design certification that are not completed and verified as part of the COL proceeding
  - 3.5 ITAAC should be objective and measurable
  - 3.6 The level of detail for ITAAC should be limited in areas where information is subject to change
  - 3.7 ITAAC are not required on elements that can be completed and verified as part of the COL proceedings