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DATE OF MEETING
06/25/2002

The attached document(s), which was/were handed out in this meeting, is/are to be placed in the public domain as soon as possible. The minutes of the meeting will be issued in the near future. Following are administrative details regarding this meeting:

Docket Number(s)	Project Number 689
Plant/Facility Name	Nuclear Energy Institute
TAC Number(s) (if available)	
Reference Meeting Notice	June 13, 2002
Purpose of Meeting (copy from meeting notice)	Meet with NEI to discuss issues associated with inspections, tests, analyses, and acceptance criteria (ITAAC) implementation.

NAME OF PERSON WHO ISSUED MEETING NOTICE
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**Meeting with NEI to Discuss Inspections, Tests, Analyses
and Acceptance Criteria (ITAAC) Implementation
June 25, 2002
Agenda**

1:30 pm	Introductory Comments	NRC/NEI
1:40 pm	Discussion of selected items from NRC June 4, 2002 letter regarding ITAAC implementation (see below)	NEI/NRC
1:40 - 3:30 pm	Public will be given the opportunity to comment after the end of one discussion topic and before proceeding to the next topic	
3:30 pm	Discussion of next steps	NEI/NRC
3:45 pm	Summary	
4:00 pm	Adjourn	

NEI Proposed Discussion Topics:

1. 52.99/FRN process (NRC Comments 2, 5, 7, 21, 22 from June 4, 2002, letter)
 1. Apparent staff distinction between 52.99/FRN process and independent NRC assessment of ITAAC completion
 2. Appropriate finality of ITAAC sign-offs by NRC
 3. "Higher standard" for ITAAC sign-offs vs. routine inspection reports
 4. Nature of staff's post-construction recommendation to the Commission on the status of ITAAC completion
2. Sign as You Go (SAYGO) Process (NRC Comments 3, 4, 12-16)
 - Objectives of SAYGO process (NRC and industry)
 - Appropriate "finality" of SAYGO sign-offs by NRC
3. Engineering Design Verification (NRC Comments 17-18)
 - Defining an early EDV milestone
 - Difference between EDV and ITAAC/DAC
4. Transition to operation (NRC Comments 30, 32)
 - License conditions on power operations
5. Other clarifications/discussion (time permitting)
 - 30-day target for completion of NRC ITAAC verification process (NRC Comment 23)
 - "It will be incumbent on the licensee to demonstrate that such staff identified deficiencies do not invalidate an ITAAC" (NRC Comment 24)
 - Materiality of ASME welder qualification (NRC Comment 29)

June 25, 2002

**DRAFT Table of Industry Responses to June 4 NRC Comments on NEI's Nov. 20, 2001, Draft White Paper:
ITAAC Implementation and Transition to Full Power Operations Under Part 52**

PITAAC	1, 6, 11, 31
52.99/FRN process.	2, 5, 7, 21, 22, 28
SAYGO	3, 4, 12, 13, 14, 15, 16
EDV	17, 18
Transition to operation	30, 32
Other	8, 9, 10, 19, 20, 23, 24, 25, 26, 27, 29, 33

June 4 NRC Comment	Industry Response
<p><u>General Comments</u></p> <p>1. NEI's draft white paper is inconsistent with the staff's recommended position regarding programmatic ITAAC. The staff recommended in SECY-02-0067, "Inspections, Tests, Analyses, and Acceptance Criteria for Operational Programs (Programmatic ITAAC)," that combined licenses (COLs) for a nuclear power plant submitted in accordance with the requirements of Title 10 of the <i>Code of Federal Regulations</i> (10 CFR) Part 52, Subpart C contain ITAAC for operational programs required by regulations such as training and emergency planning (so-called programmatic ITAAC). The staff awaits the Commission's decision in this area and notes that it will have an affect on revising the construction inspection program.</p>	<p>This is a policy issues that significantly affects the ITAAC implementation process and transition to operation under Part 52.</p> <p>Commission policy decision pending</p>

June 4 NRC Comment	Industry Response
<p>2. The staff does not agree with NEI's interpretation of 10 CFR 52.99. Specifically, the staff does not believe that 10 CFR 52.99 requires it to make separate ITAAC findings and publish these in the <i>Federal Register</i>. The staff believes that the language of §52.99 should be interpreted as requiring the NRC to publish notices in the <i>Federal Register</i> of the licensee's claim that certain inspections, tests, or analyses have been completed and the acceptance criteria have been met. The NRC staff will perform periodic inspections during construction of the facility and implementation of the licensee's operational programs, issue reports on these inspections, and at the conclusion of construction, the staff will make a recommendation to the Commission on its assessment of the licensee's completion of ITAAC. If the Commission determines that all of the acceptance criteria in the ITAAC for the combined license have been met, it will make the finding required under 10 CFR 52.103(g). Notwithstanding the above, the staff does believe in making interim conclusions regarding ITAAC and processes fundamental to ITAAC as discussed in comment 3 below.</p>	<p>The staff interpretation would reverse a previous Commission decision and significantly affect the ITAAC implementation process. Essential to the predictability and workability of Part 52 is the longstanding interpretation that there would be incremental ITAAC sign-offs by the NRC staff as ITAAC are completed, followed by opportunity for hearing on the entire set of completed ITAAC and the 52.103(g) finding by the Commission. Specific comments:</p> <ul style="list-style-type: none">• We strongly believe the requirements of 52.99 should be affirmed, not re-interpreted. Specifically, that the NRC shall "find [conclude] that prescribed acceptance criteria are met" and at appropriate intervals "publish [FRNs] of the successful completion of ITA."• Last sentence is inconsistent with rest of comment – Does NRC staff intend that its ITAAC conclusions be separate from the 52.99/FRN process? If so, we do not agree with the proposal for separate processes.• The word "interim" is inconsistent with the intent of 52.99 to provide staff-level (as opposed to agency/Commission-level) sign-off of successfully completed ITAAC.• The word "interim" is unnecessary in the sense that significant new information can always provide basis to reconsider previous regulatory actions, including ITAAC conclusions.• The 52.99 process should uphold the intent to complete and sign-off ITAAC incrementally, building towards completing the set of all ITAAC. The staff recommendation to the Commission (after construction is essentially complete) should be mechanistic – that ITAAC have been satisfactorily completed, or will be before fuel load. The staff recommendation will precipitate the 52.103 process, as described in Section 6 of the white paper.• The reference to Comment 3 in the last sentence suggests that the staff does not intend to make conclusions, interim or otherwise, as individual or groups of ITAAC are completed by the licensee. Only SAYGO conclusions. Is this true?

June 4 NRC Comment	Industry Response
<p>3. The staff is in general agreement with some of NEI's philosophy regarding the sign-as-you-go (SAYGO) process. As part of the construction inspection program, the staff envisions a system of early assessment of licensee construction processes embodied in this process. The SAYGO process is discussed in the "Draft Report on the Revised Construction Inspection Program," dated October 1996. In this report the staff notes that SAYGO is a structured method to establish that regulatory commitments have been met, to enhance the stability and predictability of the licensing process, and to identify and resolve construction problems early in the project. SAYGO would be a phased verification program in which the licensee certifies to the NRC that certain aspects of construction have been completed adequately, and the NRC staff would perform direct inspections to verify that the certification is accurate. The draft construction inspection program lists candidate areas for the SAYGO process such as structural concrete, concrete expansion anchors, safety related piping, and welding. The staff believes that the results of these direct inspections would be fundamental to the staff's later ITAAC determinations.</p> <p>The staff's inspection activity would be performed in parallel with the licensee's construction activities. The staff's assessment of the construction activities would be provided publicly throughout construction. The staff is considering methods such as sharing the information in a web-based platform, but has not yet decided the best method(s) to perform this public notification. The staff believes that this approach will benefit all of its stakeholders, because the staff's assessment of the construction activities will be known throughout construction. NEI's draft white paper incorporates some of this SAYGO philosophy.</p>	<p>Further discussion needed.</p> <p>See specific comments 12-16.</p>

June 4 NRC Comment	Industry Response
<p>4. The staff disagrees with NEI's white paper regarding the finality of interim staff conclusions made in accordance with the SAYGO process. As discussed in the draft revision to the construction inspection program the staff is in the process of developing management tools such as SAYGO and significant inspection conclusions (the term "finding" was used in the draft construction inspection report). While not a part of the Section 52.99 process, SAYGO and significant inspection conclusions would be utilized as mechanisms for developing broad staff conclusions regarding significant construction activities or processes such as reinforced concrete, cable tray and conduit installations, etc. Such conclusions would be documented (e.g., inspection reports) after sufficient work had been completed to permit judgement of underlying processes but before the work activity had been completed. However, it must be emphasized that such conclusions made early in the inspection program would not be the NRC's final position, since the inspected activity and the NRC's inspections of the activity would continue. The issuance of a favorable significant inspection conclusion would allow the NRC to reduce inspections in the area where such a conclusion was made, but maintenance-type inspections would continue. If a problem were identified during these maintenance-type inspections it could cause the NRC to revisit the previous SAYGO significant conclusion. The NRC would be responsible for determining the appropriate actions in this case. Options include, but are not limited to, increasing NRC inspections in this area, taking enforcement action, and issuing a public notice that the previous SAYGO determination is no longer valid and a new SAYGO determination will need to be made.</p>	

June 4 NRC Comment	Industry Response
<p>5. The staff disagrees with the way NEI characterizes the finality of the staff's interim conclusions regarding ITAAC. Specifically, on page 21 of the white paper NEI states that "absent new information, the staff's §52.99 finding will be binding, and would not be reconsidered by the NRC staff." NEI implies that the staff's interim conclusions would be held to a higher standard than conclusions the staff makes routinely in its inspection program and reports. The staff believes that the interim conclusions for ITAAC have the same standing as inspection report conclusions and SAYGO conclusions. Both of these conclusions are based on audit-type inspections. If new information is identified that casts doubt on an NRC previous interim conclusion regarding ITAAC, NRC staff would be responsible for determining the appropriate actions. Similar to problems identified in the SAYGO process, NRC options include, but are not limited to, increasing NRC inspections in this area, taking enforcement action, and issuing a public notice that the previous NRC ITAAC interim conclusion is no longer valid and a new ITAAC interim conclusion will need to be made. NRC management will be responsible for putting in place the proper controls over when ITAAC interim conclusions are made and under what circumstances they will be revisited.</p>	<p>NRC staff ITAAC sign-offs will absolutely be held to a higher standard than conclusions in routine inspection reports. ITAAC are a lynchpin of the Part 52 process and are the sole basis for the Commission's 52.103(g) finding. Therefore, ITAAC sign-offs clearly have greater significance than routine inspection reports. For example, we would expect a headquarters senior manager to sign off on ITAAC, while the cognizant region would sign out typical inspection reports (including SAYGO reports).</p> <p>As identified in response to NRC Comment 2, appropriate terms for ITAAC sign-offs are "staff conclusions" or "staff determinations," rather than "interim staff conclusions." Regardless of terminology, the distinction is between staff-level sign-offs pursuant to 52.99 and the Commission finding under 52.103.</p>
<p><u>Section 1 - Introduction</u></p> <p>6. Regarding Figure 1 contained in this section, the staff does not agree with the distinction shown between design and construction inspection activities and operations-based activities. This is not consistent with the staff's recommendation in SECY-02-0067.</p>	<p>This issue will be resolved based on the Commission's PITAAC determination.</p>
<p><u>Section 2 □ Part 52 Requirements</u></p> <p>7. The staff notes that the resolution of comment 2 above will affect this section.</p>	<p>Agree</p>

June 4 NRC Comment	Industry Response
<p><u>Section 3 - NRC Inspection During Construction</u></p> <p>The staff notes the following general agreements with NEI's white paper:</p> <p>8. The staff agrees with NEI regarding the need for licensees to provide the NRC staff with detailed construction schedules that identify the timing of activities that are to be the subject of NRC inspections. The staff also agrees that these schedules should be provided sufficiently in advance of the activity to enable the NRC staff to properly plan and implement its inspections to facilitate timely ITAAC conclusions. Although there is no requirement to submit such schedules in advance, the staff believes that by volunteering this information licensee's will increase the efficiency and effectiveness of the construction inspection process.</p>	<p>Agree</p>
<p>9. The staff agrees with NEI that NRC inspectors are expected to perform the same types of inspections and audits of licensee construction-related activities under Part 52 as they did for plants licensed under Part 50. Application of information technology, risk insights and past construction inspection experience will be used in revising the construction inspection program. The staff notes that the development of ITAAC during the design certification reviews for the AP600, advanced boiling water reactor and System 80+ used risk insights extensively. The amount of ITAAC for these designs is proportional to the risk-significance of structures and systems. That is why, in general, there are more detailed ITAAC on risk-significant systems in these certified designs.</p>	<p>Agree</p>

June 4 NRC Comment	Industry Response
<p>The staff believes the following issues need to be clarified:</p> <p>10. NEI states that the construction inspection program should be ITAAC-focused. However, NEI's white paper seems to try to divorce significant conclusions made during the SAYGO process from ITAAC. In SECY 94-294, "Construction Inspection and ITAAC Verification," the staff noted, based on the designs being reviewed at the time, that ITAACs were generally written as final verification of satisfactory plant construction, and they routinely referred to as-built configurations or conditions. On this basis the staff estimated that the majority of the ITAAC would be completed late in the construction of the plant. The staff notes that for many ITAACs it will rely on both system-specific observations and generic conclusions regarding the adequacy of construction activities throughout the plant. The staff believes that the SAYGO conclusions will be relied on to form a portion of the staff's basis for ITAAC conclusions. This philosophy is discussed above in Comment number 3. Therefore, if a problem is identified for a generic activity during the SAYGO process the staff believes the problem could affect the determination of whether an ITAAC has been successfully completed.</p>	<p>We agree that if a problem is identified for a generic activity during the SAYGO process, the problem could affect the determination of whether an ITAAC has been successfully completed. The impact on ITAAC of SAYGO and routine inspection findings would be evaluated on a case-by-case basis.</p> <p>The term "ITAAC focused" refers to the expectation that the NRC will select a "smart sample" of construction activities to review/inspect. Just as the staff might choose to inspect or witness testing of a HSS component over a similar, but LSS, component, the staff can also choose to inspect or witness testing of SSCs directly implicated in ITAAC, over SSCs not covered by ITAAC.</p>
<p>The staff notes the following disagreements with NEI's white paper:</p> <p>11. NEI's white paper is not consistent with the staff's recommendation in SECY-02-0067 regarding operational quality assurance (QA). Specifically, the staff recommended in this paper that operational QA have its own ITAAC. However, the staff does note that NEI's white paper appears to be consistent with the Commission approved position in SECY-00-0092 regarding the treatment of QA deficiencies related to ITAAC verification. Specifically, the recommendation contained in SECY-00-0092 and approved by the Commission, that "...underlying information (such as QA/quality control deficiencies), which is relevant and material to ITAAC, must be considered in determining whether ITAAC have been successfully completed. In addition, there may also be deficiencies identified that are not relevant to ITAAC."</p>	<p>The PITAAC issue will be resolved shortly by the Commission.</p> <p>Agreement on the treatment of QA deficiencies related to ITAAC verification.</p>

June 4 NRC Comment	Industry Response
<p>12. NEI makes the comment that meaningful assessment and determinations (SAYGO significant conclusions) can be made by NRC inspectors based on completion of approximately 20% of a given type of work. Based on the fact that the NRC inspection process is audit-based involving the inspection of a relatively small sample of construction activities, 20% may not be a realistic figure for all the areas covered by SAYGO.</p>	<p>We agree that 20% may not be the right number for all SAYGO inspection areas. It could be more or less.</p>
<p>13. Paragraph 3 on page 10 of NEI's white paper states that after a significant amount of a particular type of work has been performed and the licensee has conducted and documented its own quality assurance program inspections and evaluations, the licensee would request that the NRC perform its inspections in that area and make its assessment. The staff does not believe it should have to wait for the licensee to conduct and document its own inspections and evaluations. Depending on the activity, the staff may begin inspections as soon as the activity starts. Any problems that the staff encounters will be brought to the licensee's and other NRC stakeholder's attention as soon as possible (i.e., the staff will not wait until 20% of the work is done for an activity before staff-identified issues are made public).</p> <p>During the Vogtle plant construction, "Readiness Review" program, the NRC notes that some programs to be reviewed at the 15-20% completion point, were in excess of 50% complete by the time that the licensee conducted the necessary inspections, evaluations, and provided a fully reviewed and approved report. In some cases, the 95% completion report was received within a few weeks of receiving the early (15-20%) completion report.</p>	<p>We agree that the staff may begin inspections as soon as an activity starts and that any problems that the staff encounters should be brought to the licensee's attention as soon as possible.</p> <p>The intent of paragraph 3 on page 10 is simply that the licensee, when ready, would request a non-routine SAYGO assessment and conclusion by NRC.</p>

June 4 NRC Comment	Industry Response
<p>The staff has the following detailed comments regarding Section 3 of NEI's white paper:</p> <p>14. Page 4, Second Arrowhead Paragraph - Second, fourth and fifth lines</p> <p>Comment: The staff does not agree with some of the terms used by NEI to describe the staff's inspection process in this paragraph. NEI uses terms such as "approved" and "determinations of acceptable licensee construction processes," when referring to the NRC construction inspection program. NRC can and will provide assessments of the licensee's program implementation based on a sampling inspection, but this "assessment" should not be portrayed as an "approval."</p>	<p>Response to NRC Comments 14 & 15</p> <p>We agree that "SAYGO assessment" is a good term for the envisioned (non-ITAAC) inspections of construction processes.</p> <p>However, we believe that "favorable significant inspection conclusions" (language from NRC Comment 4) are the objective of "SAYGO assessments" and that it is appropriate to characterize such "favorable conclusions" as "approvals" or "determinations of acceptable construction processes." This is consistent with the language used in the 1996 draft CIP report describing "significant inspection findings" as "judgments about construction acceptability."</p>
<p>15. Page 8, Section 3.4, Second Paragraph, second line and fifth line, and Third paragraph, fifth line: Page 9, Section 3.4, First line at top of page, and Final paragraph, Second line</p> <p>Comment: The staff does not agree with some of the terms used by NEI to describe the staff's SAYGO inspection process in this section. The staff believes a more accurate term for its SAYGO inspection process is "assessment" in the following instances: Page 8: Second paragraph, second line, "conclusions" should be changed to "assessments" - Page 8: Second paragraph, fifth line, "judgement" should be changed to "assessment" - Page 8: Third paragraph, fifth line, change "judgements" should be changed to "assessments" - Page 9: First line at top of page, "determinations of construction process acceptability" should be changed to "assessments of the construction processes" - Page 9: Final Paragraph, Second line, "determinations of acceptable" should be changed to "assessments of."</p> <p>Justification: Results of "SAYGO" inspections are NRC management assessments. The NRC inspection program is not in the approval cycle for licensee program implementation.</p>	<p>We envision that SAYGO reports could contain two kinds of "favorable significant inspection conclusions:"</p> <ul style="list-style-type: none">• determinations of acceptable generic construction processes• determinations that specific completed work is acceptable (i.e., work in the $\cong 20\%$ sample on which the generic construction process was judged) <p>We agree that a reduced level of inspections in areas assessed and found acceptable ("spot checks" or process maintenance inspections) would continue.</p> <p>We also agree that significant findings could impact earlier SAYGO conclusions.</p>

June 4 NRC Comment	Industry Response
<p>Page 10, Paragraphs 4 through 7</p> <p>16. Comment: The staff disagrees with these paragraphs, and believes that the following better represents the NRC staff's position on SAYGO.</p> <p>“Sign as you go (SAYGO)” is seen by the NRC staff as an NRC tool for the management of inspection resources. For the functional areas, or types of work, selected for this process, implementation inspections should be heavy for the first 15 - 20% (or appropriate amount depending on the area) of the work and then the results reviewed by NRC management. The frequency of inspections would be relaxed if a determination was made that the licensee had a good program and was exercising good quality controls over the program.</p> <p>Subsequent inspections would continue to observe construction activities at a reduced frequency and rely heavily on a continuing review of the licensee's corrective action program for assurance that performance was still at an acceptable level. (Evidence of decreasing performance would be reviewed by NRC management for possible increase in frequency of inspections in that area.)</p> <p>Results of inspections and assessments would be published appropriately. The staff is considering use of the NRC web site, in a fashion similar to the reactor oversight process (ROP), except that instead of the ROP cornerstones, the subjects of the blocks would be the functional areas, or types of work, selected for the SAYGO process. Additional possible avenues for publication of the results are <i>Federal Register</i> Notices, and placing inspection report results on the web.</p> <p>Justification: Because of the sampling nature of NRC inspections, the NRC should not be placed in the role of “approving” licensee process applications. The NRC will do enough independent inspections to provide an adequate assessment of the process applications, without being placed in the approval cycle.</p>	<p>Further discussion needed in connection with NRC Comments 14 & 15.</p>

June 4 NRC Comment	Industry Response
<p>Section 4 <input type="checkbox"/> NRC Engineering Design Verification</p> <p>The staff notes that its position regarding Engineering Design Verifications is provided in SECY-94-294. NEI's white paper appears to be inconsistent with the staff's stated position in several areas. The staff would like to discuss the following issues:</p>	

June 4 NRC Comment	Industry Response
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June 4 NRC Comment

Industry Response

17. The expectation that NRC will do a detailed design verification, starting at the time of COL issuance or shortly thereafter, complete it before or shortly after the first concrete pour, and publish an acceptability determination as a significant project milestone, appears to be an over-simplification of what is involved.

To meet the aggressive construction schedules currently projected by the industry, licensees will have to issue contracts for the start of fabrication of major equipment, and facility modules, at about the same time as the COL application is submitted for NRC review and approval. The industry could also be expected to request limited work authorizations (LWA) in accordance with the provisions of 10 CFR 52.91. Therefore, to begin to meet the NEI expectation of detailed design verification, the NRC would necessarily have to begin design inspections as soon as possible. As noted in SECY-94-294, the NRC will inspect and review the adequacy of licensee design engineering early in a construction process, possibly beginning soon after receipt of a licensing application; first-of-a-kind engineering for the lead plant of each certified design will be assessed during these inspections.

The staff also disagrees with the timing for the completion of these activities. The staff ideally would expect to perform the majority of the inspections associated with engineering design verifications before a COL is issued (assuming the design information is available at that time). This is based on the concept that the staff will have to make a "reasonable assurance" finding prior to granting the COL. However, the staff does expect to continue inspections in this area after a COL is issued. As discussed in SECY-94-294, as plant construction progresses, NRC will determine if the engineering design is being implemented properly primarily through performance-based inspections to verify that plant systems and components are installed and tested to applicable standards, certified design information, and ITAACs. NRC will also assess the effectiveness of the licensee's design change process in maintaining the fidelity of high-level certified design information that is translated into construction drawings.

We agree that engineering design verification by NRC could begin at about the time a COL application is submitted and contracts are let for long-lead major components.

We believe that early completion of EDV by NRC is an important milestone both with respect to the NRC's "reasonable assurance" finding in the COL and to instill confidence and stability as plant construction (and significant capital investment) begins in earnest. As described in SECY-94-294, the purpose of EDV is to verify the proper translation of high level design certification information into detailed design and construction drawings. The effectiveness of this translation process by the licensee's engineering organization(s) must be evident prior to construction, and it is to the benefit of the licensee, the NRC and the public that this be verified and documented as soon as possible. This determination will not affect subsequent NRC audit/inspection of field change requests, resolution of non-conformances and the implementation of DAC; it is recognized that those resolution and implementation activities must continue in order to confirm the continued effectiveness of the licensee's design engineering processes. However, we believe that the adequacy of construction, QA and testing activities is assured by the NRC CIP, ITAAC verification program, etc. As such, these activities need not be included in a continuing program of engineering design verification EDV.

June 4 NRC Comment	Industry Response
<p>17 (continued)</p> <p>The staff notes that NEI's white paper does not recognize that some of the design effort may not be completely done until late in construction. As an example, during the design certification reviews for the AP600, ABWR and System 80+ the concept of design acceptance criteria (DAC) was introduced for certain ITAAC. For areas such as the design of the control room the staff accepted high-level design information instead of more detailed design information. Consequently, the ITAAC or DAC for portions of the certified design include the design process. DAC, like ITAAC, are required to be completed prior to fuel load. However, there is no requirement for when these activities would begin and they could conclude very late in the construction process. The engineering design verification inspections for these areas could therefore conclude very late in the construction process.</p> <p>The staff does not have enough specific information regarding the construction and design schedule to make a determination at this point as to when is the most appropriate time to perform engineering design verifications. The staff does believe that this activity should occur as soon as possible. The staff also does not have enough information at this point to determine how best to communicate the results of the inspection. That is, what additional steps, if any, should be taken beyond documenting the results in a publicly-available inspection report.</p>	<p>NRC verification of DAC will involve both verification of the design process (e.g., for piping or I&C) and verification of the design implementation (through typical ITAAC on as-built SSCs). We envision that the EDV milestone would include completion of the design process elements of any DAC.</p> <p>We agree that EDV should be completed ASAP, i.e., before or near the time the COL is issued.</p> <p>We believe that EDV is a significant milestone for both the NRC and the licensee and that NRC conclusions on EDV should be treated similarly to other "significant inspection conclusions," e.g., SAYGO.</p>
<p>18. NEI states that the Engineering Design Verification is distinct from ITAAC. The staff disagrees. As discussed above, DAC is a form of ITAAC. The staff also believes that to the extent the inspections are performed after the COL is issued they could have an impact on ITAAC.</p>	<p>See response to Comment 17</p>

June 4 NRC Comment	Industry Response
<p><u>Section 5 □ ITAAC Process Implementation</u></p> <p>The staff notes the following general agreements with NEI's white paper:</p> <p>19. The staff agrees with NEI's recognition that construction and inspection activities corresponding to ITAAC will be specially flagged on licensee construction plans and schedules, and that the NRC staff will be kept informed of these schedules.</p>	<p>Agree</p>
<p>20. The staff believes that an ITAAC determination bases (IDB) is an appropriate concept for documenting specific inspections, test or analyses results on which the licensee's ITAAC determinations will be based.</p>	<p>Agree</p>
<p>The staff believes that the following issues need to be clarified:</p> <p>21. Similar to SAYGO the staff believes its independent assessment of completion of ITAAC should be communicated as soon as possible to its stakeholders (e.g., the licensee, interested members of the public, local and state government officials). The staff also believes that once an interim ITAAC conclusion is made by the staff that NRC management would be responsible for establishing a process which will define the threshold for when such a conclusion would be revisited.</p>	<p>The 52.99/FRN process is intended to provide timely public information on ITAAC completion and, along with SAYGO notices, on overall construction progress. As discussed in response to Comment 2, we believe these FRNs should reflect NRC concurrence in the licensee's determination that one or more ITAAC have been met.</p> <p>We agree that it is important to define the circumstances under which an ITAAC conclusion would be revisited (e.g., based on significant new information). The process/criteria for revisiting ITAAC conclusions needs to be established now, at least in general terms, as part of the current dialogue and envisioned SECY.</p>

June 4 NRC Comment	Industry Response
<p>The staff notes the following disagreements with NEI's white paper:</p> <p>22. Regarding NEI's interpretation of §52.99 the staff does not believe that ITAAC are "closed out" with the §52.99 notification. In fact, the staff does not believe that ITAAC are closed out until the Commission makes its finding in accordance with §52.103(g). Comment number 2 also discusses this issue.</p>	<p>Proper terminology will derive from resolution of NRC Comments 2 & 5, we are amenable to discussing use of alternative terminology such as NRC staff "ITAAC sign-offs," "ITAAC conclusions" and "ITAAC determinations."</p> <p>See responses to Comments 2 & 5.</p> <p>We understand and agree with the respective roles of the NRC staff under 52.99 and the Commission under 52.103, as described by the Commission in the 1989 SOC for Part 52.</p>
<p>23. Although the staff believes in timely notification of its interested stakeholders regarding its interim conclusions regarding ITAAC, it does not agree with the proposed target to issue such a conclusion within 30 days of NRC receipt of an ITAAC determination letter. The staff believes that developing a target independent of knowing the detailed construction schedule is not possible. As stated earlier, based on the ABWR ITAAC review the majority of the ITAAC will be met late in the construction program. Meeting the same target date throughout construction does not recognize that the process is back-end loaded. The staff does agree with NEI that through day-to-day, on-site inspection activities, interactions with licensee personnel and observation of activities in the field, the NRC staff will be familiar with the status and adequacy of plant construction. The staff therefore, should be able to issue timely notification of its interim conclusions regarding ITAAC.</p>	<p>We think it is important to establish a target, such as 30-days, for NRC to complete the ITAAC verification process and issue the required 52.99 notice.</p> <p>We agree that based on various factors, the actual time to complete NRC ITAAC verification may be more or less than the target. We also agree that the density of ITAAC sign-offs will be greater at the back end. But mitigating factors are expected to enable ITAAC sign-offs to keep pace. These factors include; ability for one sign-off to cover many logically grouped ITAAC, increased ITAAC verification efficiency in the later stages of construction, and increased NRC resources to meet the surge in licensee ITAAC determinations.</p> <p>The 30-day target is consistent with – and reinforces – the intent that ITAAC verification will generally not require additional NRC inspection once the licensee's ITAAC determination letter is received. The 30-day target also reflects the expectation that ITAAC determination bases will be readily available and that NRC personnel will be familiar with the adequacy and status of plant construction, including licensee performance in the areas pertaining to a particular ITAAC verification.</p>

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<p>24. NEI states that if the staff identifies discrepancies in the ITAAC determination bases or in the field, such matters would be referred to the licensee's normal corrective action program. NEI further states that "unless there is a deficiency that indicates an ITAAC has not been successfully completed, the staff would be expected to make the required Section 52.99 finding of ITAAC completion, while corrective action proceeds separately under the quality assurance program." The staff believes that it will be incumbent on the licensee to demonstrate that such staff-identified deficiencies do not invalidate an ITAAC.</p>	<p>The NRC staff will be aware of existing inspection findings and may judge their relevance to a particular ITAAC verification. A licensee would not be expected to request NRC ITAAC verification when there are inspection findings or other deficiencies that are known to be material to the ITAAC determination.</p> <p>Further discussion is needed regarding the staff belief that "it will be incumbent on the licensee to demonstrate that such staff-identified deficiencies do not invalidate an ITAAC."</p>
<p>The staff has the following detailed comments regarding Section 5:</p> <p>25. Page 15, first bullet starting with "Prior to sending..."</p> <p>Comment: The staff does not agree with this paragraph.</p> <p>Justification: While there is nothing wrong with continuing dialogue between licensee and NRC concerning status of completion of construction, formalizing discussions between NRC and the licensee prior to submitting a letter announcing completion of an ITAAC could result in a public perception that the NRC is in the business of reviewing licensee drafts.</p>	<p>We agree that interactions will be continuous between the NRC inspection staff and the licensee regarding the status and adequacy of construction, coordination of testing and inspection schedules and the status of ITAAC activities.</p>

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<p>26. Page 16, Second paragraph.</p> <p>Comment: The following thought should be included in this discussion:</p> <ul style="list-style-type: none"> For the purpose of resource loading and inspection planning, plant construction schedules shared with the NRC should include the schedule for issuance of contracts for pre-fabrication of structural modules and important components offsite, prior to issuance of the COL. <p>Justification: To meet demanding construction schedules, components and structural modules, which are the subject of ITAACs, could be pre-fabricated offsite prior to issuance of the COL. Some later fabrication steps could mask or hide the results of earlier fabrication steps, making it important that NRC be provided the opportunity to inspect these pre-fabrication activities.</p>	<p>Agree</p>
<p>27. On page 22 of the white paper NEI suggests that any person with information contrary to the licensee's ITAAC conclusion published in accordance with § 52.99 provide information to the NRC. Failure to provide information in response to a § 52.99 notice would not be a basis for excluding participation for a timely-filed request for hearing.</p>	<p>Agree</p>
<p><u>Section 6 □ Preoperational Finding Process and Hearing Opportunity</u></p> <p>The staff has the following comments regarding this section:</p> <p>28. Regarding the Section 52.103(g) finding, the staff's position is that this finding will be based on earlier interim staff conclusions unless new information casts doubt on these conclusions or the Commission determines that there is an unresolved issue needing inspection or evaluation.</p>	<p>Agree.</p> <p>See responses to Comments 2 & 5 regarding characterization of NRC ITAAC conclusions as "interim."</p>
<p>29. On page 26 of the white paper the staff does not agree with the claim that an ASME welder not appropriately certified would never constitute prima facie evidence that a welding ITAAC had not been met.</p>	<p>Clarification of this comment needed.</p>

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30. On page 28 NEI states that the 52.103(g) finding authorizes plant operation, including scheduled fuel load, power ascension testing and full power operations. The Generic Combined License contained in SECY-00-0092 and approved by the Commission has license conditions for power operations, which is not consistent with this statement (See comment 32 below).

We believe it was premature to propose and approve in 2000 the generic form of a COL (including requirements for separate NRC authorizations for low power testing and full power operations) in the SRM on SECY-00-0092. At that time, the industry and NRC had not had substantial discussions on the subject of transition to operations under Part 52 -- and still have not -- due to priority focus on other matters (eg, ESP, Part 52 rulemaking, etc.). The focus of our June 16, 2000, response to SECY-00-0092 was on the staff proposal for programmatic ITAAC. We provided no other comments except to request that the Commission defer action on the recommendations in the SECY, including the recommendation to approve the form and content of a generic COL, "until such time that the impact of these actions can be fully explored with affected stakeholders."

Under Part 52, the only positive finding that the NRC must make post-construction is the 52.103g ITAAC finding. Required authorizations to go above 5% power and to full power are tantamount to additional positive findings that Part 52 does not envision. We do envision a post-52.103(g) license condition on completion of start-up testing as described in the FSAR. And, of course, the licensee must also be in compliance with all tech specs, other license conditions and NRC regulations.

The key point is that further broad determinations by NRC after the 52.103g ITAAC finding are not required. The time for general readiness determinations is before fuel load, not after (two track approach discussed in Section 7 of the white paper).

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<p><u>Section 7 □ Assuring Operational Readiness Under Part 52</u></p> <p>31. The staff disagrees with NEI's position in this section. This section is inconsistent with the staff's recommended position contained in SECY-02-0067.</p>	<p>Commission policy decision pending.</p>
<p><u>Section 8 □ Transition to Operation Under Part 52</u></p> <p>32. The staff agrees with the NEI's position that after the Commission makes its 52.103(g) finding authorizing fuel load, no further authorization under Part 52 by the NRC is required to proceed to full power and commercial operation. However, as stated in SECY-00-0092 any post 52.103(g) limitation on operation will be imposed by a condition in the combined license (See conditions D.2 and D.3 of the generic combined license contained in SECY-00-0092). The September 5, 2000 staff requirements memorandum from the Commission approved the form and content of this license.</p>	<p>See response to NRC Comment #30.</p>
<p><u>Section 9 □ Role of ITAAC After Fuel Load</u></p> <p>33. The staff has no comments on this section and agrees with NEI's stated position.</p>	<p>Agree</p>