



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
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February 10, 2020

MEMORANDUM TO: Mike King, Director  
Vogtle Project Office  
Office of Nuclear Reactor Regulation

Marissa G. Bailey, Director  
Division of Construction Oversight  
Region II

FROM: Victor E. Hall, Chief /RA/  
Vogtle Project Office  
Office of Nuclear Reactor Regulation

SUBJECT: UPDATE TO TARGETED INSPECTIONS, TESTS, ANALYSES AND  
ACCEPTANCE CRITERIA FOR VOGTLE ELECTRIC GENERATING  
PLANT UNITS 3 AND 4

This memorandum updates the list of Inspections, Tests, Analyses and Acceptance Criteria (ITAAC) targeted for U.S. Nuclear Regulatory Commission (NRC) inspection under the baseline inspection program for Vogtle Electric Generating Plant (VEGP), Units 3 and 4. The updates to ITAAC targeting incorporate the latest license amendments for VEGP, Units 3 and 4 (through amendments 171 and 169, respectively). They also reflect lessons learned from almost a decade of construction oversight at VEGP.

The NRC performs sampling-type inspections of ITAAC-related activities to verify that the facility is constructed in accordance with the license. The selection of the ITAAC to receive direct inspection (i.e., targeted ITAAC) is based on a prioritization process used to determine inspections that provide the most safety benefit, consistent with the NRC's Principles of Good Regulation. The program was designed with the ability to adjust targeting to incorporate lessons learned and other improvements, as described in the Office Instruction (OI) and Inspection Manual Chapters (IMCs) referenced below.

The NRC has performed over 39,000 direct inspection hours at VEGP, Units 3 and 4, with no findings of greater than green significance. With dynamic changes in the licensee's construction activities, the staff is optimizing its inspection planning. The adjustments described in this memo enhance the staff's inspection flexibility. This agility will help ensure that resources are focused on risk significant areas, which provide the most safety benefit. As a result, the staff is strengthening its ability to ensure reasonable assurance of adequate protection of public health and safety.

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The NRC reviews 100% of the licensee's ITAAC closure notifications, as well as the results of NRC inspection for the targeted ITAAC, to determine if the licensee's ITAAC closure notifications and its associated bases are satisfactory. The NRC also conducts inspection of the licensee's quality assurance program, corrective action program, and other operational programs. The staff's Title 10 of the *Code of Federal Regulations* (10 CFR) 52.103(g) finding would be based on the ITAAC-related inspection activities performed during construction and the staff's independent ITAAC closure verification activities. With this update to the list of targeted ITAAC, the construction inspection program continues to be robust and capable of achieving the NRC's mission of reasonable assurance of adequate protection of public health and safety.

### **Background:**

Office Instruction NRO-REG-102, "Prioritization of Inspections, Tests, Analyses, and Acceptance Criteria for Inspection," and Inspection Manual Chapter (IMC) 2506, "Construction Reactor Oversight Process General Guidance and Basis Document" describe the processes used to target and un-target ITAAC. IMC 2503 "Construction Inspection Program: Inspections of Inspections, Tests, Analyses and Acceptance Criteria (ITAAC) Related Work," describes the baseline for ITAAC inspection.

The staff is revising these guidance documents to give the staff flexibility to be more risk-informed in selecting which emergency preparedness and security ITAAC to inspect. The revisions also delete an unnecessary requirement to inspect at least one ITAAC in every ITAAC family. Previously, the staff position described in the IMCs required that every ITAAC family contain at least one targeted ITAAC regardless of the risk or what the inspection value was. In addition, all Emergency Preparedness (EP) and Security ITAAC were automatically determined to be targeted. As a result of our optimization initiative, the Vogtle Project Office and Region II un-targeted ITAAC that had low risk and low inspection value; un-targeted EP ITAAC that were redundant to activities that we already inspect (i.e., EP exercise); and un-targeted duplicative construction ITAACs, for example, where one ITAAC required an Motor Operated Valve stroke test during construction and a separate ITAAC required the same stroke test during preoperational testing.

Attachment 1 provides the list of targeted ITAAC activities and their associated ITAAC families. This list reflects all ITAAC in Appendix C of the combined licenses for VEGP, Units 3 and 4, through license amendments 171 and 169, respectively. Attachment 1 also lists all ITAAC activities in sequence by their original pre-consolidated ITAAC index numbers (i.e., prior to any license amendments). The staff aims to keep its Information Technology (IT) support systems updated (i.e., Construction Inspection Program Information Management System (CIPIMS) and Verification of ITAAC Closure, Evaluation, and Status (VOICES)). However, because of ITAAC consolidation, these IT systems may not perfectly reflect what ITAAC are targeted.

Inspectors should use Attachment 1 to update inspection plans to reflect the most recent changes to the baseline inspection program.

The following table provides a status of changes to the ITAAC in Appendix C for each combined license from initial license issuance through the current license amendment:

<b>APPENDIX C</b>	<b>Vogtle Unit 3</b>	<b>Vogtle Unit 4</b>
License Amendment No.	171	169
Initial ITAAC Entries	875	875
ITAAC Entries Added	6	7*
Total ITAAC Entries	881	881
ITAAC Entries Deleted	481	486
ITAAC Entries Active**	400	395
Total ITAAC Activities	741	736
Targeted ITAAC Activities	279	276
Percent Targeted	38%	38%

\* License amendment 158 reused ITAAC entry 852

\*\* An ITAAC entry may have one or more discrete ITAAC activities.

ITAAC consolidation does not impact the placement of the ITAAC activities into the ITAAC Matrix or their assigned families. These changes do not impact the outcome of the prioritization process (i.e., targeting). The NRC created the ITAAC Matrix to assign each unique ITAAC "activity," not ITAAC, into a specific or unique family that an expert panel decided best represented the ITAAC's specific construction activities. Consolidating the ITAAC activities under a different ITAAC number does not change the family for that ITAAC activity. The need to assign each individual ITAAC activity into a single ITAAC family was the original reason the Design Control Document ITAAC were broken up into individual line items.

Attachment 1 lists the ITAAC activities sequentially by ITAAC index number and Attachment 2 lists the ITAAC by family. Attachment 3 identifies the ITAAC activities that the staff has untargeted and the three ITAAC activities added to the targeted ITAAC population.

Attachment 1 provides the official list of targeted ITAAC and their assigned ITAAC families. The baseline construction inspection program will be verified using this list. The NRC will continue to inspect ITAAC activities using the inspection procedures (IPs) related to the family designator as shown in Attachments 1 and 2, as the minimum inspection requirement. Previous inspections and findings for the pre-consolidated ITAAC will be credited under the consolidated ITAAC.

CIPIMS is limited to one family designator and one inspection status (i.e., targeted or non-targeted) for each ITAAC entry. This limitation does not support the licensee's ITAAC consolidation. Previously a single ITAAC entry (i.e., index number) consisted of a single ITAAC activity. Due to consolidation, a single index number now may be comprised of several ITAAC activities, each originally with its own family designator and targeted status. Because of the IT limitations, the staff modified CIPIMS. For new consolidated ITAAC, the original ITAAC family is applied to all of the consolidated activities. With regard to targeting, the entire consolidated ITAAC is targeted if any one or more of its parts was previously targeted. As a result, the ITAAC data in CIPIMS is not always consistent with the "official" family assignments and targeted status for each of the specific ITAAC activities identified in the attachments.

The staff convened expert panels on November 20, December 10, 2019, and February 4, 2020. Panel members included: James Gaslevic, Thomas Fredette, and Carl Weber of the Vogtle Project Office. Christopher Welch presented the ITAAC changes to the expert panel

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(Attachment 3). The panel followed the guidance in NRO-REG-102, Appendix D, and IMC 2506, as modified by the staff management decisions discussed above. The panel examined license amendments 124 through 171 for Unit 3, and 123 through 169 for Unit 4.

Attachments:

1. Targeted ITAAC Listing VEGP Units 3 and 4, dated February 4, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20035C554)
2. ITAAC Family Listing VEGP Units 3 and 4, dated February 4, 2020 (ADAMS Accession No. ML20035C561)
3. Changes to Targeted ITAAC, dated February 4, 2020 (ADAMS Accession No. ML20035C570)

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SUBJECT: UPDATE TO THE "TARGETED" ITAAC FOR VOGTLE ELECTRIC GENERATING  
PLANT UNITS 3 and 4 DATED: February 10, 2020

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