

## Vogle PEmails

---

**From:** Reyes-Maldonado, Ruth  
**Sent:** Tuesday, July 18, 2017 10:49 AM  
**To:** Vogle PEmails  
**Cc:** Patel, Chandu  
**Subject:** Request for Additional Information for Vogle LAR 17-006  
**Attachments:** Request for Additional Information for Vogle LAR 17-006 - REPLACEMENT.pdf

SNC

The attachment contains the subject request for additional information (RAI). This RAI was sent to you in draft form. Your licensing review schedule assumes technically correct and complete responses within 30 days of receipt of RAIs.

As discussed during a public meeting held on June 22 this RAI replaces the RAI dated May 25, 2017 (Agencywide Documents Access and Management System (ADAMS) ML17145A576).

Attachment: Request for Additional Information (RAI) in support of the staff's review of LAR 17-006, Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Consolidation.

Thanks,

Ruth C. Reyes  
Project Manager  
AP1000, Licensing Projects Branch 4  
Office of New Reactors  
Nuclear Regulatory Commission  
Work Phone: (301) 415-3249  
Email: [Ruth.Reyes@nrc.gov](mailto:Ruth.Reyes@nrc.gov)

**Hearing Identifier:** Vogtle\_COL\_Docs\_Public  
**Email Number:** 128

**Mail Envelope Properties** (b06d5eb537714af18b90f46b70dfe0c1)

**Subject:** Request for Additional Information for Vogtle LAR 17-006  
**Sent Date:** 7/18/2017 10:49:19 AM  
**Received Date:** 7/18/2017 10:49:21 AM  
**From:** Reyes-Maldonado, Ruth

**Created By:** Ruth.Reyes-Maldonado@nrc.gov

**Recipients:**  
"Patel, Chandu" <Chandu.Patel@nrc.gov>  
Tracking Status: None  
"Vogtle PEmails" <Vogtle.PEmails@nrc.gov>  
Tracking Status: None

**Post Office:** HQPWMSMRS03.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>	
MESSAGE	867	7/18/2017 10:49:21 AM	
Request for Additional Information for Vogtle LAR 17-006 - REPLACEMENT.pdf			60851

**Options**  
**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

## Request for Additional Information

### Vogtle Electric Generating Plant Units 3 and 4

#### License Amendment Request, LAR 17-006

#### Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Consolidation

The NRC regulations in 10 CFR 52.80(a) require that a combined license (COL) application contain the proposed inspections, tests, and analyses (ITA), including those applicable to emergency planning, that the licensee shall perform, and the acceptance criteria that are necessary and sufficient to provide reasonable assurance that, 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 COL, the provisions of the Atomic Energy Act, and the NRC regulations. Appendix C, "Inspections, Tests, Analyses, and Acceptance Criteria," to the COLs for Vogtle Units 3 and 4 specifies the inspections, tests, analyses, and acceptance criteria (ITAAC) that satisfy 10 CFR 52.80(a) for each reactor unit. In License Amendment Request (LAR) 17-006, the licensee of Vogtle Units 3 and 4 proposes to relocate or remove multiple ITAAC entries from Appendix C of the Vogtle Units 3 and 4 COLs. The staff requests the following additional information regarding the licensee's proposed changes to the ITAAC:

1. In LAR 17-006, the licensee proposes to delete the official tracking number for numerous ITAAC and retain only an ITAAC Index Number. The licensee's ITAAC Index Number has not been used to track the ITAAC in all documents. For each deleted ITAAC, can the licensee retain the original ITAAC number (in addition to its Index Number) with a cross-reference to the consolidated ITAAC number (with reference to LAR 17-006) to support ITAAC close-out and NRC inspection?
2. In LAR 17-006, the licensee proposes to delete several ITAAC although it is not apparent that the Design Commitments in the deleted ITAAC will be accomplished as part of the subsuming ITAAC. In particular,
  - a. The licensee proposes to delete ITAAC 2.1.02.12a.vi (58) which will be subsumed by ITAAC 2.1.02.08d.i (32). The Design Commitment for ITAAC 2.1.02.12a.vi (58) states that the automatic depressurization valves identified in Table 2.1.2-1 perform an active safety-related function to change position as indicated in the table. The ITA and Acceptance Criteria for ITAAC 2.1.02.08d.i (32) do not discuss verification that the automatic depressurization valves will change position.
  - b. The licensee proposes to delete ITAAC 2.1.02.12a.vii (59) which will be subsumed by ITAAC 2.1.02.08d.ii (33). The Design Commitment for ITAAC 2.1.02.12a.vii (59) states that the automatic depressurization valves identified in

Table 2.1.2-1 perform an active safety-related function to change position as indicated in the table. The ITA and Acceptance Criteria for ITAAC 2.1.02.08d.ii (33) do not discuss verification that the automatic depressurization valves will change position.

- c. The licensee proposes to delete ITAACs 2.1.01.03 (3), 2.2.03.08a (174), 2.2.04.08c (239), 2.3.01.02 (279), 2.3.02.07a (298), 2.3.04.03 (329), 2.3.06.08a (370), 2.3.07.07a (401), 2.3.10.06a (441), 2.3.13.07 (469), 2.3.14.02 (478), 2.3.15.02 (482), 2.7.02.02 (702) and 2.7.06.02.i (724) which will be subsumed by ITAAC 2.2.01.07.i (107) (Table 2.2.1-3 Item 7.i) and ITAAC 2.2.01.07.ii (108) (Table 2.2.1-3 Item 7.ii). Provide a description of the actions that will be taken and specific success criteria to demonstrate that containment leakage pathways, containment isolation valves, and pressure boundaries adequately perform as intended in the maintained and deleted ITAAC and how the associated Design Commitments are still met, including but not limited to specifics for pressure boundary integrity, stroke times, and vacuum relief. Further, provide a list of the valve numbers to fulfill each (deleted and maintained) ITAAC and related Design Commitments. For example, ITAAC 298 is in regards to CVS containment isolation valves listed in Table 2.3.2-1. However, because Table 2.2.1-1 does not list the CVS containment isolation valves of Table 2.3.2-1, deleting ITAAC 298 could result in these CVS valves not being evaluated for the timing response requirement to close within 60 seconds upon receipt of an actuation signal per ITAAC 108.
- d. The licensee proposed to delete ITAAC 2.5.01.05 (520) which will be subsumed by ITTACs 3.2.00.01a (739), 3.2.00.01b (740), 3.2.00.01C.i (741), 3.2.00.01c.ii (742), 3.2.00.01d (743) and 3.2.00.01e (744). The Design Commitment for ITAAC 2.5.01.05 (520) states that the diverse actuation system (DAS) manual actuation of automatic depressurization system (ADS), in-containment refueling water storage tank (IRWST) injection, and containment recirculation can be executed correctly and reliably. The ITA and Acceptance Criteria for ITAACs 739-742 are intended to provide evidence that a state-of-the-art human factors program has been conducted. NRC staff used NUREG-0711 to assess the applicant's implementation plans for conducting the human factors process. Execution of DAS manual actuation of ADS, IRWST injection, and containment recirculation is not specifically called out for verification and validation in NUREG-0711.
- e. The licensee proposes to delete ITAAC 2.7.01.07 (689), which will be subsumed by ITAAC 2.7.01.10b (696). Provide a description of the actions that will be taken and specific success criteria to demonstrate isolation of the pipe that penetrates the MCR pressure boundary.

- f. The licensee proposes to delete ITAAC 2.7.01.08a (690), 2.7.01.08b (691), 2.7.03.02a (708), 2.7.03.02b (709), 2.7.04.02a (713), 2.7.04.02b (714), and 2.7.04.02c (715) regarding ventilation systems. Provide a description of the actions that will be taken and specific success criteria to demonstrate operation as intended in the deleted and maintained ITAAC and how the associated Design Commitments are still met.
- g. The licensee proposes to delete ITAAC 2.7.01.08c (692) regarding MCR and CSA habitability. Provide a description of the actions that will be taken and the specific success criteria to demonstrate that habitability can be maintained as intended in the deleted and maintained ITAAC and how the associated Design Commitments are still met.
- h. The licensee proposes to delete ITAACs 3.3.00.02d (772) and 3.3.00.02e (773) which will be subsumed by ITAACs 2.2.01.04a.i (95), 2.2.01.04a.ii (96), 2.2.01.04b (97), 2.2.01.07.i (107) and 2.2.01.ii (108). Provide a description of the actions that will be taken and specific success criteria to demonstrate that containment leakage rate and pressure boundaries adequately perform as intended in the maintained and deleted ITAAC and how the associated Design Commitments are still met.

The staff requests that the licensee discuss how the Design Commitments of the aforementioned ITAACs are being accomplished by the consolidated ITAACs. If the scope of the ITAAC is not accurate to demonstrate the intended purpose, provide a justification that the proposed scope (e.g., "all" valves) is the appropriate scope for the ITAAC(s) and Design Commitment(s).