

## Vogle PEmails

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**From:** Hoellman, Jordan  
**Sent:** Wednesday, January 25, 2017 9:44 AM  
**To:** Willis, Frederick H.; Nick Kellenberger (SCANA)  
**Cc:** Patel, Chandu; Woods, David F.; Haggerty, Neil; Gleaves, Bill; RYDER.THOMPSON@scana.com; Welch, Christopher  
**Subject:** ICN and UIN Discussion Items for January 26, 2017 Public Meeting  
**Attachments:** 2017-01-26 VOGTLE AND SUMMER ICN and UIN Discussion Items.docx

Hi Fred and Nick –

Can you support a discussion on ITAAC Closure Notifications (ICNs) and Uncompleted ITAAC Notifications (UINs) at this week's public meeting, on **January 26<sup>th</sup>, 2017**.

Please see the attached document detailing the ICN and UIN discussion items.

Please let me know if you have any questions or concerns.

Thank you,

Jordan Hoellman  
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**From:** Hoellman, Jordan

**Created By:** Jordan.Hoellman2@nrc.gov

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**VOGTLE AND SUMMER  
ICN / UIN  
ISSUES TRACKING SHEET**

Date	No.	ICN OR UIN	TOPIC	ITAAC INDEX No. RECEIVED	ISSUE
1/3	10	UIN	AS-built IDS fault current s vs MFGR equipm ent ratings	Vogtle 3 617, 618,	<p>This item was discussed during public calls on 12/15/16 and 1/12/17. This write-up was revised following the Jan. 12 call. This section refers to NEI 08-01, Rev 5 Corrected</p> <p>NEI 08-01 Demo 5 was written for ITAAC index No. 617. ITAAC index Nos. 618 and 619 are very similar and Demo 5 would be an appropriate example for these UINs. However, based on the IDB provided in the UINs for ITAAC 617 and 618 Demo 5 is not consistent with the IDB provided in the UINs and may be incorrect.</p> <p>The UINs for 617 &amp; 618 are not consistent with NEI 08-01 Section 6, which requires that UIN/ICNs describe / explain the methodology and key steps used in performing the ITA and determining that each element of the AC was met. Required information includes, but is not limited to, a description of the specific procedures and analytical methods used for performing the ITA and determining the prescribed AC are met. If the IDB references non-public documents, it should include a brief summary of the salient information included in those documents.</p> <p>Review of ITAAC 617 &amp; 618 and the two UINs identify the key steps include: analysis to calculate the maximum IDS fault currents, analysis to determine the breaker/fuse minimum required interrupt capacity and analysis to complete the IDS protection coordination study (which appears to be critical in each of these ITAAC). The submitted UINs do not describe / explain the methodology and key steps to perform the short circuit (i.e. fault) analyses or circuit interrupting device coordination analyses, nor do they provide adequate reference to the appropriate IEEE standard and section(s). UIN 618 refers to the short circuit analysis document while 617 does not. Reference to section 7.1 of IEEE-946-1992 is incomplete, providing only a portion of the necessary information.</p> <p>Pursuant to UFSAR section 8.3.2.2, short circuit analyses are performed per IEEE 964 and circuit interrupting device coordination analyses are performed per IEEE 141 and 142 (or other applicable industry standards or practices). While referencing the UFSAR (UIN 618) may be acceptable for the UIN it would not be acceptable for the ICN because the method used is not specifically defined in section 8.3.2.2.</p> <p>The IDB for Demo 5 verifies the AC is met by comparing the nameplate ratings for the circuit breakers and fuses to the analytically determined fault currents (i.e. short circuit analysis). In the UIN it compares the nameplate ratings to the analyses documented in the IDS protection coordination study.</p> <p>All three ICNs/UINs for ITAAC 617, 618, and 619 should be written in the same format with the description for the required analyses being identical in each ICN/UIN with the appropriate references.</p>

Date	No.	ICN OR UIN	TOPIC	ITAAC INDEX No.	ISSUE
1/3	11	ICN	HFE HIS task support verification	Vogtle 3 Vogtle 4 Summer 2 Summer 3  739,739, 739,739	<p>This item was discussed during public calls on 12/15/16 and 1/12/17. This write-up was revised following the Jan. 12 call. This section refers to NEI 08-01, Rev 5 Corrected</p> <p>NEI 08-01 Example D52 is for ITAAC index No. 741. The ICN for ITAAC 741 was accepted. D52 is an appropriate example for use with ITAAC index No. 739. However, Example D52 contains greater detail in the IDB than was provided in the ICNs for ITAAC 739.</p> <p>The four ICNs for ITAAC index No. 739 are not consistent with NEI 08-01 Section 6, which requires that ICNs describe / explain the methodology and key steps used in performing the ITA and determining that each element of the AC was met. Required information includes, but is not limited to, a description of the specific procedures and analytical methods used for performing the ITA and determining the prescribed AC are met. If the IDB references non-public documents, it should include a brief summary of the salient information included in those documents.</p> <p>Specifically, the first paragraph of D52 provided information which expanded upon what was evaluated "(including operating procedures, operator performance, and control room design)" ----- and the specific results "participants received appropriate training, simulator scenarios contained appropriate detail and were executed in conformance with the plan, the near-full scope simulator provided an appropriate test bed, test data was collected and analyzed in accordance with the plan and deficiencies were appropriately documented and prioritized."</p> <p>The second paragraph of D52 stated, "The ISV results demonstrate, via the successful management of complex operational and accident scenarios, that the main control room design (MCR), Human-system Interface resources, procedures, MCR staffing, and operator training are adequate to support safe operation."</p>

Date	No.	ICN OR UIN	TOPIC	ITAAC INDEX NUMBERS RECEIVED	ISSUE
1/3	12	UIN	HFE MCR HSI. Resources available	Vogtle 3 751	<p>This item was discussed during public calls on 12/15/16 and 1/12/17. This write-up was revised following the Jan. 12 call. This section refers to NEI 08-01, Rev 5 Corrected</p> <p>NEI 08-01 Example D52 is not an appropriate example for use with ITAAC index No. 751. D52 is an evaluation of the implementation of a portion of the HFE V&amp;V program. ITAAC 751 is for an inspection of the HSi resources available to MCR operators in the MCR.</p> <p>The UIN for ITAAC index No. 751 is not consistent with NEI 08-01 Section 6, which requires that UINs/ICNs describe / explain the methodology and key steps used in performing the ITA and determining that each element of the AC was met. Required information includes, but is not limited to, a description of the specific procedures and analytical methods used for performing the ITA and determining the prescribed AC are met. If the IDB references non-public documents, it should include a brief summary of the salient information included in those documents.</p> <p>For this UIN, an inspection of the HSI resources is performed to confirm that the HSI resources available in the MCR for the MCR operators at the time of plant startup include an alarm system, plant information system (nonsafety-related displays), wall panel information system, nonsafety-related controls (soft and dedicated), and computerized procedure system. The UIN does not state the purpose of the inspection or what was done to perform it. It merely refers to verification of the inclusion of HSI systems and controls in the MCR without ever stating how that was done or what that exactly means. The UIN also refers to results without stating what those results are and what is contained in them.</p>

Date	No.	ICN OR UIN	TOPIC	ITAAC INDEX NUMBERS RECEIVED	ISSUE
1/9	17	UIN	HFE HSI Design Verification	Vogtle 3 & 4 740, 740	<p>This item was discussed during public calls on 12/15/16 and 1/12/17. This write-up was revised following the Jan. 12 call. This section refers to NEI 08-01, Rev 5 Corrected</p> <p>NEI 08-01 Example D52 is for ITAAC index No. 741. The ICN for ITAAC 741 was accepted. D52 is an appropriate example for use with ITAAC index No. 740. However, Example D52 contains greater detail in the IDB than was provided in the UIN for ITAAC 740.</p> <p>The UIN for ITAAC index No. 740 is not consistent with NEI 08-01 Section 6, which requires that UINs/ICNs describe / explain the methodology and key steps used in performing the ITA and determining that each element of the AC was met. Required information includes, but is not limited to, a description of the specific procedures and analytical methods used for performing the ITA and determining the prescribed AC are met. If the IDB references non-public documents, it should include a brief summary of the salient information included in those documents.</p>

Date	No.	ICN OR UIN	TOPIC	ITAAC INDEX NUMBERS RECEIVED	ISSUE
1/3	14	UIN	Electrical separation	Vogtle 3 791	<p>This item was discussed during public call on 1/12/17. This write-up was revised following the Jan. 12 call. The IDB contains an incomplete sentence and needs to be fixed to match same sentence in UIN 790.</p>

Date	No.	ICN OR UIN	TOPIC	ITAAC INDEX NUMBERS RECEIVED	ISSUE
1/9	16	ICN	Electromagnetic Compatibility qualification of the non-safety related Diverse Actuation System (DAS)	Vogtle 3 & 4 514, 514	<p>This item was discussed during public calls on 12/15/16 and 1/12/17. This write-up was revised following the Jan. 12 call. This section refers to NEI 08-01, Rev 5 Corrected</p> <p>NEI 08-01 Example Demo 1 is for ITAAC index No. 24. Demo 1 is an acceptable example for use with ITAAC index No. 514. However, Demo 1 contains greater detail in the IDB than was provided in the ICN for ITAAC 514. Specifically, Demo 1 references AP-1000 Appendix 3D for additional information on the methods used to qualify the equipment, Tier 2 Chapter 3 for the requirements of the EQDPs and also provides the standard used in addition to the RG. Demo 1 also includes a table with additional information.</p> <p>The ICN for ITAAC index No. 514 is not consistent with NEI 08-01 Section 6, which requires that ICNs describe / explain the methodology and key steps used in performing the ITA and determining that each element of the AC was met. Required information includes, but is not limited to, a description of the specific procedures and analytical methods used for performing the ITA and determining the prescribed AC are met. If the IDB references non-public documents, it should include a brief summary of the salient information included in those documents. Specifically, the ICN:</p> <ol style="list-style-type: none"> <li>1. Does not state for each what was done by analysis and what testing did.</li> <li>2. RG 1.180 endorses two standards for EMI/RFI emissions testing MIL-STD-461E and IEC 61000-6-4 test methods. The ICN does not state which was used.</li> <li>3. The same RG endorses IEEE C62.41-1991 and the IEC Methods for SWC testing, The ICN does not state which was used.</li> <li>4. The RG does not address electrostatic discharge (ESD). The methodology that was used was per APP-GW-G1-002, and that document is a not readily available to the public.</li> </ol>

Date	No.	ICN OR UIN	TOPIC	ITAAC INDEX NUMBERS RECEIVED	ISSUE																																				
1/23	17	ICN	Seismic components located on nuclear island	<table border="1"> <tr><td>630</td><td>V4</td></tr> <tr><td>630</td><td>V3</td></tr> <tr><td>291</td><td>V3</td></tr> <tr><td>291</td><td>V4</td></tr> <tr><td>396</td><td>V4</td></tr> <tr><td>396</td><td>V3</td></tr> <tr><td>361</td><td>V3</td></tr> <tr><td>462</td><td>V4</td></tr> <tr><td>684</td><td>V3</td></tr> <tr><td>437</td><td>V3</td></tr> <tr><td>437</td><td>V4</td></tr> <tr><td>462</td><td>V3</td></tr> <tr><td>6</td><td>V3</td></tr> <tr><td>6</td><td>V4</td></tr> <tr><td>9</td><td>V3</td></tr> <tr><td>9</td><td>V4</td></tr> <tr><td>823</td><td>V4</td></tr> <tr><td>823</td><td>V3</td></tr> </table>	630	V4	630	V3	291	V3	291	V4	396	V4	396	V3	361	V3	462	V4	684	V3	437	V3	437	V4	462	V3	6	V3	6	V4	9	V3	9	V4	823	V4	823	V3	<p>These ICNs have been submitted to early, they cannot be submitted until the components are verified in place.</p> <p>The purpose of ITAAC is to verify that the as-built plant conforms to the approved design. The submitted ICNs do not verify the as-built plant conforms to the approved design and are not consistent with the ITAAC requirement to verify that the seismic category I equipment and valves identified in Table X.X.X-X are located on the nuclear island.</p> <p>NEI 08-01 Example D43 is for this ITAAC. The ICNs do not conform to D43.</p>
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Date	No.	ICN OR UIN	TOPIC	ITAAC INDEX NUMBERS RECEIVED	ISSUE
1/23	18	ICN	Rad Monitors exist	Vogtle 3 & 4 832, 832 831, 831	<p>These ICNs have been submitted to early, they cannot be submitted until the components are verified in place.</p> <p>The purpose of ITAAC is to verify that the as-built plant conforms to the approved design. The submitted ICNs do not verify the as-built plant conforms to the approved design and are not consistent with the ITAAC requirement to verify that the radiation monitors exist.</p> <p>COL Appendix C General Provisions identifies when the term exist is used it means the item is present and meets the design commitment.</p>

Date	No.	ICN OR UIN	TOPIC	ITAAC INDEX NUMBERS RECEIVED	ISSUE
1/23	19	IPCN		Vogtle 3 & 4 580, 580	These letters should be labeled as ITAAC Post Closure Notifications