

St Lucie EAL RAIs.txt

From: Siva Lingam
Sent: Thursday, February 26, 2009 4:12 PM
To: Frehafer, Ken
Cc: Tom Boyce (NRR); Jason Paige; Don Johnson
Attachments: St Lucie_EAL_Upgrade_RAIs - DRAFT.DOC

Attached please find the draft RAIs for St. Lucie EALs. After your review of these RAIs is complete, we can set up the phone call to discuss these RAIs.

Siva P. Lingam
U.S. Nuclear Regulatory Commission
Project Manager (NRR/DORL/LPL2-2)
Saint Lucie and Turkey Point Nuclear Stations
Location: 08-D5; Mail Stop: 08-G9a
Telephone: 301-415-1564; Fax: 301-415-1222
E-mail address: siva.lingam@nrc.gov

St Lucie
NRC Request for Additional Information (RAI)
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RAI #	EAL	Question
GENERIC		<p>It is expected that licensee's adhere to endorsed guidance, particularly for Initiating Conditions and Definitions, with no differences or deviations other than those related to a licensee's particular design. This is to ensure regulatory stability of the EAL scheme by enforcing the expectation that licensees adhere to NRC reviewed and endorsed guidance with no non-design related deviations and little to no differences.</p> <p>This also ensures that, as stated in 10 CFR 50.47(b)(4), licensees implement a "...standard emergency classification and action level scheme...."</p> <p>While the NRC is not enforcing strict verbatim compliance with the endorsed guidance, where applicable, the NRC will be pointing out areas where we expect compliance with the endorsed guidance to ensure implementation of a standard scheme. This is primarily based upon industry and NRC experience with issues related to the particular EAL.</p>
BASES INFORMATION		<p>Staff has noted discrepancies between the proposed Bases Information wording and the endorsed Bases Information wording. Incorporate the endorsed wording to ensure a standard emergency classification and action level scheme or provide detailed justification for not doing so in each case.</p>
1	ATT. 2	<p>Add that the EAL Bases information will also be controlled via 10 CFR 50.54(q).</p>
2	ATT. 6	<ol style="list-style-type: none"> 1. Add the Fission Barrier Matrix to the list of discretionary EALs found in the last paragraph dealing with multiple events and emergency class upgrading. 2. Follow the expectations as stated in the endorsed guidance to ensure a standard emergency classification and action level scheme or provide detailed justification for not doing so in each case. All of the parts of Attachment 6 are, for the most part, inconsistent with the endorsed guidance. Use the endorsed guidance, or provide additional information to support the staff's consideration of these deviations. For consistency, it is expected that licensees adopt the intent, if not the exact wording, of the endorsed guidance for all of Attachment 6. 3. The 3rd paragraph of the "Multiple Events..." section requires additional justification to support the deviation. Explain how the regulatory requirements would be met if one unit is at a GE when the other unit meets the criteria for a GE (separate events); how would this be declared and how would a classification downgrade for the unit that declared the GE impact the unit that still meets the criteria for a GE but never actually declared it? 4. This attachment is inconsistent with Sections 3.10, 3.11, and 3.12. Explain the inconsistency or revise to ensure a standard emergency classification and action level scheme or provide detailed justification for not doing so in each case.
3	SECT 1.1	<p>Incorporate wording from the endorsed guidance for the Basis information bullet.</p>
4	SECT 3.5	<p>Incorporate information from NEI 99-01 R5 related to the digital I&C example.</p>

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5	SECT 3.9	The first paragraph is not in accordance with NEI 99-01 R5. Remove this paragraph and replace it with the 1 st paragraph of Section 3.9 from NEI 99-01 R5 to ensure compliance with the standard emergency classification and action level scheme.
6	SECT. 5.2	<ol style="list-style-type: none"> 1. Add the definition for “Extortion,” “Hostage,” “Intrusion,” “Sabotage,” and “Strike Action” to ensure compliance with the standard emergency classification and action level scheme. 2. Is the term “power block” defined in your FSAR? In addition, this term is too all encompassing for effective use in the EALs. In addition, this term appears to be inconsistently used throughout the document. Staff expects area determination to be consistent with the endorsed guidance without adding any other areas that may lead to unnecessary EAL declarations. 3. For the terms “Containment Closure” “Protected Area,” and “Vital Areas,” use your site-specific definition, not the generalized wording from NEI 99-01 R5. 4. Explain why turbine runback, SI injection, or thermal power oscillations are not considered part of the definition for significant transient.
7	SECT 5.3 (NEI)	Incorporate Section 5.3 from NEI 99-01 R5 to ensure adequate understanding.
8	RU1 RA1	<ol style="list-style-type: none"> 1. Incorporate the remaining non-developer information from the endorsed guidance to ensure compliance with the standard emergency classification and action level scheme. 2. Is “2 (200) times the High Alarm setpoint” within the calibrated ranges of these instruments and are they able to be read (i.e., on a scale marking) if they are actually in the calibrated range (assuming a logarithmic scale)? 3. Justify why the actual threshold values are not listed, as this is the expectation from the endorsed guidance. 4. Do all the listed monitors/channels annunciate in the Control Room? If not, provide additional justification to support their suitability as EAL thresholds. 5. Justify why the NRC should consider the deviation from (NEI) AU1.3, which is the site’s RU1.2. If not based upon a site-specific design issue, the expectation is to adhere to the endorsed wording to ensure compliance with the standard emergency classification and action level scheme. [Note that RA1.2 is consistent with the endorsed guidance.]
9	RU2	<ol style="list-style-type: none"> 1. Incorporate the remaining non-developer information from the endorsed guidance to ensure compliance with the standard emergency classification and action level scheme. In addition, the 3rd paragraph of the bases is not consistent with the endorsed guidance. Fully justify the deviation or revise to ensure compliance with the standard emergency classification and action level scheme. 2. Do all the listed monitors/channels indicate in the Control Room? If not, provide additional justification to support their suitability as EAL thresholds.

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10	RA2	<ol style="list-style-type: none"> 1. Do all the listed monitors/channels indicate in the Control Room? If not, provide additional justification to support their suitability as EAL thresholds. 2. Fully justify how you will be able to timely differentiate between “Off scale High” and instrument failure. 3. Incorporate the remaining non-developer information from the endorsed guidance to ensure compliance with the standard emergency classification and action level scheme.
11	RA3	<ol style="list-style-type: none"> 1. Explain why you added the TSC and SAS? Are these areas requiring continuous occupancy that, if evacuated, would impede operation of systems required to maintain plant safety functions or perform a safe shutdown? Fully justify their inclusion or remove to ensure compliance with the standard emergency classification and action level scheme. 2. Incorporate the remaining non-developer information from the endorsed guidance to ensure compliance with the standard emergency classification and action level scheme.
12	RS1 RG1	<ol style="list-style-type: none"> 1. Do all the listed monitors/channels indicate in the Control Room? If not, provide additional justification to support their suitability as EAL thresholds. 2. Incorporate the remaining non-developer information from the endorsed guidance to ensure compliance with the standard emergency classification and action level scheme. <p><i>[spelling error in note]</i></p>
13	CU1	Add the endorsed information related to relief valves to ensure compliance with the standard emergency classification and action level scheme.
14	CU3	Use the wording from the endorsed guidance in the Bases information to ensure compliance with the standard emergency classification and action level scheme.
15	CU4	Remove the word “Unplanned” from threshold 2 to ensure compliance with the standard emergency classification and action level scheme.
16	CU6 SU6	Is the State Hot Ringdown system a viable method for communicating with the NRC? If not, justify its inclusion on this list or remove it.
17	CU7	<ol style="list-style-type: none"> 1. Remove the word “Unplanned” from the IC to ensure compliance with the standard emergency classification and action level scheme. Also, remove the bases information related to this term in this EAL. 2. How was “...ALL...” determined to be an acceptable alternative to the expectation that the site-specific busses be listed? Justify or revise accordingly to ensure compliance with the standard emergency classification and action level scheme.

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18	CA1 CS1 CG1	<ol style="list-style-type: none"> 1. Justify why an indication from Tygon tubing is acceptable for use in this EAL. Is the indication available in the Control Room? Is it permanently installed? What procedure dictates its use and why is it not referenced in the EAL? 2. Are all the values listed equivalent to the expected values as detailed in the endorsed guidance?
19	CA3	Use the wording from the endorsed guidance in the Bases information to ensure compliance with the standard emergency classification and action level scheme.
20	CA4	<ol style="list-style-type: none"> 1. Where is the part of the EAL that deals with reduced inventory? 2. Is the 10-psi value in CA4.2 within the calibrated range of the instrumentation used in these operating modes? What are the scale markings for these indicators?
21	CG1	The expectation is for the value in CG1.1b to be the same as CS1.2. Explain why consideration should be given for this deviation from the standard emergency classification and action level scheme as endorsed.
22	FB MATRIX	<ol style="list-style-type: none"> 1. The note at the bottom of the IC Matrix is not needed if the logic flow diagram is implemented at the site. 2. If you do not use CFST trees, you must still develop thresholds that are equivalent to the condition(s) typically addressed by the CFST trees. Develop equivalent thresholds to ensure compliance with the standard emergency classification and action level scheme. 3. For Fuel Clad Barrier PL4: This level seems inconsistent with other EAL thresholds that use a value equivalent to TOAF. Explain the inconsistency or revise all applicable thresholds to ensure compliance with the standard emergency classification and action level scheme. 4. Provide more justification to explain why you do not have any thresholds for #7 (from the endorsed guidance). It is expected that licensees adopt thresholds that equate to loss or potential loss of the applicable fission barrier. The endorsed guidance intends for licensees to provide other indicators here, or provide additional justification detailing the considerations that went into the decision to not add additional indicators.
23	HU1	<ol style="list-style-type: none"> 1. HU1.2: Is 120 mph within the calibrated range of the instrumentation used to measure wind speed? 2. Where is the internal flooding threshold? Provide additional justification for its removal, or revise to ensure compliance with the standard emergency classification and action level scheme. 3. The bases information for threshold #4 needs to be specific to your site, not a regurgitation of the generic information from the endorsed guidance.

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24	HU2	<ol style="list-style-type: none"> 1. Add the note from the endorsed guidance to ensure compliance with the standard emergency classification and action level scheme. 2. See RAI related to use of the term “power block” and justify its use in this EAL. 3. ICs are expected to be verbatim unless adequate justification is given for the NRC to consider the change. Restore compliance to the endorsed IC or provide adequate justification to support this change. This is to ensure compliance with the standard emergency classification and action level scheme.
25	HU3	<ol style="list-style-type: none"> 1. Restore HU3.1 to the EAL endorsed by the NRC or provide adequate justification for the change. This is to ensure compliance with the standard emergency classification and action level scheme. 2. Add the words “corrosive” and “asphyxiant” to the 1st paragraph in the bases. 3. Remove the 2nd paragraph from the bases as this is not from the endorsed guidance, or justify why the NRC should consider this deviation. 4. Use the wording from the endorsed guidance in the Bases information to ensure compliance with the standard emergency classification and action level scheme.
26	HU4	<p>Add the note from the endorsed guidance to ensure compliance with the standard emergency classification and action level scheme.</p>
27	HA1	<ol style="list-style-type: none"> 1. HA1.1: Explain how the first criteria would work to ensure a timely EAL declaration. Is this available in the control room without any operator/technician interaction? Where is the wording related to indication of degraded performance? Provide additional justification for its removal, or revise to ensure compliance with the standard emergency classification and action level scheme. 2. HA1.2: Is 120 mph within the calibrated range of the instrumentation used to measure wind speed? 3. HA1.3: Explain why you did not use the term Vital Areas as expected from the endorsed guidance. If sufficient justification is given to allow the staff to reach a similar conclusion, explain why these are the only two areas listed for this threshold, particularly given the bases for the threshold as defined in the endorsed guidance. 4. HA1.4 and HA1.5: See RAI related to use of the term “power block” and justify its use in this EAL. 5. Explain in greater detail why a threshold for turbine failure is not provided in this EAL or revise to ensure compliance with the standard emergency classification and action level scheme. 6. The bases information for threshold #5 needs to be specific to your site, not a regurgitation of the generic information from the endorsed guidance.

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28	HA2	<ol style="list-style-type: none"> 1. See RAI related to use of the term “power block” and justify its use in this EAL. 2. The expectation is for a specific list of areas this EAL would be applicable to. Justify the deviation or revise to ensure compliance with the standard emergency classification and action level scheme.
29	HA3	<ol style="list-style-type: none"> 1. While the use of the term “vital areas” meets the staff’s expectations, it does highlight the inconsistency in the use of this term versus “power block” in the proposed EAL scheme. 2. Add the note from the endorsed guidance to ensure compliance with the standard emergency classification and action level scheme. 3. Add paragraphs #3 and #4 from the endorsed guidance to ensure compliance with the standard emergency classification and action level scheme. 4. Remove the 2nd paragraph from the bases as this is not from the endorsed guidance, or justify why the NRC should consider this deviation.
30	HA4	<ol style="list-style-type: none"> 1. Add the note from the endorsed guidance to ensure compliance with the standard emergency classification and action level scheme. 2. Incorporate the bases wording from the endorsed guidance for threshold #1 to ensure compliance with the standard emergency classification and action level scheme.
31	HS2	Incorporate the bases information from the endorsed guidance into paragraph.
32	SA4 SS6	Why define “significant transient” in the Definitions section, then define it again in this EAL? Moreover, explain why the list of transients is not in accordance with the endorsed guidance.
33	SA2 SS2	<ol style="list-style-type: none"> 1. SA2: Explain why “RPS” was added to the 1st and 3rd paragraphs of the bases. This is not the expectation of the endorsed guidance. 2. Provide more information related to the suitability of “Reactivity Control Safety Functions Met” and why you feel it is acceptable for use in this EAL. 3. Incorporate the rest of the bases information from the endorsed guidance to ensure compliance with the standard emergency classification and action level scheme.
34	SA5	Incorporate the rest of the bases information from the endorsed guidance to ensure compliance with the standard emergency classification and action level scheme.
35	SG2	Paragraphs #2 and #3 in the bases section is not applicable for this EAL and needs to be removed to ensure compliance with the standard emergency classification and action level scheme.