

From: Rankin, Jennivine
Sent: Friday, February 7, 2020 5:17 AM
To: Vogtle PEmails
Subject: FW: Presentation Slides to Support Feb. 13, 2020 Technical Exchange (2 Topics)
Attachments: Tech Exch Slides_13Feb2020_ITAAC LAR Topic.pdf; Tech Exch Slides_13Feb2020_CdC Process LAR Topic.pdf

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Sent: Thursday, February 06, 2020 4:44 PM
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Subject: [External_Sender] Presentation Slides to Support Feb. 13, 2020 Technical Exchange (2 Topics)

Hi Tanny – the attached two Adobe presentation files are provided to the Staff in support of our planned Feb. 13, 2020 Technical Exchange for the following topics:

1. Non-Material Issues Related to Completion of ITAAC
2. Proposed LAR for License Condition 2.D.(1) Changes during Construction

Amy Chamberlain and Eddie Grant will attend the Technical Exchange in person. We anticipate each topic to require approximately 45 minutes (90 minutes total). Please contact me if additional information is needed.

Respectfully,

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Non-Material Issues Related to Completion of ITAAC

Technical Exchange Meeting

02/13/2020



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Agenda

- Background
- Problem Statement
- Example ITAAC (for discussion)
- Proposed Path Forward
- Draft License Amendment Request
- Questions/Discussion



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Background

- Examples have been identified of requirements identified in an ITAAC that are not actually necessary to be met to show that the Design Commitment has been met.
- For examples identified to-date, the requirements have been accommodated.
- To prepare for future instances where accommodations for the requirements would impact the fuel load schedule or reduce schedule flexibility, SNC is investigating alternate processes to the typical LAR and Exemption content and schedule.
- Example for Discussion – ITAAC 178, which requires “Each accumulator will be partially filled with water and pressurized with nitrogen.”



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Example Problem Statement

- When identified, the nitrogen source was not available.
- First indications were that the nitrogen source availability would be delayed, potentially impacting the testing schedule, and closure of the ITAAC.
[This has since been resolved for Unit 3.]
- For discussion, the use of “nitrogen” for the pressurization of the accumulator is not material to the test to show the Design Commitment is met by the components being tested.
- Any gas could be use for the pressurization of the accumulator to complete the test to show the Design Commitment is met by the components being tested.



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Example ITAAC

Table 2.2.3-4			
Inspections, Tests, Analyses, and Acceptance Criteria			
Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria	

8.c) The PXS provides RCS makeup, boration, and safety injection during design basis events.	i) ***	i) ***	
	2. Accumulators: Each accumulator will be partially filled with water and pressurized with nitrogen . All valves in these lines will be open during the test. Sufficient flow will be provided to fully open the check valves.	2. Accumulators: The calculated flow resistance between each accumulator and the reactor vessel is $\geq 1.47 \times 10^{-5}$ ft/gpm ² and $\leq 1.83 \times 10^{-5}$ ft/gpm ² .	



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Example Path Forward

- **Simplified LAR to remove “with nitrogen” so that the test can be done with any gas.**
- **With schedule impact justification, request expedited process.**
- **Discuss Simplified LAR content.**
- **Technical Justification is primarily that the change is not material to the ITA.**
- **Will also provide justification for expedited process.**
- **Reduced Regulatory Evaluation, retains significant hazards**
- **Reduced Environmental Considerations**
- **Slightly reduced Exemption content**



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Questions / Discussion

(Draft simplified LAR available)



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Proposed License Amendment Request: License Condition 2.D.(1) Changes during Construction

February 13, 2020

Technical/Licensing Exchange Meeting



Southern Nuclear



Georgia Power

Meeting Purpose and Agenda

Meeting Purpose

- **Technical Exchange meeting to discuss a proposed License Amendment Request (LAR) to change COL License Condition (LC) 2.D.(1) by replacing the Changes during Construction (CdC) process addressed in COL/ISG-025 with a site-specific at-risk CdC process**
- **Receive Staff feedback**



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Meeting Purpose and Agenda

Agenda

- **Background**
- **Need for Change**
- **Description of Proposed Change**
- **Proposed COL License Condition**
- **Basis for Approval of Proposed Change**
- **Questions, Comments and Open Discussion**



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Background

- **January 2012: NRC issues for use, and public comment on, draft Interim Staff Guidance (ISG) COL-ISG-025 “Interim Staff Guidance on Changes During Construction Under 10 CFR Part 52” (ISG-025)**
 - **Provides an “at-risk” preliminary amendment request (PAR) process to allow construction to proceed as NRC reviews license amendment requests (LARs), exemption requests, or both associated with construction activities**
 - **Based on the premise that construction (as defined in 10 CFR 50.10) may not proceed until licensing basis is changed**



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Background

- **Primary purpose of ISG-025**
 - **Avoid unnecessary construction delays related to changes during construction (CdC)**
 - **Maintain licensing basis configuration control**
- **Other attributes of ISG-025**
 - **Communicate impact of change on inspection & testing accessibility and scheduling**
 - **Communicate impact of ITAAC verification activities associated with CdC activities**
 - **Licensee retains risk of returning plant to Current Licensing Basis (CLB) if LAR is subsequently denied**



Need for Change

- In the past 8 years, the PAR process has achieved stated purpose, but has involved a significant administrative burden
 - SNC has received over 40 “No Objection” Letters for activities on:
 - Construction (including one LAR that required 3 PARs)
 - Testing
 - Integrated System Validation
 - Fitness-for-Duty Access Authorization
 - No PARs have been denied, or associated LARs not approved, requiring return to CLB configuration
 - Admin burden due to evaluation, preparation, review of PAR submittal
 - No commensurate nuclear risk benefit, as plant systems, structures, and components (SSCs) serve no safety function prior to fuel load



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Need for Change

- **During this same period, SNC has demonstrated:**
 - **Ability to maintain control of the VEGP 3&4 Licensing Basis**
 - **Timely incorporation of approved changes**
 - **Real-time tracking of near-term and approved changes**
 - **Each PAR submitted was evaluated by SNC Management prior to submittal to confirm risk of denial is acceptable**



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Need for Change

To maintain the VEGP construction and testing schedule, SNC needs to be able to respond quickly for potential licensing basis changes that may arise as construction nears completion and testing activities ramp up.

- Performing and documenting a 50.59-like evaluation for even the most straightforward change may delay a team performing testing for days**
- The delay associated with developing, documenting, and processing a LAR/PAR and awaiting receipt of “No Objection” letter is a minimum of 2 - 3 weeks**
- Considering the amount of testing to occur over the upcoming months, the impact of these delays could compound, potentially impacting the fuel load schedule**



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Description of Proposed Change

- Change is proposed to License Condition 2.D.(1) to replace PAR process and reference to ISG-025 with an allowance to proceed at-risk with construction/testing activities in advance of regulatory evaluation
- Proposed License Condition will satisfy each ISG-025 primary purpose and attribute, and allow construction and testing activities to proceed in advance of Licensing Basis changes
 - Regulations do not require Licensing Basis changes to lead construction [10 CFR 50.10(c) requires receipt of the appropriate license or authorization prior to commencing construction]
 - CdC to be incorporated, or plant restored to CLB, prior to the applicable requirement being needed (e.g., ICN submittal, Technical Specifications mode applicability, etc.)
 - SNC retains risk of returning plant to CLB if change not approved



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Proposed COL License Condition

(1) Changes during Construction

- ~~(a) SNC may request use of a preliminary amendment request (PAR) process, for license amendments, at any time before a Commission finding under 10 CFR 52.103(g). To use the PAR process, SNC shall submit a written request to the Office of New Reactors (NRO) in accordance with COL-ISG-025, "Changes during Construction under Part 52."~~
- ~~(b) Before NRO's issuance of a written PAR notification, SNC shall submit the license amendment request (LAR). Thereafter, NRO will issue a written PAR notification, setting forth whether SNC may proceed in accordance with the PAR, LAR, and COL-ISG-025. If SNC elects to proceed and the LAR is subsequently denied, SNC shall return the facility to its current licensing basis.~~

Prior to operation in accordance with Section 2.D.(6), SNC may proceed, at-risk, with construction of changes to or departures from the current licensing basis prior to incorporation of the change or departure into the current licensing basis. If SNC elects to proceed with an at-risk construction activity, the change shall either be incorporated into the licensing basis or SNC shall restore the facility to compliance with the current licensing basis as required.



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Basis for Approval of Proposed Change

- **Primary purpose of Changes during Construction process**
 - **Avoid unnecessary construction delays related to CdC**
 - Avoids delays by allowing construction/testing to lead Licensing Basis changes prior to commencement of power ascension testing
 - **Maintain licensing basis configuration control**
 - Provided by Appendix B Quality Assurance requirements, including Corrective Action Program



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Basis for Approval of Proposed Change

- **Other attributes of Changes during Construction process**
 - **Communicate impact of change on inspection & testing accessibility and scheduling**
 - Appendix B requirements will ensure that changes are identified, documented and tracked to resolution
 - No impact to SNC's ability to provide NRC Inspectors information on changes to inspection and testing
 - **Communicate impact of ITAAC verification activities associated with CdC activities**
 - No impact to SNC's ability to provide NRC information on changes to ITAAC



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Basis for Approval of Proposed Change

- **Licensee retains risk of returning plant to CLB if LAR is denied**
 - SNC retains risk of returning plant to CLB if change not approved
 - CdC to be incorporated, or CLB restored, prior to full power operation per license condition 2.D.(6)
 - Technical Specifications become effective upon 103(g) finding per license condition 2.D.(9)
 - 10 CFR 50 Appendix B provides assurance that all changes are completed before safety function is required



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Supporting Basis

- **Proposed LC will satisfy each ISG-025 Primary & Secondary purpose, with the exception that changes to construction and testing activities may proceed in advance of Licensing Basis changes**
 - **Commission's regulations do not require Licensing Basis to lead construction**
 - **10 CFR 50.10(c) only requires receipt of the appropriate license or authorization prior to commencing construction**



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Questions, Comments, and Open Discussion



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