Vogtle PEmails

From: Chamberlain, Amy Christine <ACCHAMBE@southernco.com>
Sent: Thursday, August 18, 2016 4:02 PM
To: Patel, Chandu
Cc: Haggerty, Neil
Subject: [External_Sender] RE: Interim Amendment Request Post-Submittal Meeting
Attachments: IAR Presentation.pdf

Hi Chandu,

Attached is the presentation for SNC LAR-16-015, Request for License Amendment: Addition of Interim Amendment Request Process to License Condition 2.D.(1). In this presentation we use LAR-15-020, Use of Localized Shoring for Composite Floors and Roof in the Auxiliary Building, [ML15320A464] as an example in detail. Could you please make the public aware in the meeting notice that this LAR will be discussed?

I will also briefly discuss as examples VCS LAR 15-20 [ML16053A405], SNC LAR-13-003 [ML13016A169] and SNC LAR-12-008 [ML12269A433], and the Staff and Public may want to have copies available for reference.

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From: Chamberlain, Amy Christine
Sent: Tuesday, August 16, 2016 2:26 PM
To: 'Patel, Chandu'
Cc: Haggerty, Neil
Subject: Interim Amendment Request Post-Submittal Meeting

Hi Chandu,

In the Pre-Submittal meeting for SNC LAR-16-015, Addition of Interim Amendment Request Process to License Condition 2.D.(1), on July 21, 2016 it was suggested by the Staff that a Post-Submittal meeting to walk through a past LAR as a hypothetical example of the proposed process would be beneficial.

So, we would like to a have a public meeting to provide the hypothetical example to the Staff. We are prepared to have the discussion as early as next week depending on Staff availability.

Could you please check on Staff availability for this meeting?

Thank you,

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Request for License Amendment: Addition of Interim Amendment Request Process to License Condition 2.D.(1) (LAR-16-015)

Proposed IAR Process Overview

- Process to allow construction to continue at SNC's own risk
  - In emergent conditions
  - Non-conforming condition has little to no safety significance
  - Construction cannot proceed until condition is resolved.

Proposed IAR Process Overview

- Interim Amendment Request (IAR) would include:
  - An oath or Affirmation
  - Description of proposed change
  - Significant hazards consideration determination
  - Review of categorical exclusion from environmental review
  - Nuclear Construction Safety Assessment (NCSA)

Nuclear Construction Safety Assessment (NCSA)

- Identify the scope of the proposed change
- Evaluate whether emergent conditions are present,
- Evaluate whether the proposed change would result in any material decrease in safety
- Evaluate whether continued construction would make the nonconforming condition irreversible.

Evaluation of Safety

- Based on 10 CFR 52, Appendix D, Section VIII.B.5.b, VIII.B.5.c, VIII.B.5.d, and 10 CFR 50.59(c)(2) and would consider whether the change would:
  - Increase in the frequency of occurrence of an accident previously evaluated
  - Increase in the likelihood of occurrence of a malfunction
  - Increase in the consequences of an accident previously evaluated
  - Increase in the consequences of a malfunction of an SSC important to safety
  - Create a new type of accident
  - Create a malfunction with a different result
  - Results in design basis limit for a fission product barrier being exceeded or altered
  - A change in methodology used in establishing the design bases or in the safety analyses
  - Results in a departure from the information required by 10 CFR 52.47(a)(28); and if so, whether the assessment requirements in 10 CFR 50.150(a)(1) would continue to be met.
  - Affect the resolution of an ex-vessel severe accident design feature, such that:
    - Increase in the probability of an ex-vessel severe accident such that a non-credible event could become credible;

    or
    - Substantial increase in the consequences of a severe accident

Example – SNC LAR-15-020

- Use of Localized Shoring for Composite Floors and Roof in the Auxiliary Building (WEC LAR-116)
  - Revised T2* text in UFSAR Subsection 3H.5.2 to allow use of shoring for the metal deck in the vicinity of penetrations and other openings and as temporary supports in place of incomplete walls
  - The intent if the T2* text was to prohibit the use of shoring in the construction of beams, consistent with design.
  - While the applicability to beams could be inferred based on context, the language in the Tier 2* section of the licensing basis did not explicitly restrict it as such
  - Submitted in Nov 2015, PAR Submitted Feb 2016
  - Construction need was April 2016, No-objection received March 2016

Example – SNC LAR-15-020

- To invoke the IAR process, SNC would need to determine if emergent conditions are present
  - The need for the use of localized shoring being inconsistent with Tier 2* text was discovered during construction
  - Construction could not proceed on Aux building Wall 7.3 without resolution of non-conforming condition

Significant Hazards Consideration Determination

- Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated? **No**
- Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated? **No**
- Does the proposed amendment involve a significant reduction in a margin of safety? **No**

Environmental Review

- There is no significant hazards consideration.
- There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.
- There is no significant increase in individual or cumulative occupational radiation exposure.

Categorical exclusion from the environmental review

Example NCSA – SNC LAR-15-020

- Evaluate whether the proposed change would result in any material decrease in safety:
  1. Result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the plant-specific DCD or in the final safety analysis report (as updated).

  No - The use of localized temporary support for the metal deck at penetrations and similar conditions does not change the structural model used in the evaluation of the nuclear island structures. The evaluation method for the seismic and structural evaluation of the nuclear island structures is not changed. The analyses and evaluations of the floor and roof designs are not changed.

Example NCSA– SNC LAR-15-020

2. Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety and previously evaluated in the plant-specific DCD or in the final safety analysis report (as updated)

No - Use of localized temporary support does not impact the function, design, or operation of the systems and components supported by the walls, floors, floor modules, and structural wall modules. The use of localized temporary support does not impact the function, design, or operation of the safety related systems and components

Example NCSA – SNC LAR-15-020

3. Result in more than a minimal increase in the consequences of an accident previously evaluated in the plant-specific DCD or in the final safety analysis report (as updated);

No - The use of localized temporary support does not affect the prevention or mitigation of abnormal events (e.g., accidents, anticipated operational occurrences, earthquakes, floods and turbine missiles, or their safety or design analyses).

Example NCSA– SNC LAR-15-020

4. Result in more than a minimal increase in the consequences of a malfunction of an SSC important to safety previously evaluated in the plant-specific DCD or in the final safety analysis report (as updated);

No - The use of localized temporary support does not involve, nor interface with any structure, system, or component accident initiator or initiating sequence of events, and thus, the probabilities of the accidents previously evaluated in the plant-specific DCD or UFSAR are not affected.

Example NCSA– SNC LAR-15-020

5. Create a possibility for an accident of a different type than any evaluated previously in the plant-specific DCD or in the final safety analysis report (as updated);

No - The use of localized temporary support for the metal deck at penetrations and similar conditions does not change the structural model used in the evaluation of the nuclear island structures. The evaluation method for the seismic and structural evaluation of the nuclear island structures is not changed. The analyses and evaluations of the floor and roof designs are not changed.

Example NCSA– SNC LAR-15-020

6. Create a possibility for a malfunction of an SSC important to safety with a different result than any evaluated previously in the plant-specific DCD or in the final safety analysis report (as updated);

No - The proposed changes do not adversely affect any safety-related system, component, or equipment design code, design code allowable value, function, or design analysis, nor do they adversely affect any safety analysis input, result, or design/safety margin.

Example NCSA – SNC LAR-15-020

7. Result in a design basis limit for a fission product barrier as described in the plant-specific DCD or in the final safety analysis report (as updated) being exceeded or altered

No - The proposed changes do not make changes to or affect safety-related equipment or a fission product barrier.

Example NCSA – SNC LAR-15-020

8. Result in a departure from a method of evaluation described in the plant-specific DCD or in the final safety analysis report (as updated) used in establishing the design bases or in the safety analyses.

No - The use of localized temporary support for the metal deck at penetrations and similar conditions does not change the structural model used in the evaluation of the nuclear island structures. The evaluation method for the seismic and structural evaluation of the nuclear island structures is not changed. The analyses and evaluations of the floor and roof designs are not changed. The design of the nuclear island structures with the subject change remains in conformance with the applicable portions of ACI 349 and AISC N690

Example NSCA– SNC LAR-15-020

9. Result in a departure from the information required by 10 CFR 52.47(a)(28); and if so, whether the assessment requirements in 10 CFR 50.150(a)(1) would continue to be met.

No - The proposed change has no impact on the Aircraft Impact Assessment. The changes described are to construction methods for the auxiliary building floors and roof and do not impact the design or response of the containment vessel and shield building. There is no change to protection of plant structures, systems, and components against aircraft impact provided by the design of the shield building. There is no change to the design of any of the key design features described in UFSAR Appendix 19F. The thickness and strength of the walls, floors, and roof in the auxiliary building are not changed. The activity described does not change the overall design or construction of the shield building.

Example NCSA – SNC LAR-15-020

10. Affect the resolution of an ex-vessel severe accident design feature identified in the plant-specific DCD, such that:

    (a) There is a substantial increase in the probability of an ex-vessel severe accident such that a particular ex-vessel severe accident previously reviewed and determined to be not credible could become credible; or

    (b) There is a substantial increase in the consequences to the public

No - The proposed change has no adverse effect on the ex-vessel severe accident. The design, geometry, and strength of the containment internal structures are not changed. The design and material selection of the concrete floor beneath the reactor vessel is not altered. The response of the containment to a postulated reactor vessel failure, including direct containment heating, ex-vessel steam explosions, and core concrete interactions, is not altered by the changes to the construction methods used to construct the auxiliary building floor and roof. The design of the reactor vessel and the response of the reactor vessel to a postulated severe accident are not altered by the localized use of shoring.

Example – SNC LAR-15-020

- The final portion of the IAR would evaluate whether continued construction would make the nonconforming condition irreversible
  - Placement of concrete for Wall 7.3 in the VEGP Unit 3 auxiliary building would be performed using temporary shoring; the concrete can be later removed to restore the wall to its current condition, if required.

Additional Examples of IAR Candidates

- VCS LAR 15-20 – Increased Concrete Thickness Tolerance for Column Line J-1 and J-2 Walls above 66'6"
  - Impacted Tier 1 Table 3.3-1 and Tier 2 Subsection 3.8.4.1.2
- SNC LAR-13-003 – Tier 2* Editorial and Consistency Changes
  - Numerous impacts to Tier 2* information in UFSAR Chapter 3
- SNC LAR-12-008 – Tier 1 Definition of Wall Thicknesses
  - Impacted Tier 1 Table 3.3-1