ClinchRiverESPHFNPEm Resource

From:	Sutton, Mallecia
Sent:	Thursday, December 21, 2017 5:11 PM
To:	Schiele, Raymond Joseph
Cc:	ClinchRiverESPSafRAIPEm Resource; Fetter, Allen; pshastings@tva.gov; Colaccino, Joseph; Musico, Bruce; Barss, Dan; Anderson, Joseph
Subject:	Issuance of RAI Pertaining to Part 6 of the Clinch River Nuclear Site ESP application - Exemptions and Departures (RAI Number 11, eRAI-9227)
Attachments:	CRNS ESP Final RAI EP-11 9227.pdf

Good Afternoon,

This email is the formal issuance of RAI Number 11, eRAI-9227, pertaining to Part 6 of the Clinch River Nuclear Site ESP application - Exemptions and Departures. This is the 11th safety RAI prepared (Number 11) for the Clinch River Nuclear Site ESP application review, and it has unique e-RAI identifying number of eRAI-9227. TVA did not request a clarification call on the draft RAI.

The schedule NRC have established for the review of the application assumes technically correct and complete responses within 30 calendar days of receipt of RAIs.

Please let me know if you have any questions.

Thanks,

Mallecia Sutton, Project Manager
U.S. Nuclear Regulatory Commission
Office of New Reactors
Division of New Reactor Licensing
Licensing Branch 3
Washington, D.C.
301-415-0673 (Office)

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From: Sutton, Mallecia

Created By: Mallecia.Sutton@nrc.gov

Recipients:
"ClinchRiverESPSafRAIPEm Resource" <ClinchRiverESPSafRAIPEm.Resource@nrc.gov>
Tracking Status: None
"Fetter, Allen" <Allen.Fetter@nrc.gov>
Tracking Status: None
"pshastings@tva.gov" <pshastings@tva.gov>
Tracking Status: None
"Colaccino, Joseph" <Joseph.Colaccino@nrc.gov>
Tracking Status: None
"Musico, Bruce" <Bruce.Musico@nrc.gov>
Tracking Status: None
"Barss, Dan" <Dan.Barss@nrc.gov>
Tracking Status: None
"Anderson, Joseph" <Joseph.Anderson@nrc.gov>
Tracking Status: None
"Schiele, Raymond Joseph" <rjschiele@tva.gov>
Tracking Status: None

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Request for Additional Information Number 11, eRAI-9227

Issue Date: 12/21/2017
Application Title: Clinch River Nuclear Site, ESP
Operating Company: Tennessee Valley Authority
Docket No. 52-047
Review Section: 13.03 - Emergency Planning
Application Section: Part 6, EP Exemption

QUESTIONS

13.03-3

10 CFR 52.17(b)(2)(i) addresses the required contents of an early site permit application (ESPA) that proposes major features of the emergency plans. For such an application, the applicant may address various requirements in Appendix E to 10 CFR Part 50. ESPA Part 2 (Site Safety Analysis Report (SSAR)), Section 13.3, "Emergency Preparedness," identifies major features Emergency Plan 5A (Site Boundary EPZ) in ESPA Part 5, which reflects various requested emergency planning (EP) exemptions in ESPA Part 6, Table 1-1, "Exemptions Requested from 10 CFR 50.33(g), 50.47(b), and (c)(2) for the Site Boundary EPZ Emergency Plan," and Table 1-2, "Exemptions Requested from 10 CFR 50, Appendix E for the Site Boundary EPZ Emergency Plan."

1. Table 1-2 includes exemption request Item No. 17, which addresses the proposed exemption from Section IV.F.2.c of Appendix E to 10 CFR Part 50 (below) that removes the requirements to exercise the offsite (emergency) plans, and the participation in exercises by offsite authorities. This includes removal of the five numbered requirements (i.e., (1) through (5)). Please explain why the words: "each licensee shall:" have been retained in the introductory paragraph. In addition, does the biennial exercise requirement of onsite emergency plans covered in (the revised) Section IV.F.2.b, and hostile action exercise requirement in Section IV.F.2.j, allow for an exemption from the entire requirement in Section IV.F.2.c (including the words "each licensee shall")?

~~F.2.c. Offsite plans for each site shall be exercised biennially with full participation by each offsite authority having a role under the radiological response plan. Where the offsite authority has a role under a radiological response plan for more than one site, it shall fully participate in one exercise every two years and shall, at least, partially participate in other offsite plan exercises in this period. If two different licensees each have licensed facilities located either on the same site or on adjacent, contiguous sites, and share most of the elements defining co-located licensees, then each licensee shall:~~

~~(1) Conduct an exercise biennially of its onsite emergency plan;~~

~~(2) Participate quadrennially in an offsite biennial full or partial participation exercise;~~
~~(3) Conduct emergency preparedness activities and interactions in the years between its participation in the offsite full or partial participation exercise with offsite authorities, to test and maintain interface among the affected State and local authorities and the licensee. Co-~~

located licensees shall also participate in emergency preparedness activities and interaction with offsite authorities for the period between exercises;

(4) Conduct a hostile action exercise of its onsite emergency plan in each exercise cycle; and

(5) Participate in an offsite biennial full or partial participation hostile action exercise in alternating exercise cycles.

2. Table 1-2 includes the following exemption request Item No. 18, which addresses proposed changes (exemptions) to Section IV.F.2.d of Appendix E to 10 CFR Part 50. The proposed change removes the requirements of Section IV.F.2.d Appendix E to 10 CFR Part 50.

F.2.d. Each State with responsibility for nuclear power reactor emergency preparedness should fully participate in the ingestion pathway portion of exercises at least once every exercise cycle. In States with more than one nuclear power reactor plume exposure pathway EPZ, the State should rotate this participation from site to site. Each State with responsibility for nuclear power reactor emergency preparedness should fully participate in a hostile action exercise at least once every cycle and should fully participate in one hostile action exercise by December 31, 2015. States with more than one nuclear power reactor plume exposure pathway EPZ should rotate this participation from site to site.

a. SSAR Section13.3.3.2, "Ingestion Exposure Pathway," states that "[t]he ingestion exposure pathway EPZ for the CRN Site will be described in the COLA." While the deferral to addressing the ingestion pathway EPZ until the COLA stage is allowed for a major features emergency plan, the deletion of the requirements in Section IV.F.2.d appears premature, in that it addresses ingestion pathway exercises, which have not been addressed in the ESP application. That is, if the ingestion pathway EPZ is addressed at the COLA stage, then the exemption request for the ingestion pathway EPZ should also be addressed at the COLA stage, rather than at the ESP application stage. Please explain why it is appropriate to consider an exemption for an area that is not addressed in the application, and deferred to the COLA.

b. If the requested exemption to Section IV.F.2.d is appropriate, address the following: The proposed changes to Section IV.F.2.d (above) removes the ingestion pathway and hostile action exercise requirements applicable to the State. The adjacent Table 1-2 column (Item 18), entitled "Basis for Exemption," includes the following: "Refer to basis for 10 CFR 50, Appendix E, Section IV.2" (i.e., Table 1-2, Item 2, Section IV.2 of Appendix E to 10 CFR Part 50). It is unclear whether the "Basis for Exemption" for Section IV.2, which addresses offsite response organizations (OROs) and the Comprehensive Emergency Management Plan (CEMP), should also apply to Section IV.F.2.d. This is because the deleted Section IV.F.2.d requirement addresses offsite exercise requirements for the State, in contrast to the deleted Section IV.2 requirement to provide an analysis of the time required to evacuate various sectors and distances within the plume exposure pathway emergency planning zone (EPZ) for transient and permanent populations. Please clarify whether the reference to Section IV.2 under "Basis for Exemption" for Section F.2.d (in Item 18 of Table 1-2) is correct, and revise, if appropriate.