

LeeRAIsPEm Resource

From: Hughes, Brian
Sent: Thursday, January 30, 2014 8:16 AM
To: LeeRAIsPEm Resource
Subject: RAI LTR 111Related to SRP 13.03 the WS Lee Units 1 & 2 SRP 13.03 EPlan
Attachments: LEE-RAI-LTR-111.docx

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Recipients:
"LeeRAIsPEm Resource" <LeeRAIsPEm.Resource@nrc.gov>
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January 30, 2013

Mr. Robert Kitchen
Licensing Manager, Nuclear Plant Development
Duke Energy
526 South Church Street
Charlotte, NC 28201-1006

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 111, RELATED TO SRP SECTION 13.03 EMERGENCY PLANNING FOR THE WILLIAM STATES LEE III UNITS 1 AND 2 COMBINED LICENSE APPLICATION (RAI – 7398)

Dear Mr. Kitchen:

By letter dated December 12, 2007, as supplemented by letters dated January 28, 2008, February 6, 2008 and February 8, 2008, Duke Energy submitted its application to the U. S. Nuclear Regulatory Commission (NRC) for a combined license (COL) for two AP1000 advanced passive pressurized water reactors pursuant to 10 CFR Part 52. The NRC staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed application.

The NRC staff has identified that additional information is needed to continue portions of the review. The staff's request for additional information (RAI) is contained in the enclosure to this letter.

To support the review schedule, you are requested to respond within 30 days of the date of this letter. If changes are needed to the final safety analysis report, the staff requests that the RAI response include the proposed wording changes.

R. Kitchen

If you have any questions or comments concerning this matter, you may contact me at 301-415-6582.

Sincerely,

/RA/

Brian Hughes, Senior Project Manager
Licensing Branch 4 - AP1000 Projects
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-018
52-019

Enclosure:
Request for Additional Information

CC: see next page

R. Kitchen

If you have any questions or comments concerning this matter, you may contact me at 301-415-3199.

Sincerely,

/RA/

Brian Hughes, Senior Project Manager
Licensing Branch 4 - AP1000 Projects
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-018
52-019

eRAI Tracking No. 7398

Enclosure:
Request for Additional Information

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DATE	1/30/14	1/29/14	1/15/14	1/30/14

*Approval captured electronically in the electronic RAI system.

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Request for Additional Information

Issue Date: 1/30/2014

Application Title: William States Lee III, Units 1 and 2 - Dockets 52-018 and 52-019

Operating Company: Duke Energy Carolinas, LLC

Docket No. 52-018 and 52-019

Review Section: 13.03 - Emergency Planning

Application Section:

QUESTIONS

By letters dated February 18 and May 09, 2013, Duke Energy Carolinas (DEC), LLC., submitted their proposed changes to the William States Lee (WSL) III Nuclear Station Emergency Plan to address its compliance with the Final Rule on Enhancements to Emergency Preparedness Regulation effective December 23, 2011.

NRC staff has the following requests for additional information:

1. Appendix E.IV.A.7. to 10 CFR 50 requires, in part, the licensee to identify and provide a description of the assistance expected from Federal, State, and local agencies with responsibilities for coping with emergencies, including hostile action at the site.

Appendix 7 “Certification Letters” and Appendix 8, “Cross-References to Regulations, Guidance, and State and Local Plans,” of the WSL Emergency Plan provided information that the details of the letters of agreement/arrangements are developed at a later date consistent with the commitments outlined in the certification letters.

Based on the information provided in the WSL Emergency Plan, additional information is needed to ascertain the level and type of assistance that is expected to be provided by Federal, State, and local agencies during a hostile action at the site. **One way to provide this information would be to propose license conditions and revise the emergency plan consistent with descriptions below.**

- Propose a license condition and clarify in the WSL Emergency Plan whether Federal, State, and local agencies will also provide sufficient assistance for onsite activities in response to a hostile action (e.g., law enforcement assisting site security and plant operators during response to a hostile action event), or provide justification for why this information is not necessary. As part of your response, describe whether consideration has been given to expanding the use of mutual assistance agreements with neighboring authorities to identify and plan for additional resources.
- Propose a license condition to provide finalized letters of agreement with State and local emergency support organizations identified in Appendix 7 of the WSL Emergency Plan that includes each entity’s specific emergency planning responsibilities, to include response to hostile action, and certify the entity’s concurrence with their responsibilities.

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Note: Any discussion or description of emergency planning responsibilities associated with a hostile action event contained in letters of agreement should not disclose safeguarded detail contained in the applicant's security contingency plan, but merely reference the location of that particular information.

- Identify in the WSL Emergency Plan, the emergency plan implementing procedures that will describe offsite response organizations available during an emergency event at WSL (including hostile action), with a description of their integration into site activities, or provide justification for why this information is not necessary.

2. Appendix E.IV.D.3 to 10 CFR 50 requires, in part, that a licensee must have a public alert and notification system (ANS) consisting of administrative and physical means capable of alerting and prompt notification of the public within the plume exposure pathway EPZ, and a backup capability.

Section II.E.6, "Instructions to the Public in the Plume Exposure EPZ" of the WSL Emergency Plan states, in part, that the primary and backup means to alert the public may consist of using a combination of fixed sirens, tone alert radios, NOAA weather radios, or route alerting. In addition, Appendix 3, "Public Alert and Notification System Description" of the WSL Emergency Plan states, in part that, the ANS provides an alerting signal and an informational or instructional message... within 15 minutes from the time the cognizant offsite agencies have determined the need for such alerting exists.

EP ITAAC in Part 10 of the WSL application provides acceptance criteria, consisting of: "90% of the sirens operate properly, as indicated by the feedback system" and "the EAS is activated" for demonstration of the capability of the public alert and notification system to operate properly when required.

Based on the information contained in the WSL Emergency Plan and EP ITAAC, additional information is needed to clarify both the administrative means used to implement the ANS and performance criteria necessary to demonstrate its capability. **One way to provide this information would be to provide the clarifications and performance criteria described below.**

- Clarify in the emergency plan which emergency plan implementing procedure(s) is used by WSL to alert and notify the general public within the 10-mile EPZ, or provide justification for why this information is not necessary.
- Revise the EP ITAAC performance criteria for activation of the EAS, to include the timeliness goal of 15 minutes, consistent with language in the WSL emergency plan, or provide justification for why this information is not necessary.

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- Propose EP ITAAC performance criteria to demonstrate the backup capability for public alert and notification within a reasonable time (e.g., goal of 45 minutes), or provide justification for why this demonstration is not necessary.

3. Appendix E.IV.E.8.d to 10 CFR requires, in part, the emergency plan include the identification of an alternate facility (or facilities) that would be accessible even if the site is under threat of or experiencing hostile action, to function as a staging area for augmentation of ERO staff to minimize delays in emergency response and provide for a swift coordinated response.

Section II.H, “Emergency Facilities and Equipment,” and Appendix 9 “Justification for a Common EOF” of the WSL Emergency Plan provide a high level description of locations and functions of the alternate facilities, should the Technical Support Center (TSC) not be accessible. Section II.H of the WSL Emergency Plan provides a general reference stating, in part, that these alternate facilities “satisfy the communications and engineering assessment capability requirements for an alternate facility.”

Based on the information contained in the WSL Emergency Plan, additional information is needed to ascertain the capabilities of the alternate facilities:

- Clarify in the WSL Emergency Plan whether the alternate facilities have been designated to support a threat situation or hostile action event in which all site emergency facilities are inaccessible, in addition to the TSC, or provide justification for why this information is not necessary.
- Clarify in the WSL Emergency Plan whether the alternate facilities include the following characteristics, or provide justification for why this information is not necessary:
 - Capability to make off-site notifications within 15 minutes of a change in emergency classification level (ECL) or issuance of a PAR, from the alternate facility;
 - Capability to communicate with the control room and plant security from the alternate facility;
 - Access to up-to-date plant technical documentation, such as general plant drawings, system information, and plant procedures, to enable engineers and maintenance supervisors to do adequate damage control and response team planning and preparation.

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4. Appendix E.IV.I to 10 CFR Part 50 requires, in part, that the emergency plan include a range of protective actions to protect onsite personnel during hostile action and ensure the continued ability of the licensee to safely shut down the reactor and perform the functions of the licensee's emergency plan.

Section IV.F "Protective Actions for Onsite Personnel" of the Interim Staff Guidance "Emergency Planning for Nuclear Power Plants," includes, in part, "dispersal of licensed operators" who are considered "critical to mitigate hostile action consequences" as a potential site protective action during hostile event. Section II.J. "Protective Response" of the WSL Emergency Plan states that, a "range of protective actions is also in place to protect all onsite personnel during any hostile action and ensure the continued ability to safely shutdown the reactor and perform the functions of the emergency plan." Section II.J.5 "Personnel Accountability" of the WSL Emergency Plan discusses several protective actions that may be initiated other than personnel assembly, accountability, and evacuation during a hostile action event; one of which is "dispersal of key personnel."

Based on the information contained in the WSL Emergency Plan, additional information is needed to clarify the protective actions contained in the WSL Emergency Plan and to whom they apply:

- Clarify in the WSL Emergency Plan whether the term "key personnel" includes licensed plant operators who must take action onsite to ensure safe shutdown during a hostile event, or provide justification for why this information is not necessary.
- Clarify in the WSL Emergency Plan whether there are any other protective actions considered to provide key onsite personnel (i.e., plant operators) increased survivability while ensuring safe shutdown of the plant during a hostile event, or provide justification for why this information is not necessary.

Note: Any discussion or description of protective actions associated with a hostile action event should not disclose safeguarded detail contained in the applicant's security contingency plan, but merely reference where this information can be found.

5. Appendix E.IV.F. to 10 CFR requires, in part, that licensees develop and maintain key skills for emergency response through drill and exercise scenarios that encompass a wide spectrum of events and conditions to avoid anticipatory responses resulting from participant preconditioning.

Section II.N.1.b, "Exercise Scenarios and Participation," of the WSL Emergency Plan states, in part, that exercise scenario content is varied during each 8-year cycle to include no

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radiological release, or an unplanned minimal release that does not require public protective actions, including the integration of offsite resources with onsite response. Section II.N.2, "Drills," of the WSL Emergency Plan states, "upon request, Duke Energy allows affected State and local governments located within the plume exposure pathway EPZ to participate in the drills."

Based on the information contained in the WSL Emergency Plan, additional information is needed to ascertain anticipated offsite response organization participation in the applicant's drill and exercise program:

- Clarify in the WSL Emergency Plan whether the plan or emergency implementing procedures for exercises and drills include provisions to invite State, Tribal and local response organizations to participate jointly with resources adequate to demonstrate offsite capabilities;
 - Clarify in the WSL Emergency Plan whether the plan or emergency implementing procedures for exercises and drills includes provisions for ensuring the mobilization and implementation of State and local (as appropriate) personnel and resources adequate to verify the capability and response to a large radiological release requiring ingestion pathway protective actions beyond the 10 mile EPZ at least once every 8 years.
6. Appendix E.IV.E.8.c.(1-3) to 10 CFR Part 50 requires the applicant's emergency plan to address the capability of the Emergency Operations Facility (EOF) to support response to simultaneous events at more than one nuclear power reactor site (if the EOF serves more than one site). This includes the capability to obtain, analyze, display, and brief plant data and radiological information for each reactor the facility serves (i.e. multiple technologies). In addition, regulatory guidance provided in NUREG-0696, Subsection 4.3, "Staffing and Training," as enhanced by NSIR/DPR-ISG-01, states in part that prior to initial operation of a consolidated EOF, and in at least one drill or exercise per exercise cycle thereafter, the EOF staff will demonstrate the ability to perform the additional consolidated EOF functions described in the emergency plan and revised guidance.

Prior Commission direction in Staff Requirements Memorandum-SECY-05-0172, "Duke Power Company's Request to Incorporate the Oconee Emergency Operations Facility into the EOF Shared by Catawba and McGuire Nuclear Stations," for use of a shared Duke EOF in Charlotte, North Carolina, required the licensee to demonstrate the integrated capability and functionality of the EOF with the Technical Support Centers (TSC), NRC site-team facility, NRC Incident Response Centers, and other Federal, State, and local coordination centers, prior to incorporating Oconee into the shared McGuire and Catawba EOF. Section II.H.2 and Appendix 9 of the WSL Emergency Plan provide a description of the EOF and its functions, and justification for a common EOF, respectively. Appendix 9 of the WSL Emergency Plan

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provides, in part, an evaluation of the EOF described in the plan against the criteria established in NUREG-0696.

Based on the information contained in the WSL Emergency Plan, additional information is needed to determine the capability of the proposed combined EOF to support response to simultaneous events at more than one site, including WSL:

- Clarify in the WSL Emergency Plan, the capability of the EOF to support response to simultaneous events at more than one nuclear power reactor site, including the capability to obtain, analyze, display, and brief plant data and radiological information for each reactor the facility serves (i.e. multiple technologies), or provide justification for why this information is not necessary.
- Consistent with prior Commission direction, clarify whether Part 10, "License Conditions and ITAAC," of the WSL COL application includes consideration for an updated exercise with WSL participation demonstrating the integrated capability and functionality of the EOF to respond to a simultaneous event with other Duke power reactor sites with different reactor technologies.
- Clarify in the WSL Emergency Plan whether the EOF staff will demonstrate their ability to perform consolidated EOF functions established in the emergency plan and regulatory guidance in at least one drill or exercise per exercise cycle thereafter.