



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

June 30, 2016

Mr. C. R. Pierce  
Regulatory Affairs Director  
Southern Nuclear Operating Company, Inc.  
Post Office Box 1295, Bin 038  
Birmingham, AL 35201-1295

**SUBJECT: SUMMARY OF NRC AUDIT OF VOGTLE ELECTRIC GENERATING PLANT,  
UNITS 1 AND 2, FOR LICENSE AMENDMENT REQUEST TO REVISE  
TECHNICAL SPECIFICATIONS TO IMPLEMENT NUCLEAR ENERGY  
INSTITUTE 06-09, REVISION 0-A (CAC NOS. ME9555 AND ME9556)**

Dear Mr. Pierce:

By letter dated September 13, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12258A055), Southern Nuclear Operating Company, Inc. (SNC) submitted a license amendment request (LAR) to revise the Vogtle Electric Generating Plant, Units 1 and 2 (Vogtle), Technical Specifications (TSs) to permit the use of risk-informed completion times (RICTs) in accordance with Nuclear Energy Institute (NEI) Report NEI 06-09, Revision 0-A, "Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines" (ADAMS Accession No. ML12286A322).

On April 15, 2014, and April 16, 2014, the U.S. Nuclear Regulatory Commission (NRC) staff participated in a regulatory audit of Vogtle at the SNC offices in Birmingham, Alabama. The purpose of the audit was to understand the calculations, analyses, and bases for the LAR, and to develop requests for additional information, as needed. NRC staff discussions with SNC focused on internal events and fire probabilistic risk assessment (PRA) quality, PRA functionality, implementation of the RICT program, TS limiting conditions for operation, and associated RICT program guidance documents. SNC provided a demonstration of how it would implement the RICT. The NRC staff also reviewed applicable program documents.

The NRC staff will request any additional information needed to support its review in accordance with NRC Office of Nuclear Reactor Regulation Office Instruction LIC-101, Revision 4, "License Amendment Review Procedures" (ADAMS Accession No. ML113200053). The enclosure to this letter provides the list of audit participants and documents reviewed by the NRC.

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If you have any questions regarding this matter, please contact me at (301) 415-0489 or by e-mail at [Audrey.Klett@nrc.gov](mailto:Audrey.Klett@nrc.gov).

Sincerely,

A handwritten signature in black ink, appearing to be 'A. Klett', with a long horizontal stroke extending to the right.

Audrey L. Klett, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-424 and 50-425

Enclosure:  
List of Participants and Documents  
Reviewed

cc w/enclosure: Distribution via Listserv

## **List of Participants and Documents Reviewed**

### **Participants:**

#### *U.S. Nuclear Regulatory Commission Team:*

- Hossein Hamzehee, Branch Chief
- Daniel O'Neal, Technical Reviewer
- Kristy Bucholtz, Technical Reviewer
- Jonathan Evans, Technical Reviewer
- David Gennardo, Technical Reviewer
- Robert Martin, Licensing Project Manager

#### *Southern Nuclear Operating Company, Inc. (SNC) Staff and Contractors:*

- Erin Anners, SNC Lead Licensing Engineer
- Ken McElroy, SNC Licensing Manager
- Anees Farruk, SNC Risk-Informed Engineering Lead
- Amir Afzali, SNC Risk-Informed Engineering Director
- Justin Wheat, SNC Risk-Informed Engineering Applications Supervisor
- Adam Coker, SNC Risk-Informed Engineering Applications Lead - Vogtle
- Young G. Jo, SNC Risk-Informed Engineering – Consulting Engineer
- Vish Patel, SNC Risk-Informed Engineering
- Michael Corbett, SNC Risk-Informed Engineering
- Ozzie Vidal, SNC Licensing
- Kenneth Middlebrook, SNC Vogtle Operations
- George Gunn, SNC Vogtle Regulatory Affairs Licensing Supervisor
- Mike Saunders, Erin Engineering (Fire Probabilistic Risk Assessment (FPRA) Support)

### **Documents Reviewed:**

- Equipment Out-of-Service (EOOS) Risk-Informed Completion Time (RICT) Calculation Procedure
- Risk Management Action Procedure
- Risk Tracking Procedure
- Probabilistic Risk Assessment (PRA) Functionality Determination Procedure
- VEGP [Vogtle Electric Generating Plant] CCW [Component Cooling Water] System Summary for RMTS [Risk-Managed Technical Specifications] application.docx
- Southern Nuclear PRA Calculation Number PRA-BC-V-12-008, Uncertainty Analysis for Internal Events (including Internal Flooding) PRA Model
- SNC Nuclear Management Instruction: PRA Functionality Determination, NMP-OS-011, Version 1.0
- ABS Consulting Report, 1762171-R-003, Revision 2, "Vogtle Electric Generating Plant Internal Flooding Probabilistic Risk Assessment," January 8, 2009
- PRA-BC-V-06-005.pdf
- VEGP Level 1 and 2 PRA Model, Revision 4, PRA-BC-V-07-003.pdf
- PRA-BC-V-06-002.pdf

Enclosure

- Input Parameters for PRA Success Criteria V-405-R1.par
- VEGP RMTS AFW [Auxiliary Feedwater] System Guidance Revision 0.docx
- VEGP RMTS HVAC [Heating, Ventilation, and Air Conditioning] System Guidance Revision 0.docx
- VEGP RMTS NSCW [Nuclear Service Cooling Water] System Guidance Revision 0.docx
- VEGP RMTS ECCS [Emergency Core Cooling System] System Guidance Revision 0.docx
- 4b NRC Audit EOOS demo.ppt
- NMP-GM-031-003, Risk Management Actions for Title 10 of the *Code of Federal Regulations*, Section 50.65(a)(4), and the RICT Program, Version 1.0
- Regulatory Guide 1.200 PRA Peer Review against the ASME PRA Standard Requirements for the VEGP PRA, Final Deliverable
- Fire PRA Peer Review against FPRA Standard Supporting Requirements from Section 4 of the American Society of Mechanical Engineers/American Nuclear Society PRA Standard for the VEGP FPRA
- Generation and Maintenance of PRA Models and Associated Updates, RIE-001, Version 1.0

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If you have any questions regarding this issue, please contact me at (301) 415-0489 or by e-mail at [Audrey.Klett@nrc.gov](mailto:Audrey.Klett@nrc.gov).

Sincerely,

**/RA/**

Audrey L. Klett, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-424 and 50-425

Enclosure:  
List of Participants and Documents  
Reviewed

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LFields, NRR  
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**ADAMS Accession No.: ML16172A095**

**\*by memorandum**

OFFICE	NRR/DORL/LPL2-2/PM	NRR/DORL/LPL2-1/LA	NRR/DRA/APLA/BC*
NAME	AKlett	LRonewicz	HHamzehee
DATE	6/22/2016	6/20/2016	5/21/2014
OFFICE	NRR/DORL/LPL2-1/BC	NRR/DORL/LPL2-2/PM	
NAME	MMarkley	AKlett	
DATE	6/30/2016	6/30/2016	

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