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Enclosure 2 contains security-related
information not for public disclosure.
Withhold per 10 CFR 2.390.



A SOUTHERN COMPANY

June 14, 2016

Docket Nos.: 50-424
50-425

NL-16-0785

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Vogtle Electric Generating Plant – Units 1 and 2
Response to Request for Additional Information for TSTF-312

Ladies and Gentlemen:

By letter dated July 18, 2014, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14203A124) Southern Nuclear Operating Company (SNC) submitted a license amendment request (LAR) to adopt various previously approved Technical Specifications Task Force (TSTF) Travelers for Vogtle Electric Generating Plant (Vogtle), Units 1 and 2.

On May 3, 2016, the U.S. Nuclear Regulatory Commission (NRC) staff conducted an audit of the design for Vogtle and the bounding analysis used to support the proposed LAR in accordance with the audit plan. During the audit, it was determined that additional information is needed.

By letter dated May 17, 2016, the NRC sent SNC a request for additional information (RAI) related to TSTF-312-A (ADAMS Accession No. ML16125A411). The enclosure to this letter provides SNC's response to the NRC RAI.

Enclosure 2 of this RAI response contains security-related information and should be withheld from public disclosure under 10 CFR 2.390.

This letter contains no new NRC commitments. If you have any questions, please contact Ken McElroy at (205) 992-7369.

(Oath and Affirmation on following page)

ADD
NRR

Mr. C. R. Pierce states he is Regulatory Affairs Director of Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company and, to the best of his knowledge and belief, the facts set forth in this letter are true.

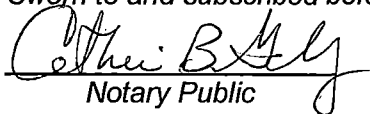
Respectfully submitted,



C. R. Pierce
Regulatory Affairs Director

CRP/JMC/lac

Sworn to and subscribed before me this 14th day of June, 2016.



Notary Public

My commission expires: 1-2-2018

Enclosures: 1. Response to RAI for TSTF-312
 2. Supplemental Drawings

cc: Southern Nuclear Operating Company
 Mr. S. E. Kuczynski, Chairman, President & CEO
 Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer
 Mr. D. R. Madison, Vice President – Fleet Operations
 Mr. M. D. Meier, Vice President – Regulatory Affairs
 Mr. B. K. Taber, Vice President – Vogtle 1 & 2
 Mr. B. J. Adams, Vice President – Engineering
 Mr. G. W. Gunn, Regulatory Affairs Manager – Vogtle 1 & 2
 RType: CVC7000

U. S. Nuclear Regulatory Commission
Ms. C. Haney, Regional Administrator
Mr. R. E. Martin, NRR Senior Project Manager – Vogtle 1 & 2
Mr. W. D. Deschaine, Senior Resident Inspector – Vogtle 1 & 2

State of Georgia
Mr. J. H. Turner, Director- Environmental Protection Division

**Vogtle Electric Generating Plant – Units 1 and 2
Response to Request for Additional Information for TSTF-312**

Enclosure 1

Response to RAI for TSTF-312

By letter dated July 18, 2014, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14203A124) Southern Nuclear Operating Company (SNC) submitted a license amendment request (LAR) to adopt various previously approved Technical Specifications Task Force (TSTF) Travelers for Vogtle Electric Generating Plant (Vogtle), Units 1 and 2. By letter dated May 17, 2016, the Nuclear Regulatory Commission (NRC) sent SNC a request for additional information (RAI) related to TSTF-312-A (ADAMS Accession No. ML16125A411.) The enclosure to this letter provides SNC's response to the NRC RAI.

Request For Additional Information No. 1:

Following a fuel handling accident (FHA), there exists a potential for activity to migrate from open containment penetrations into adjacent buildings and eventually into the control room. Please provide additional information describing how this potential contribution to control room dose is accounted for, in, or bounded by, the FHA dose consequence analysis of record.

SNC Response to RAI No. 1:

Vogtle Units 1 and 2 share a common control room envelope (CRE) which is maintained at a positive pressure during normal plant operation with the normal non-safety related air-conditioning system. For accident mitigation, there are two independent emergency filtration trains (along with their dedicated cooling system) for each unit. Thus, there are a total of four filtration trains, and any one of them is sufficient to maintain the dual unit control room envelope at a positive pressure greater than 1/8 inch wg relative to all adjacent areas. Since Vogtle has a dual unit control room, the emergency filtration system remains functional for the operating unit even during an outage on the opposite unit.

In the event of a FHA, upon detection of radiation in the control room intake, the emergency filtration system will activate automatically pressurizing the main control room. During the recent (April 2016) control room in-leakage (tracer gas) testing, SNC demonstrated that the control room can be maintained at a positive pressure of at least 1/8 inch wg relative to all adjacent areas.

The dual unit control room is located within the control building structure, which is protected from effects of a tornado and fire with pressure and fire rated doors. These doors are considered boundary doors to the areas that lead from the containment and the auxiliary buildings (Ref. AX1D94A21 and Sketch # 1) to the control room area. The doors (V12111L134, V12111L141 and V12111L131) in the pressure/fire rated wall are fire doors and are rated for a tornado pressure rating up to 3 psi (Ref. Plant Door Database excerpts and Sketch #1). The aforementioned doors are maintained closed during Modes 1-6 and during outages. If a door is breached, compensatory actions, such as fire watches, are implemented to initiate manual action to close the breached door if needed. It is also important to note that beyond the pressure/fire rated wall, the air pathway to the control room envelope is protected with air lock doors. The surrounding wall enclosing the equipment building is also fire rated and the fire boundary is maintained with closed fire rated doors. These doors protect against any radiation

intrusion into the control room from penetrations in the containment purge and exhaust room, which are located on the same level as the control room.

Auxiliary Building penetrations in the main steam vault area, Rooms R108 and R159 (Ref. AX1D08A06-2), are also on the same elevation as the control room but in another building. The main steam vault area is vented to the atmosphere. Thus, it is not credible to assume that, during a FHA in the containment, any radiation released in this area would migrate to the areas around the control room. The FHA analysis of record assumes a release point much closer to the control room outside air intakes than the vents for the main steam vault area, and hence the analysis of record is more conservative for this type of release.

The rest of the containment penetration rooms (both electrical and mechanical) are located at elevations below the control room (el. 220'). The mechanical penetration rooms are in the Auxiliary Building, and effluent releases would require a tortuous path to enter the Control Building. The electrical penetration rooms are in the Equipment Building below the elevation of the control room, and effluent releases would also require a tortuous path to reach the control room. The Units 1 and 2 Train A cable spreading rooms are located below the control room on elevation 200' (Ref. Sketch # 2). The cable spreading room penetrations through the floor of the control room are sealed air tight and the area is included in the testing for control room pressurization effectiveness. The walls surrounding the penetration rooms and the Units 1 and 2 cable spreading rooms are fire rated and doors are maintained closed.

Since the control room will remain pressurized relative to the cable spreading rooms, no direct pathway exists for effluent releases from containment to travel to the main control room even with some of the containment penetrations being maintained open during a unit outage.

In conclusion, it can be stated that for a postulated FHA event in containment during a unit outage, no air pathway exists due to multiple diverse barriers (airlocks, fire-rated and air-tight doors and walls, etc.). These barriers, in addition to administrative controls and periodic pressurization testing, prove that release effluents will not traverse to any area adjacent to the dual unit control room envelope, even with some of the containment penetrations being maintained open. Hence, the operators in the control room will remain protected from a direct impact from releases in containment as a result of a postulated FHA event inside containment. The dose contribution factor to operators in the control room during a postulated FHA inside the containment event will be from the effluent escaping to the environment through the open containment door and entering as makeup air to the control room emergency filtration system. Considering the conclusions above, the current analysis of record remains bounding.

Request For Additional Information No. 2:

SNC states in its application that, "The proposed TS change adds a Note to the LCO for Specification 3.9.4, 'Containment Penetrations,' allowing 'Penetration

flow path(s) that have direct access from the containment atmosphere to the outside containment atmosphere to be unisolated under administrative control." Please provide confirmation that the subject administrative controls will be defined in a document that is subject to the requirements of Title 10 of the *Code of Federal Regulations*, Section 50.59, "Changes, test and experiments."

SNC Response to RAI No. 2:

All procedure changes at SNC plants are subject to an Applicability Determination screening per a fleet procedure, NMP-AD-008.

Applicability Determination is the process for determining if a proposed activity (design, procedure, and licensing document changes) can be excluded from the scope of 10 CFR 50.59. Such action is allowed by 10 CFR 50.59(c)(4) which states that the provisions of 10 CFR 50.59 do not apply to changes to the facility or procedures when an activity is controlled by another more specific regulation.

Question (7) of the Applicability Determination screening form asks if the activity involves a managerial or administrative change. If the answer to question (7) is yes, a 10 CFR 50.59 screen is not required. The procedures which will contain the new guidance for unisolating containment penetrations under administrative control are not administrative-type procedures and will be subject to a 10 CFR 50.59 screening. In addition, all individuals performing Applicability Determination and 10 CFR 50.59 screening evaluations must be trained on how to properly answer the screening questions and must maintain an active qualification.

Further, during impact reviews prior to submittal of the LAR to the NRC, Vogtle entered a Technical Evaluation (TE) 821671 into the Corrective Action Program to ensure all procedures are updated as needed. Specifically for TSTF-312, the TE is tracking the change to procedures 14210-1 and 14210-2, Containment Building Penetrations Verification – Refueling.