Southern Nuclear

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Docket Nos.: 52-025
52-026

ND-19-0644
10 CFR 50.90

U.S. Nuclear Regulatory Commission
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Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Units 3 and 4
Request for License Amendment:
Spent Fuel Pool Boron Concentration Applicability and Actions (LAR-19-012)

Ladies and Gentlemen:

Pursuant to 10 CFR 52.98(c) and in accordance with 10 CFR 50.90, Southern Nuclear Operating Company (SNC) requests an amendment to the combined licenses (COLs) for Vogtle Electric Generating Plant (VEGP) Units 3 and 4 (License Numbers NPF-91 and NPF-92, respectively). The requested amendment proposes changes to COL Appendix A, Technical Specifications (TS).

The license amendment request (LAR) proposes changes to the COL Appendix A TS 3.7.11, Spent Fuel Pool Boron Concentration, Applicability and Required Actions to eliminate an allowance to exit the Applicability of Limiting Condition of Operation (LCO) 3.7.11, Spent Fuel Pool Boron Concentration, once a spent fuel pool storage verification had been performed. The requested amendment also proposes to eliminate TS 3.7.11 Required Action A.2.2, which provides an option to perform a spent fuel pool storage verification in lieu of restoring spent fuel pool boron concentration to within limits.

Enclosure 1 provides the description, technical evaluation, regulatory evaluation (including the Significant Hazards Consideration Determination) and environmental considerations for the proposed changes.

Enclosure 2 identifies the requested changes and provides markups depicting the requested changes to the VEGP Units 3 and 4 licensing basis documents.

Enclosure 3 provides the information-only changes to the VEGP Units 3 and 4 Technical Specifications Bases document.

This letter contains no regulatory commitments. This letter has been reviewed and determined not to contain security-related information.

SNC requests NRC staff review and approval of this license amendment request (LAR) no later than January 20, 2020 to support the associated procedure and training updates. Delayed approval of this license amendment could result in a delay in training updates and subsequent dependent activities. SNC expects to implement the proposed amendment within 30 days of approval of the LAR.

In accordance with 10 CFR 50.91, SNC is notifying the State of Georgia by transmitting a copy of this letter and its enclosures to the designated State Official.

Should you have any questions, please contact Ms. Stephanie Agee at (205) 992-7556.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 18th of June 2019.

Respectfully submitted,

Brian H. Whitley
Director, Regulatory Affairs
Southern Nuclear Operating Company

Enclosures
1) Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – Request for License Amendment: Spent Fuel Pool Boron Concentration Applicability (LAR-19-012)
2) Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – Proposed Changes to Licensing Basis Documents (LAR-19-012)
3) Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – Conforming Changes to the Technical Specifications Bases (For Information Only) (LAR-19-012)

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Southern Nuclear Operating Company

ND-19-0644
Enclosure 1

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

Request for License Amendment: Spent Fuel Pool Boron Concentration Applicability

(LAR-19-012)

(Enclosure 1 consists of 11 pages, including this cover page.)

Table of Contents

Pursuant to 10 CFR 52.98(c) and in accordance with 10 CFR 50.90, Southern Nuclear Operating Company (SNC) hereby requests an amendment to Combined License (COL) Nos. NPF-91 and NPF-92 for Vogtle Electric Generating Plant (VEGP) Units 3 and 4, respectively.

1. SUMMARY DESCRIPTION

The license amendment request (LAR) would revise the COL Appendix A, Technical Specifications (TS) to eliminate an allowance to exit the Applicability of Limiting Condition of Operation (LCO) 3.7.11, Spent Fuel Pool Boron Concentration, once a spent fuel pool storage verification had been performed. The requested amendment also proposes to eliminate TS 3.7.11 Required Action A.2.2, which provides an option to perform a spent fuel pool storage verification in lieu of restoring spent fuel pool boron concentration to within limits.

2. DETAILED DESCRIPTION

As described in Updated Final Safety Analysis Report (UFSAR) Subsection 9.1.2.1, spent fuel is stored in high density racks which include integral neutron absorbing material to maintain the required degree of subcriticality. The racks are designed to store fuel of the maximum design basis enrichment. Each rack in the spent fuel pool consists of an array of cells interconnected to each other at several elevations and to a thick base plate at the bottom elevation. These rack modules are free-standing, neither anchored to the pool floor nor braced to the pool wall. The spent fuel storage racks include storage locations for 884 fuel assemblies and five defective fuel assemblies. All spent fuel racks will be in place whenever fuel is stored in the spent fuel racks.

As described in UFSAR Subsection 9.1.2.3, the design of the racks is such that effective neutron multiplication factor (k_{eff}) remains less than or equal to 0.95 under design basis conditions, including fuel handling accidents. Inadvertent insertion of a fuel assembly between the rack periphery and the pool wall or placement of a fuel assembly across the top of a fuel rack is considered a postulated accident and, as such, realistic initial conditions such as boron in the pool water are assumed. These accident conditions have an acceptable k_{eff} of less than 0.95. The criticality analysis, which meets the applicable requirements of 10 CFR 50.68, Paragraph b, considers the inherent neutron absorbing effect of the materials of construction, including fixed neutron absorbing "poison" material. Soluble boron in the spent fuel pool and assembly burnup is used as reactivity credits.

UFSAR Subsection 4.3.2.6.1 also clarifies requirements from 10 CFR 50.68 that are imposed for AP1000, to help preclude criticality of fuel assemblies (both new and spent) outside of the reactor. The applicable 10 CFR 50.68 requirement for spent fuel storage is that the maximum K-effective value, including all biases and uncertainties, must be less than 0.95 with soluble boron credit and less than 1.0 with full density unborated water. Note this design criterion is provided in 10 CFR Part 50.68, Item 4 of Paragraph b.

This Soluble Boron Credit Methodology is explicitly discussed in UFSAR 4.3.2.6.2 as:

“The minimum soluble boron requirement under normal and accident conditions must be determined to show that the reactivity of the spent fuel racks remains below 0.95. This is achieved by crediting a discrete amount of soluble boron and then determining by linear interpolation the

appropriate amount of soluble boron necessary to reduce the maximum k_{eff} to 0.95 with all uncertainties and biases included."

LCO 3.7.11 requires that the spent fuel pool boron concentration shall be ≥ 2300 ppm. The Applicability for this LCO is, "When fuel assemblies are stored in the spent fuel pool and a spent fuel pool storage verification has not been performed since the last movement of fuel assemblies in the spent fuel pool." Required Action A.2.2 states, "Initiate action to perform a spent fuel pool storage verification." This Required Action is part of an "OR" statement, which can currently be performed in lieu of performing Required Action A.2.1 which initiates action to restore boron concentration to within the limit (i.e., to greater than or equal to 2300 ppm).

The TS Bases for TS 3.7.11 further explain that the spent fuel pool k_{eff} storage limit of 0.95 is maintained during postulated criticality related events by a minimum boron concentration of greater than or equal to 800 ppm established by criticality analysis. Compliance with the LCO minimum boron concentration limit of 2300 ppm ensures that the credited concentration is always available.

With respect to the action to perform a spent fuel pool storage verification, the TS Bases also explain that an acceptable alternative is to verify by administrative means that the spent fuel pool storage verification has been performed since the last movement of fuel assemblies in the spent fuel pool. However, prior to resuming movement of fuel assemblies, the concentration of boron must be restored. This does not preclude movement of a fuel assembly to a safe position.

The AP1000 Spent Fuel Storage Racks Criticality Analysis states "Reactivity effects of abnormal and accident conditions have also been evaluated to assure that under all credible abnormal and accident conditions, the reactivity will not exceed the regulatory limit of 0.95," which is consistent with UFSAR Subsection 4.3.2.6.2. In order to maintain a k_{eff} of 0.95 under abnormal and accident conditions, the analysis provides a soluble boron requirement of 800 ppm. TS LCO 3.7.11 imposes a conservative limit of 2300 ppm.

If the boron concentration drops below 2300 ppm, completion of TS LCO 3.7.11 Required Action A.2.2 to perform a spent fuel storage verification would provide for exiting the Actions once verification is complete, thereby allowing a further reduction in spent fuel pool boron concentration to below the analysis limit of 800 ppm. Under this scenario, the conservative action to assure compliance with the analysis and regain compliance with the conservative LCO limit would be to initiate action to restore spent fuel pool boron concentration to within limit (per Required Action A.2.1). Required Action A.2.2 does not assure compliance with the analysis limit of 800 ppm and should not be allowed as an option to Required Action A.2.1. Thus, a change is proposed to delete Required Action A.2.2.

In conjunction with removing the option for Required Action A.2.2, a proposed change to Applicability of TS LCO 3.7.11 eliminates the concurrent condition for spent fuel pool storage verification not having been performed as a condition requiring maintaining the spent fuel pool boron concentration above the required limit. This change will ensure that the 2300 ppm boron concentration limit applies at all times when fuel assemblies are stored in the spent fuel pool. This ensures that the concentration credited in the spent fuel storage rack criticality analyses is always available.

Licensing Basis Change Descriptions:

The following changes to the VEGP 3 and 4 Technical Specifications are proposed:

- The Applicability of TS LCO 3.7.11 is revised to eliminate the concurrent condition for spent fuel pool storage verification not having been performed since the last movement of fuel assemblies in the spent fuel pool, so that it applies at all times when fuel assemblies are stored in the spent fuel pool. This ensures that the concentration credited in the spent fuel storage rack criticality analyses, which is cited in TS Bases 3.7.11, is always available.

- Required Action A.2.2 of TS LCO 3.7.11 (Initiate action to perform a spent fuel pool storage verification) is deleted and as a result, Required Action A.2.1 is renumbered to A.2.

Conforming TS Bases 3.7.11 changes will be incorporated following NRC approval of the license amendment request in accordance with TS 5.5.6, Technical Specification Bases Control Program. The markups showing these changes are provided in Enclosure 3 for information only.

3. TECHNICAL EVALUATION

The change assures compliance with the Spent Fuel Criticality Analysis for the maximum fuel assembly reactivity criteria imposed in the analysis in accordance with 10 CFR 50.68 requirements when crediting soluble boron and flooded with borated water (i.e., k_{eff} must not exceed 0.95, at a 95 percent probability, 95 percent confidence level).

The purpose of spent fuel pool storage verification is to confirm that there are no misloaded fuel assemblies. With no further fuel assembly movements in progress, there is no potential for a misloaded fuel assembly or a dropped fuel assembly. However, UFSAR Subsection 4.3.2.6.2 invokes the 0.95 k_{eff} criteria regardless of whether an accident has occurred or not (consistent with the AP1000 Spent Fuel Storage Racks Criticality Analysis), and a boron concentration of 800 ppm (abnormal/accident conditions) or greater is needed to meet this requirement. The LCO minimum boron concentration limit of 2300 ppm provides margin to ensure that the credited concentration is available.

Removing the provision to exit LCO 3.7.11 Applicability by performing spent fuel pool storage verification is a more restrictive (conservative) change as the resulting requirement to maintain the spent fuel pool boron concentration above the required limit applies at all times when fuel assemblies are stored in the spent fuel pool. As discussed in the Bases for TS 3.7.11, spent fuel storage verification alone is not sufficient to resume movement of fuel assemblies and the concentration of boron must still be restored prior to movement (because the storage verification would no longer be current). In the event of failing to maintain 2300 ppm without having completed storage verification post movement, LCO 3.7.11 Required Action A.2.1 will drive restoration of the required boron concentration. Since Required Action A.2.2 was intended to exit the previous Applicability, with the revised Applicability, this Required Action is no longer necessary and is deleted.

Summary

Meeting the 10 CFR 50.68 requirements is consistent with 10 CFR 50 Appendix A General Design Criteria (GDC) 62, and thereby establishes that criticality in the fuel storage and handling system is prevented by physical systems or processes, and geometrically safe configurations.

No system or design function or equipment qualification is affected by the proposed changes. The changes do not result in a new failure mode, malfunction or sequence of events that could affect a radioactive material barrier or safety-related equipment. The proposed changes do not allow for a new fission product release path, result in a new fission product barrier failure mode, or create a new sequence of events that would result in significant fuel cladding failures.

The proposed changes associated with this license amendment request do not affect the containment, control, channeling, monitoring, processing or releasing of radioactive and non-radioactive materials. The types and quantities of expected effluents are not changed, and no effluent release path is adversely affected by the proposed changes. Therefore, radioactive or non-radioactive material effluents are not affected by the proposed changes.

Plant radiation zones (as described in UFSAR Section 12.3), controls under 10 CFR 20, and the expected amounts and types of radioactive materials are not affected by the proposed changes. Therefore, individual and cumulative radiation exposures do not change.

This proposed change deletes an Applicability condition, imposing a more restrictive requirement to maintain spent fuel pool boron concentration at all times fuel is stored, and removes the complementary Required Action to perform a spent fuel storage verification. The proposed change would not adversely affect any safety-related equipment or function, a radioactive material barrier or a safety analysis. In addition, no nonsafety-related design function or procedure described in licensing basis would be adversely affected.

4. REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

10 CFR 52.98(c) requires NRC approval for any modification to, addition to, or deletion from the terms and conditions of a Combined License (COL). This amendment request involves a change to plant-specific Technical Specifications (COL Appendix A); and therefore, requires an amendment to the COL. Accordingly, NRC approval is required prior to making the plant-specific changes in this license amendment request.

10 CFR 52, Appendix D, VIII.C.6 states that after issuance of a license, “Changes to the plant-specific TS (Technical Specifications) will be treated as license amendments under 10 CFR 50.90.” 10 CFR 50.90 addresses the applications for amendments of licenses, construction permits and early site permits. As discussed above, changes to Technical Specifications are requested, and thus a license amendment request (LAR) (as supplied herein) is required.

10 CFR 50.68, Criticality accident requirements, paragraph (b)(4) requires that “If credit is taken for soluble boron, the k-effective of the spent fuel storage racks loaded with fuel of the maximum fuel assembly reactivity must not exceed 0.95, at a 95 percent probability,

95 percent confidence level, if flooded with borated water, and the k-effective must remain below 1.0 (subcritical), at a 95 percent probability, 95 percent confidence level, if flooded with unborated water." As discussed above, compliance with 10 CFR 50.68 is demonstrated in the Spent Fuel Criticality Analysis for the maximum fuel assembly reactivity criteria imposed in the analysis when crediting soluble boron and flooded with borated water.

10 CFR 50, Appendix A, GDC 60, Control of releases of radioactive materials to the environment. "The nuclear power unit design shall include means to control suitably the release of radioactive materials in gaseous and liquid effluents and to handle radioactive solid wastes produced during normal reactor operation, including anticipated operational occurrences." Because the changes continue to meet the k_{eff} requirements, there is no effect on the release of radioactive materials to the environment, and this criterion continues to be satisfied.

10 CFR 50, Appendix A, GDC 61, Fuel storage and handling and radioactivity control. "The fuel storage and handling, radioactive waste, and other systems which may contain radioactivity shall be designed to assure adequate safety under normal and postulated accident conditions." Because the changes continue to meet the k_{eff} requirements, there is no effect on the purification subsystem radioactive waste processed by other systems, so this criterion continues to be satisfied.

10 CFR 50, Appendix A, GDC 62, Prevention of criticality in fuel storage and handling. "Criticality in the fuel storage and handling system shall be prevented by physical systems or processes, preferably by use of geometrically safe configurations." This criterion is specifically cited in the Spent Fuel Rack criticality analysis. By meeting the applicable 10 CFR 50.68 requirements, this criterion continues to be satisfied.

4.2 Precedent

No precedent is identified.

4.3 Significant Hazards Consideration

Southern Nuclear Operating Company (SNC) is requesting an amendment to Combined License (COL) Nos. NPF-91 and NPF-92 for Vogtle Electric Generating Plant (VEGP) Units 3 and 4, respectively. The proposed Technical Specifications (TS) changes would eliminate an allowance to exit the Applicability of Limiting Condition of Operation (LCO) 3.7.11, Spent Fuel Pool Boron Concentration, once a spent fuel pool storage verification had been performed. The requested amendment also proposes to eliminate TS 3.7.11 Required Action A.2.2, which provides an option to perform a spent fuel pool storage verification in lieu of restoring spent fuel pool boron concentration to within limits.

An evaluation to determine whether or not a significant hazards consideration is involved with the proposed amendment was completed by focusing on the three standards set forth in 10 CFR 50.92(c), "Issuance of amendment," as discussed below.

4.3.1 Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed changes do not involve changes to current plant design or safety analysis assumptions. These changes provide Technical Specifications (TS) consistency with the approved plant design and criticality analysis assumptions and the requirements of 10 CFR 50.68(b)(4). The radioactive material source terms and release paths used in the safety analyses are unchanged, thus the radiological releases in the Updated Final Safety Analysis Report (UFSAR) accident analyses are not affected.

The changes do not affect the operation of any systems or equipment that initiate an analyzed accident or alter any structures, systems, and components (SSCs) accident initiator or initiating sequence of events. The proposed changes do not result in any increase in the probability of an analyzed accident occurring.

Meeting the 10 CFR 50.68 requirements is consistent with 10 CFR 50 Appendix A, General Design Criterion (GDC) 62, and thereby establishes that criticality in the fuel storage and handling system is prevented by physical systems or processes, and geometrically safe configurations.

Therefore, the requested amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

4.3.2 Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed changes do not affect the safety limits as described in the plant-specific Technical Specifications. In addition, the limiting safety system settings and limiting control settings continue to be met with the proposed changes to the plant-specific Technical Specifications. These changes provide Technical Specifications (TS) consistency with the approved plant design and criticality analysis assumptions and the requirements of 10 CFR 50.68(b)(4). The proposed changes do not affect the operation of any systems or equipment that may initiate a new or different kind of accident or alter any SSC such that a new accident initiator or initiating sequence of events is created.

The proposed changes do not affect plant protection instrumentation systems, and do not affect the design function, support, design, or operation of mechanical and fluid systems. The proposed changes do not result in a new failure mechanism or introduce any new accident precursors. No design function described in the Updated Final Safety Analysis Report (UFSAR) is affected by the proposed changes.

Therefore, the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

4.3.3 Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

The proposed changes do not involve changes to current plant design or safety analysis assumptions. These changes provide Technical Specifications (TS) consistency with the approved plant design and criticality analysis assumptions and the requirements of 10 CFR 50.68(b)(4). No safety analysis or design basis acceptance limit/criterion is involved.

The criticality analysis, which meets the applicable requirements of 10 CFR 50.68, Paragraph b, considers the inherent neutron absorbing effect of the materials of construction, including fixed neutron absorbing "poison" material. Soluble boron in the spent fuel pool and assembly burnup is used as reactivity credits.

Meeting the 10 CFR 50.68 requirements is consistent with 10 CFR 50 Appendix A GDC 62, and thereby establishes that criticality in the fuel storage and handling system is prevented by physical systems or processes, and geometrically safe configurations. No safety analysis or design basis acceptance limit/criterion is challenged or exceeded by the proposed changes, and no margin of safety is reduced.

Therefore, the proposed amendment does not involve a significant reduction in a margin of safety.

Based on the above, it is concluded that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of “no significant hazards consideration” is justified.

4.4 Conclusions

Based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission’s regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public. Therefore, it is concluded that the requested amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of “no significant hazards consideration” is justified.

5. ENVIRONMENTAL CONSIDERATIONS

The proposed Technical Specification (TS) changes would eliminate an allowance to exit the Applicability of Limiting Condition of Operation (LCO) 3.7.11, Spent Fuel Pool Boron Concentration, once a spent fuel pool storage verification had been performed. The requested amendment also proposes to eliminate TS 3.7.11 Required Action A.2.2, which provides an option to perform a spent fuel pool storage verification in lieu of restoring spent fuel pool boron concentration to within limits.

A review has determined that the proposed changes require an amendment to the COL. However, a review of the anticipated construction and operational effects of the requested amendment has determined that the requested amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9), in that:

(i) There is no significant hazards consideration.

As documented in Section 4.3, Significant Hazards Consideration, of this license amendment request, an evaluation was completed to determine whether or not a significant hazards consideration is involved by focusing on the three standards set forth in 10 CFR 50.92, “Issuance of amendment.” The Significant Hazards Consideration evaluation determined that (1) the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated; (2) the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated; and (3) the proposed amendment does not involve a significant reduction in a margin of safety. Therefore, it is concluded that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and accordingly, a finding of “no significant hazards consideration” is justified.

(ii) There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

The proposed changes are unrelated to any aspect of plant construction or operation that would introduce any change to effluent types (e.g., effluents containing chemicals or biocides, sanitary system effluents, and other effluents) or affect any plant radiological or non-radiological effluent release quantities. Furthermore, the proposed changes do not affect any effluent release path or diminish the functionality of any design or operational features that are credited with controlling the release of effluents during plant operation. Therefore, it is concluded that the proposed amendment does not involve a significant change in the types or a significant increase in the amounts of any effluents that may be released offsite.

(iii) There is no significant increase in individual or cumulative occupational radiation exposure.

The proposed change in the requested amendment does not affect the shielding capability of, or alter any walls, floors, or other structures that provide shielding. Plant radiation zones and controls under 10 CFR 20 preclude a significant increase in occupational radiation exposure. Furthermore, eliminating Response Time testing requirements for the RCP speed sensor results in a reduction of radiation exposure to plant workers.

Eliminating unnecessary testing on these sensors reduces exposures consistent with the guidelines of As Low As (Is) Reasonably Achievable (ALARA). Therefore, the proposed amendment does not involve a significant increase in individual or cumulative occupational radiation exposure.

Based on the above review of the proposed amendment, it has been determined that anticipated construction and operational effects of the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in the individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

6. REFERENCES

None.

Southern Nuclear Operating Company

ND-19-0644
Enclosure 2

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

Proposed Changes to Licensing Basis Documents

(LAR-19-012)

Deletions are denoted by ~~Red Strikethrough~~
Omitted text is identified by three asterisks (* * *)

(Enclosure 2 consists of two pages, including this cover page.)

Revise COL Appendix A Technical Specification 3.7.11 as shown below:

LCO 3.7.11 The spent fuel pool boron concentration shall be ≥ 2300 ppm.

APPLICABILITY: When fuel assemblies are stored in the spent fuel pool ~~and a spent fuel pool storage verification has not been performed since the last movement of fuel assemblies in the spent fuel pool~~.

ACTIONS

- NOTE -

LCO 3.0.3 is not applicable.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Spent fuel pool boron concentration not within limit.	A.1 Suspend movement of fuel assemblies in the spent fuel pool. AND	Immediately
	A.2~~.1~~ Initiate action to restore spent fuel pool boron concentration to within limit.	Immediately
	~~OR~~	
	~~A.2.2 Initiate action to perform a spent fuel pool storage verification.~~	~~Immediately~~

* * *

Southern Nuclear Operating Company

ND-19-0644
Enclosure 3

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

Conforming Changes to the Technical Specifications Bases (For Information Only)

(LAR-19-012)

Deletions are denoted by ~~Red Strikethrough~~
Omitted text is identified by three asterisks (* * *)

(Enclosure 3 consists of two pages, including this cover page.)

Technical Specifications Bases B 3.7.11 is revised as follows:

* * *

APPLICABILITY

This LCO applies whenever fuel assemblies are stored in the spent fuel pool ~~and a spent fuel pool storage verification has not been performed since the last movement of fuel assemblies in the spent fuel pool~~.

ACTIONS

LCO 3.0.3 is applicable while in MODE 1, 2, 3, or 4. Since spent fuel pool cooling requirements apply in all MODES when fuel is stored in the spent fuel pool, the ACTIONS have been modified by the Note stating that LCO 3.0.3 is not applicable. Spent fuel pool boron concentration requirements are independent of reactor operations. Entering LCO 3.0.3 while in MODE 1, 2, 3, or 4 would require the unit to be shutdown unnecessarily.

A.1~~, A.2.1,~~ and A.2~~.2~~

When the concentration of boron in the spent fuel pool is less than required, immediate action must be taken to preclude the occurrence of an accident or to mitigate the consequences of an accident in progress. This is most efficiently achieved by immediately suspending the movement of fuel assemblies. The concentration of boron is restored simultaneously with suspending movement of fuel assemblies. ~~An acceptable alternative is to verify by administrative means that the spent fuel pool storage verification has been performed since the last movement of fuel assemblies in the spent fuel pool. However, prior to resuming movement of fuel assemblies, the concentration of boron must be restored. This does not preclude movement of a fuel assembly to a safe position.~~

* * *