Southern Nuclear

R. Keith Brown
Director, Regulatory Affairs

Southern Nuclear
Operating Company, Inc.
3535 Colonnade Parkway
Birmingham, AL 35243

April 5, 2023

NL-23-0136
10 CFR 50.90

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

Vogtle Electric Generating Plant Units 3 and 4
Docket Nos.: 52-025 & 52-026

Subject: License Amendment Request: More Restrictive Action for Technical Specification 3.1.9 (LAR-23-006)

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 license amendment request (LAR) proposes changes to COL Appendix A, Technical Specifications (TS) 3.1.9, "Chemical and Volume Control System (CVS) Demineralized Water Isolation Valves and Makeup Line Isolation Valves." The proposed change to Required Action B.1 imposes a more restrictive TS Action. Additional changes are proposed for consistency, clarity, and to eliminate duplication with regulations.

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

Attachments 1 and 2 provide markups depicting the requested changes and final typed changes, respectively, to the VEGP Units 3 and 4 TS.

Attachment 3 provides the changes to the VEGP Units 3 and 4 TS Bases document for information.

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

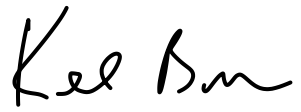
SNC requests NRC staff review and approval of this LAR no later than 12 months from acceptance. Approval of this license amendment will provide timely and effective resolution of the issue. SNC expects to implement the proposed amendment within 30 days of approval of the LAR.

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

Should you have any questions, please contact Amy Chamberlain at (205) 992-6361.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 5th of April 2023.

Respectfully submitted,



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Southern Nuclear Operating Company

Enclosure: Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – License Amendment Request: More Restrictive Action for Technical Specification 3.1.9 (LAR-23-006)

Attachments:
1 Technical Specification Marked-up Pages
2 Revised Technical Specification Pages
3 Technical Specification Bases Marked-up Pages (For Information Only)

cc:

Regional Administrator, Region II
VPO Project Manager
Senior Resident Inspector – Vogtle 3 & 4
Director, Environmental Protection Division - State of Georgia
Document Services RTYPE: VND.LI.L00
File AR.01.02.06

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

License Amendment Request:
More Restrictive Action for Technical Specification 3.1.9 (LAR-23-006)

Enclosure

Basis for Proposed Change

1 SUMMARY DESCRIPTION

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. The proposed change would revise COL Appendix A, Technical Specifications (TS) 3.1.9, "Chemical and Volume Control System (CVS) Demineralized Water Isolation Valves and Makeup Line Isolation Valves." The proposed change to Required Action B.1 imposes a more restrictive TS Action. Additional changes are proposed to TS 3.1.9 Actions Note and Action A for consistency with similar applications, changes to Surveillance Requirements (SR) 3.1.9.1 and SR 3.1.9.2 to eliminate duplication with regulations, and SR 3.1.9.3 for consistency with similar Surveillances.

2 DETAILED DESCRIPTION

2.1 System Design and Operation

As described in UFSAR subsections 9.3.6.1.1, Safety Design Basis, and 9.3.6.4.5 Accident Operation, the safety related functions provided by the CVS include containment isolation of CVS lines penetrating containment, termination of inadvertent boron dilution, and preservation of the Reactor Coolant System (RCS) pressure boundary, including isolation of CVS letdown from the RCS. Another of the safety related functions provided by the CVS is the termination of RCS makeup to prevent overfilling of the pressurizer during non-Loss of Coolant Accidents (non-LOCA) transients or to prevent steam generator overfilling during a steam generator tube rupture. The CVS makeup line isolation valves provide this RCS makeup isolation function.

The simplified CVS Piping and Instrumentation flow path shown in Updated Final Safety Analysis Report (UFSAR) Figure 9.3.6-1, Sheet 1, depicts CVS makeup valves CVS-V090 and CVS-V091 (which are also containment isolation valves for containment penetration C03) downstream of the CVS Makeup Pumps (which are shown on Sheet 2). Sheet 2 depicts CVS Demineralized Water Isolation Valves (CVS-V136A and CVS-V136B), which discharge to the Makeup Pump Suction Header Three-Way Blend Control Valve where demineralized water is blended with boric acid from the boric acid storage tank (BAST) prior to entering the CVS Makeup Pump suction.

The Limiting Condition for Operation (LCO) 3.1.9 requirement that at least two CVS demineralized water isolation valves (CVS-V136A and V136B) and two CVS makeup line isolation valves (CVS-V090 and V091) be OPERABLE assures that there will be redundant means available to terminate or prevent an inadvertent boron dilution event. The requirement that at least two CVS makeup isolation valves (CVS-V090 and V091) be OPERABLE also assures that there will be redundant means available to terminate CVS makeup to the RCS during a non-LOCA event or a steam generator tube rupture accident should that become necessary to provide protection from overfilling the pressurizer or steam generator. In addition, LCO 3.6.3, "Containment Isolation Valves," provides additional requirements for the CVS makeup line isolation valves.

The Code of Federal Regulations (CFR) Title 10 Section 50.55a (10 CFR 50.55a) paragraph (f)(4), *Inservice testing standards requirement for operating plants*, imposes

the regulatory requirement for valves that are within the scope of the American Society of Mechanical Engineers (ASME) Operation and Maintenance (OM) Code to meet the inservice test (IST) requirements set forth in the ASME OM Code. ASME OM-2012, ISTC-5113, Valve Stroke Testing, paragraph (a), requires that "Active valves shall have their stroke times measured when exercised in accordance with para. ISTC-3500..." and ASME OM-2012, III-3610, Normal Exercising Requirements, requires "All MOVs, within the scope of this Mandatory Appendix, shall be full cycle exercised... ."

2.2 Current Technical Specifications Requirements

TS 3.1.9 requires two Chemical and Volume Control System (CVS) Demineralized Water Isolation Valves and two CVS Makeup Line Isolation Valves to be OPERABLE in MODES 1, 2, 3, 4, and 5.

TS 3.1.9 Condition A includes three "OR"-d Conditions: one for "One CVS demineralized water isolation valve inoperable," one for "One CVS makeup line isolation valve inoperable," and one for the combination "One CVS demineralized water isolation valve and one CVS makeup line isolation valve inoperable." Required Action A.1 requires "Restore two CVS demineralized water isolation valves and two CVS makeup line isolation valves to OPERABLE status."

TS 3.1.9 Condition B for two CVS Makeup line Isolation valves inoperable has Required Action B.1 requiring (emphasis added) "Isolate the affected flow path(s) from the demineralized water storage tank to the Reactor Coolant System by use of at least one closed manual or one closed and deactivated automatic valve" within 1 hour.

TS 3.1.9 SR 3.1.9.1 requires the CVS demineralized water isolation valves and CVS makeup line isolation valves to be stroke closed with the Frequency in accordance with the Inservice Testing Program. SR 3.1.9.2 requires (in part) CVS makeup isolation valve closure timing with the Frequency in accordance with the Inservice Testing Program.

SR 3.1.9.2 requires (in part) each CVS makeup isolation valve actuates (i.e., closes) on an actual or simulated actuation signal with Frequency in accordance with the Inservice Testing Program. SR 3.1.9.3 requires verifying each CVS demineralized water isolation valve actuates to the isolation position on an actual or simulated actuation signal every 24 months.

2.3 Reason for the Proposed Change

TS 3.1.9 Actions do not include an allowance for separate Condition entry for each inoperable valve, which is typical for TS that address multiple valves and have an Action provision to isolate the affected flow path and continue operations (e.g., TS 3.6.3, "Containment Isolation Valves"). As such, if demineralized water isolation valve inoperability has had its flow path isolated to meet Required Action B.1, a subsequent makeup line isolation valve inoperability requiring flow path isolation in accordance with Required Action B.1 would not be allowed a separate Completion Time to complete the isolation, which would require an undesired entry into LCO 3.0.3. By including an Actions Note providing "Separate Condition entry is allowed for each inoperable valve" would avoid the unnecessary LCO 3.0.3 entry. That Actions Note would also allow clarification to Condition A by eliminating the third Condition for the combination of both one CVS demineralized water isolation valve and one CVS makeup line isolation valve inoperable.

TS 3.1.9 Action B requirement to isolate “from the demineralized water storage tank” to the Reactor Coolant System reflects a non-conservative TS action in that it only protects the boron dilution mitigation safety function for the CVS demineralized water isolation valves, and does not require protecting the boron dilution mitigation and pressurizer overfill safety functions for the CVS makeup line isolation valves, since the makeup line flow path is not specifically isolated if the isolation is made at the demineralized water storage tank. Therefore, to address the non-conservative action, VEGP has imposed a more restrictive administrative requirement in accordance with the guidance in NRC Administrative Letter (AL) 98-10, “Dispositioning of Technical Specifications That Are Insufficient to Assure Plant Safety.” For inoperabilities of CVS makeup isolation valves, isolating the "affected flow path" must prevent flow from the CVS makeup pumps to the RCS in order to provide protection from overfilling. Isolation can be accomplished by manually closing the CVS makeup isolation MOVs or alternatively, manual valve(s) in the makeup line between the makeup pumps and the RCS.

Additionally, to support the administrative measures for the non-conservative TS Action in MODES 1, 2, 3, and 4, the requirements of LCO 3.6.3 must also be met when one or more of the CVS makeup line isolation valves are inoperable, which impose the more restrictive requirement to isolate the affected flow path within one hour (which would prevent flow from the CVS makeup pumps to the RCS in order to provide protection from overfilling).

The Surveillances of SR 3.1.9.1 and SR 3.1.9.2 reflect duplication of the Regulatory requirements imposed by 10 CFR 50.55a(f)(4) to perform stroke and closure timing.

The Surveillances of SR 3.1.9.2 and SR 3.1.9.3 similarly require verifying the actuation on an actual or simulated actuation signal, but at differing Frequencies. The SR 3.1.9.3 Frequency of 24 months is consistent with all similar Surveillances except SR 3.1.9.2. SR 3.1.9.2 inconsistency is proposed to be resolved.

2.4 Description of the Proposed Change

The proposed changes revise TS 3.1.9 (underline showing addition of text and strikeouts showing deletion of text):

- Actions Note 2 added (also add plural “S” to "NOTE” header and add “1” to first existing Note) stating:

  Separate Condition entry is allowed for each valve

- Condition A delete third Condition:

  ~~OR~~
  ~~One CVS demineralized water isolation valve and one CVS makeup line isolation valve inoperable.~~

- Required Action A.1

  Restore ~~two CVS demineralized water isolation valves and two CVS makeup line isolation~~ valve~~s~~ to OPERABLE status.

- Required Action B.1 to

  "Isolate the affected flow path(s) ~~from the demineralized water storage tank~~ to the Reactor Coolant System ..."

- SR 3.1.9.1 and SR 3.9.1.2

~~Verify two CVS demineralized water isolation valves and two CVS makeup line isolation valves stroke closed.~~	~~In accordance with the Inservice Testing Program~~
~~Verify closure time of each CVS makeup isolation valve is within limits on an actual or simulated actuation signal.~~	~~In accordance with the Inservice Testing Program~~

- SR 3.1.9.3 revised to SR 3.1.9.1 and

  Verify each CVS demineralized water isolation valve and each CVS makeup line isolation valve actuates to the isolation position on an actual or simulated actuation signal.

TS Bases will implement conforming changes (refer to Attachment 3 for information only) upon implementation, pending approval of the request.

3 TECHNICAL EVALUATION

3.1 Background

In the initial COL issued TS, there were three (3) LCOs requiring operability of the CVS makeup valves (CVS-V090 and CVS-V091):

1. LCO 3.1.9, "CVS Demineralized Water Isolation Valves and Makeup Line Isolation Valves," which was for boron dilution protection.

2. LCO 3.4.17, "CVS Makeup Isolation Valves," which was for pressurizer overfill protection during a steam generator tube rupture accident.

3. LCO 3.6.3, "Containment Isolation Valves," which was for reactor coolant system (RCS) inventory and containment isolation (i.e., CVS makeup valves CVS-V090 and CVS-V091 are also containment isolation valves).

VEGP Units 3 and 4 Amendment 13 [ML13238A337] combined the requirements of TS 3.4.14 with TS 3.1.9 (deleting LCO 3.4.14 and modifying LCO 3.1.9) based on both Specifications having the same Actions Completion Times (Note that the third TS [TS 3.6.3] applicable to CVS makeup isolation valves has more restrictive Completion Times, and was not affected by this change). However, comparing the original TS 3.1.9 Required Action B.1 for two inoperable CVS makeup line isolation valves and the original TS 3.4.17 Required Action B.1 for two inoperable CVS makeup line isolation valves, there were slightly different requirements, which were not accounted for in Amendment

13. TS 3.1.9 had the appropriate action for protecting from a boron dilution (underline added for emphasis):

> Isolate the flow path from the demineralized water storage tank to the Reactor Coolant System by use of at least one closed manual or one closed and de-activated automatic valve.

... while TS 3.4.14 had the appropriate action for protecting the required safety functions (underline added for emphasis):

> Isolate the flow path from the CVS makeup pumps to the Reactor Coolant System by use of at least one closed manual or one closed and de-activated automatic valve.

This difference was not completely addressed in combining the two LCOs in Amendment 13. Amendment 13 did revise TS 3.1.9 Required Action B.1 to include "affected flow path(s)" (underline added for emphasis), which recognized that the Action could apply to different flow paths. However, Amendment 13 should have removed the flow path detail "from the demineralized water storage tank" since each affected flow path involved a different "from" flow path. The required flow path isolation to protect the required safety functions is not assured by the TS 3.1.9 Required Action B.1 requirement to only isolate "from the demineralized water storage tank." As reflected in original COL TS 3.4.17 Required Action B.1, the necessary action to protect pressurizer overfill is to isolate the flow path from the CVS makeup pumps to the Reactor Coolant System. As such, LCO 3.1.9 Required Action B.1 reflects a non-conservative TS Action.

These details on the "from" flow path should have been reflected in TS Bases, and Required Action B.1 should have only specified "Isolate the affected flow path(s)" (similar to the Required Actions of LCO 3.6.3), which would have imposed the necessary requirement to protect the affected safety function.

3.2 Evaluation of Actions Note Change and Action A Changes

TS 3.1.9 Required Action B.1 adequately compensates for the inoperability any CVS demineralized water isolation valve or CVS makeup line isolation valve that has not been restored to operable status within72 hours (per Required Action A.1), or has both valves in a flow path inoperable (Condition B), since it requires the affected flow path to be isolated. Required Action B.1 places the affected flow path in the assumed post accident position. Once isolated, the appropriate compensatory action is in place to allow continued plant operation. Subsequent inoperable valves in the other flow path (i.e., demineralized water or make up flow path) should be allowed the same appropriate Completion Time (1 hour) to isolate that second affected flow path instead of requiring entry into LCO 3.0.3 due to the associated ACTIONS not being met based on the expired Required Action B.1 Completion Time. Providing this allowance minimizes the plant risk associated with imposing an unnecessary entry into LCO 3.0.3 and ensuing required plant shutdown.

With the proposed inclusion of the separate condition entry Note, the appropriate form for Condition A and Required Action A.1 is to address each valve individually. The appropriate form is as seen in TS Section 1.3, Example 1.3-5. Therefore, the inclusion of the Condition for the combination of "One CVS demineralized water isolation valve and one CVS makeup line isolation valve inoperable" is superfluous since the Note

provides for each of the remaining Conditions to be utilized to address the combination. Similarly, Required Action A.1 need only address the restoration for an individual valve. These changes reflect the appropriate coordination with the proposed addition of Note 2.

Therefore, the proposed changes will continue to provide the appropriate assurance of the required safety functions.

3.3 Evaluation of Required Action B.1 Change

TS 3.1.9 Required Action B.1 currently allows isolating the affected flow path(s) "from the demineralized water storage tank" to the RCS. Boron dilution and pressurizer overfill do not achieve the protection afforded by the CVS makeup line isolation when only isolating "from the demineralized water storage tank" since the CVS makeup pumps can still supply the RCS via CVS makeup valves CVS-V090 and CVS-V091.

As discussed above, including "from the demineralized water storage tank" allows a non-conservative action for inoperability of CVS makeup line isolation valves. The proposed change to eliminate "from the demineralized water storage tank," leaving the broader requirement for isolating the affected flow path(s) to the RCS, imposes a more restrictive action for the MODE 5 application to the CVS makeup line isolation valves. To meet the proposed Required Action B.1 for inoperable CVS makeup isolation valves, the affected flow path "to the RCS" would provide the required protection to preclude make up flow that could challenge boron dilution and/or pressurizer overfill, thereby protecting the safety function(s).

Therefore, the proposed change will provide the appropriate assurance of the required safety function.

3.4 Evaluation of Surveillance Requirement Changes

Current SR 3.1.9.1 requires both CVS demineralized water isolation valves and both CVS makeup line isolation valves to be stroked closed. This requirement is a partial duplication of ASME OM-2012, III-3610, Normal Exercising Requirements, which requires "All MOVs, within the scope of this Mandatory Appendix, shall be full cycle exercised... ." Additionally, the SR Frequency requires the Surveillance to be performed "In accordance with the Inservice Testing Program," which is specified in TS 5.5.3, "Inservice Testing Program," as the licensee program that fulfills the requirements of 10 CFR 50.55a(f). As such, the SR is redundant to the Regulations.

Current SR 3.1.9.2 requires closure time of each CVS makeup isolation valve is within limits. This requirement is a duplication of ASME OM 2012, ISTC 5113, Valve Stroke Testing, paragraph (a), requires that "Active valves shall have their stroke times measured when exercised in accordance with para. ISTC 3500... ." Additionally, the SR Frequency requires the Surveillance to be performed "In accordance with the Inservice Testing Program," which is specified in TS 5.5.3, "Inservice Testing Program," as the licensee program that fulfills the requirements of 10 CFR 50.55a(f). As such, the SR is redundant to the Regulations.

These ASME OM tests are implemented as shown in the "Vogtle Electric Generating Plant Units 3&4 Inservice Testing Program Plan - 1st Interval, Revision 2," submitted on April 7, 2022 [ML22097A331] (Reference 1).

Neither SR 3.1.9.1 or SR 3.1.9.2 overtly specify a specific acceptance criterion for the stroke-closed or the stroke-timing. Procedure acceptance criteria assure the results meet the required safety analysis required performance, as well as any additional performance requirements that may be imposed by the VEGP IST Program, which meets the ASME OM Code requirements (with any approved alternatives). CVS demineralized water isolation valve and CVS makeup line isolation valve operability is unchanged with these proposed changes.

Since SR 3.1.9.1 and SR 3.1.9.2 reflect duplication of the Regulatory requirements imposed by 10 CFR 50.55a(f)(4) to perform stroke and closure timing, there is no technical change being proposed with their deletion.

Current SR 3.1.9.2 requires (in part) closure actuation of CVS makeup isolation valves "on an actual or simulated actuation signal" and SR 3.1.9.3 requires closure actuation of CVS demineralized water isolation valves "on an actual or simulated actuation signal." These portions of the Surveillances are proposed to be combined into a single SR 3.1.9.1 (proposed renumbering from the deletion of SR 3.1.9.1 and SR 3.1.9.2). As described in the TS Bases for these SRs, "The actual or simulated actuation signal is processed through the component interface module to verify the continuity between the output of the component interface module and the valves." This overlap testing is applicable with either Frequency: the SR 3.9.1.2 "In accordance with the Inservice Testing Program" and the SR 3.9.1.3 "24 months." Since the IST Program (and ASME OM requirements) do not specify the performance of a test using "actual or simulated actuation signal," the SR 3.1.9.2 Frequency of "In accordance with the Inservice Testing Program" is not an appropriate Frequency. The proposed application of the 24-month Frequency is consistent with the other TS Surveillance requirements for use of an "actual or simulated actuation signal" (including, for example, SR 3.6.3.5, which is duplicative for the CVS makeup isolations valves that are the subject of SR 3.1.9.2 currently utilizing the inappropriate "In accordance with the Inservice Testing Program").

Therefore, the proposed changes will continue to provide the appropriate assurance of the required safety functions.

3.5 Conclusion

In conclusion, the proposed changes imposes a more restrictive action, provides additional clarification consistent with the intent, and eliminates some duplication with Regulations. These changes continue to provide the appropriate assurance of the required safety functions. Therefore, there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner.

4 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

10 CFR Section 50.36, "Technical Specifications"

10 CFR 50.36(c)(2) requires that operating licenses for nuclear reactors must include TS that specifies:

> (2) Limiting conditions for operation. (i) Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met.

The proposed changes eliminate duplication of requirements, and where there are differences, retain the more restrictive requirements; thereby maintaining the lowest functional capability or performance levels of equipment required for safe operation of the facility. The proposed changes maintain Actions that protect safe operation. As such, the proposed changes maintain licensing basis compliance with 10 CFR 50.36.

10 CFR 50.36(c)(3) also requires that operating licenses for nuclear reactors must include TS that specifies:

> (3) Surveillance requirements. Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.

The proposed changes eliminate duplication of surveillance requirements, maintaining requirements that assure that the limiting conditions for operation will be met.

4.2 Precedents

None.

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 license amendment request (LAR) proposes changes to COL Appendix A, Technical Specifications (TS) 3.1.9, “Chemical and Volume Control System (CVS) Demineralized Water Isolation Valves and Makeup Line Isolation Valves.” The proposed change to Required Action B.1 imposes a more restrictive TS Action. Additional changes are proposed to TS 3.1.9 Actions Note and Action A for consistency with similar applications, to Surveillance Requirements (SR) 3.1.9.1 and SR 3.1.9.2 to eliminate duplication with regulations, and to SR 3.1.9.3 for consistency with similar Surveillances.

SNC has evaluated whether or not a significant hazards consideration is involved with the proposed change by focusing on the three standards set forth in 10 CFR 50.92, "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 change to TS 3.1.9 does not eliminate any requirement for systems to be operable, thereby continuing to provide the assumed safety functions. Since the proposed changes does not significantly affect system operability, the proposed change will have no significant increase on the probability or consequences of for 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 change to TS 3.1.9 does not affect the design or function of any plant systems. The proposed change does not change the operability requirements for plant systems.

Therefore, it is concluded that this change 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 change imposes a more restrictive TS action and reduces the administrative duplication of requirements, while continuing to provide that the affected system is capable of performing its safety function. As a result, margin of plant safety is restored.

Therefore, it is concluded that this change 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.

5 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed change would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed change 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 individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets the eligibility criterion 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 change.

6 REFERENCES

"Vogtle Electric Generating Plant Units 3&4 Inservice Testing Program Plan - 1st Interval, Revision 2," SNC letter No. ND-22-0254, April 7, 2022 [ML22097A331].

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

License Amendment Request:
More Restrictive Action for Technical Specification 3.1.9 (LAR-23-006)

Attachment 1

Technical Specification Marked Up Pages

Insertions Denoted by Blue Underline
Deletions Denoted by ~~Red Strikeout~~

(Attachment 1 consists of three pages, including this cover page.)

Technical Specification 3.1.9

LCO 3.1.9 Two CVS Demineralized Water Isolation Valves and two CVS Makeup Line Isolation Valves shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, 4, and 5.

ACTIONS

- NOTES -

1. Flow path(s) may be unisolated intermittently under administrative controls.

2. Separate Condition entry is allowed for each valve.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CVS demineralized water isolation valve inoperable. OR One CVS makeup line isolation valve inoperable. ~~OR~~ ~~One CVS demineralized water isolation valve and one CVS makeup line isolation valve inoperable.~~	A.1 Restore ~~two CVS demineralized water isolation valves and two CVS makeup line~~ isolation valve~~s~~ to OPERABLE status.	72 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and associated Completion Time of Condition A not met. OR Two CVS demineralized water isolation valves inoperable. OR Two CVS makeup line isolation valves inoperable.	B.1 Isolate the affected flow path(s) ~~from the demineralized water storage tank~~ to the Reactor Coolant System by use of at least one closed manual or one closed and de-activated automatic valve.	1 hour

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
~~SR 3.1.9.1~~	~~Verify two CVS demineralized water isolation valves and two CVS makeup line isolation valves stroke closed.~~	~~In accordance with the Inservice Testing Program~~
~~SR 3.1.9.2~~	~~Verify closure time of each CVS makeup isolation valve is within limits on an actual or simulated actuation signal.~~	~~In accordance with the Inservice Testing Program~~
SR 3.1.9.1~~3~~	Verify each CVS demineralized water isolation valve and each CVS makeup line isolation valve actuates to the isolation position on an actual or simulated actuation signal.	24 months

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

License Amendment Request:
More Restrictive Action for Technical Specification 3.1.9 (LAR-23-006)

Attachment 2

Technical Specification Revised Pages

(Attachment 2 consists of three pages, including this cover page.)

3.1 REACTIVITY CONTROL SYSTEMS

3.1.9 Chemical and Volume Control System (CVS) Demineralized Water Isolation Valves and Makeup Line Isolation Valves

LCO 3.1.9 Two CVS Demineralized Water Isolation Valves and two CVS Makeup Line Isolation Valves shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, 4, and 5.

ACTIONS

- NOTES -

1. Flow path(s) may be unisolated intermittently under administrative controls.

2. Separate Condition entry is allowed for each valve.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CVS demineralized water isolation valve inoperable. OR One CVS makeup line isolation valve inoperable.	A.1 Restore isolation valve to OPERABLE status.	72 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and associated Completion Time of Condition A not met. OR Two CVS demineralized water isolation valves inoperable. OR Two CVS makeup line isolation valves inoperable.	B.1 Isolate the affected flow path(s) to the Reactor Coolant System by use of at least one closed manual or one closed and de-activated automatic valve.	1 hour

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.1.9.1	Verify each CVS demineralized water isolation valve and each CVS makeup line isolation valve actuates to the isolation position on an actual or simulated actuation signal.	24 months

Vogtle Electric Generating Plant (VEGP) Units 3 and 4

License Amendment Request:
More Restrictive Action for Technical Specification 3.1.9 (LAR-23-006)

Attachment 3

Technical Specification Bases Marked Up Pages

Insertions Denoted by Blue Underline
Deletions Denoted by ~~Red Strikeout~~
Omitted text is identified by three asterisks (* * *)

(Attachment 3 consists of three pages, including this cover page.)

Technical Specifications Bases 3.1.9

* * *

ACTIONS The ACTIONS are modified by ~~a~~two Notes. Note 1 allows~~ing~~ the affected flow path(s) to be unisolated intermittently under administrative controls. These administrative controls consist of stationing a dedicated operator at the valve controls, who is in continuous communication with the main control room. In this way, the flow path(s) can be rapidly isolated when a need for isolation is indicated.

A second Note provides clarification that, for this LCO, separate Condition entry is allowed for each valve. This is acceptable, since the Required Actions provide appropriate compensatory actions for each inoperable isolation valve. Complying with the Required Actions may allow for continued operation, and subsequent inoperable isolation valves are governed by subsequent Condition entry and application of associated Required Actions.

* * *

B.1

If the Required Actions and associated Completion Time of Condition A are not met, or if both CVS demineralized water isolation valves or both CVS makeup line isolation valves are not OPERABLE (i.e., not able to be closed automatically), then the affected flow path(s) must be isolated.

~~**- NOTE -**~~

~~As identified in MAXIMO CR 50121598, Required Action B.1 is nonconservative in providing the appropriate compensation for protecting the overfill safety function. The Required Action B.1 requirement to isolate "from the demineralized water storage tank to the Reactor Coolant System" only protects the boron dilution mitigation safety function.~~ * * *~~, in the event of two inoperable CVS makeup valves or one inoperable CVS makeup isolation valve for longer than 72 hours, Required Action B.1 must be administratively met by isolation of the CVS makeup line in order to provide protection from overfilling the pressurizer or steam generator.~~ For inoperabilities of CVS makeup isolation valves, isolating the "affected flow path" must prevent flow from the CVS makeup pumps to the RCS in order to provide protection from overfilling. Isolation can be accomplished by manually closing the CVS makeup isolation MOVs or alternatively, manual valve(s) in the makeup line between the makeup pumps and the RCS.

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For inoperabilities of CVS demineralized water isolation valves i~~I~~solation from the demineralized water supply flow path to the RCS can be accomplished by manually isolating the CVS demineralized water isolation valve(s) or by positioning the 3-way blend valve to only take suction from the boric acid tank. Alternatively, the dilution path may be isolated by closing appropriate isolation valve(s) in the flow path(s) from the demineralized water storage tank to the reactor coolant system.

SURVEILLANCE REQUIREMENTS

SR 3.1.9.1

~~Verification that the CVS demineralized water isolation valves and makeup line isolation valves stroke closed demonstrates that the valves can perform their safety related function. The Frequency is in accordance with the Inservice Testing Program.~~

~~SR 3.1.9.2~~

~~Verification that the closure time of each RCS makeup isolation valve is less than that assumed in the safety analysis (i.e., < 30 seconds), is performed by measuring the time required for each valve to close on an actual or simulated actuation signal. The actual or simulated actuation signal is processed through the component interface module to verify the continuity between the output of the component interface module and the valves. The Frequency is in accordance with the Inservice Testing Program.~~

~~SR 3.1.9.3~~

This SR verifies that each CVS demineralized water isolation valve and each CVS makeup water isolation valve actuates to the correct position on an actual or simulated actuation signal. The actual or simulated actuation signal is processed through the component interface module to verify the continuity between the output of component interface module and the valve. The Frequency of 24 months is based on the need to perform this surveillance during periods in which the plant is shutdown for refueling to prevent any upsets of plant operation.