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January 27, 2014  
NND-14-0038  
10 CFR 50.59  
10 CFR 52 App D

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3  
Docket Numbers 52-027 and 52-028  
Combined License Numbers NPF-93 and NPF-94

Subject: Reporting of 10 CFR 50.59 Changes, Tests, and Experiments and 10 CFR 52  
Appendix D Section VIII Departures

Reference: 1. Letter from Alfred M. Paglia (SCE&G) to Document Control Desk (NRC), July  
25, 2013, Reporting of 10 CFR 50.59 Changes, Tests, and Experiments and  
10 CFR 52 Appendix D Section VIII Departures

In accordance with 10 CFR 50.59(d)(2), VCSNS Units 2 and 3 is required to submit a report to the NRC containing a brief description of any changes, tests or experiments made pursuant to 10 CFR 50.59(c), including a summary of the evaluation of each. This 10 CFR 50.59 report is for the period beginning July 26, 2013 and ending January 27, 2014. During that period there were no changes, tests or experiments made pursuant to paragraph (c) of 10 CFR 50.59.

Additionally, as required by paragraphs X.B.1 and X.B.3.b of Appendix D to 10 CFR Part 52, this submittal contains a report of all plant-specific departures made in this reporting period. The 10 CFR 52 Appendix D Departure Report is provided in Enclosure 1 to this letter and covers the period beginning in July 26, 2013 and ending January 27, 2014.

This letter makes no new regulatory commitments.

DO 83  
NRD

If you have any questions please call Al Paglia, Manager – Nuclear Licensing, at 803-941-9876 or April Rice, Supervisor – Nuclear Licensing, at 803-941-9858.

Sincerely,

A handwritten signature in black ink, appearing to read 'Al Paglia', with a long horizontal flourish extending to the right.

Alfred M. Paglia  
Manager  
New Nuclear Licensing

BB/AMP/bb

Enclosure 1: V.C. Summer Nuclear Station Units 2 and 3 Departure Report: July 26, 2013 through January 27, 2014

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NND-14-0038

Enclosure 1

V.C. Summer Nuclear Station Units 2 and 3

Departure Report: July 26, 2013 through January 27, 2014

**Departure:** LCE-12-020

**Originating Document:** APP-FSAR-GLN-022

**Title:** Changes to the Primary Sampling System (PSS)

**Activity Description:**

The PSS as described in the UFSAR (plant-specific DCD) is changed to replace the containment air return check valve, PSS-PL-V024 with a solenoid-operated valve, redesign the PSS inside containment header, and add a new PSS containment penetration.

A second portion of this departure adds sample source isolation valves upstream of the solenoid operated PSS sample isolation valves and clarifies that the PSS sample cooler feed line valves isolate on a high pressure signal sensed downstream of the respective PSS sample coolers.

**Summary of Evaluation:**

Portions of this departure involved Tier 1 information, Combined License (COL) Appendix C, and Tier 2 information in the UFSAR which involved changes to Tier 1 information; therefore, a License Amendment and Exemption Request (LAR 13-06) was submitted to the NRC.

The NRC approved this departure and exemption and issued License Amendment 8 to Combined Licenses NPF-93 and NPF-94 for V.C. Summer Units 2 and 3, respectively.

The second portion of this departure does not result in a modification, addition to, or removal of a structure, system, or component (SSC) such that a design function is adversely affected, has no impact on plant operating procedures or a method of control that adversely affects a design function, does not result in an adverse change to a method of evaluation or use of an alternate method of evaluation, does not represent tests or experiments outside the reference bounds of the design basis, and does not alter the assumptions or results of the ex-vessel severe accident assessment.

That portion of the departure did not involve a change to Tier 1 information, Tier 2\* information or the Technical Specifications. A 10 CFR 50.59/10 CFR 52 Appendix D Section VIII review determined that no prior NRC approval is required.

**Departure:** LCE-13-011

**Originating Document:** APP-FSAR-GLN-125

**Title:** Passive Core Cooling System (PXS) Remote Transmitters

**Activity Description:**

PXS level instrumentation inside containment associated with the Core Makeup Tanks, Accumulator Tanks, In-Containment Refueling Water Storage Tank (IRWST) and the Containment Flood-up level instruments are changed from level switches to sensing elements with separate remote transmitters.

**Summary of Evaluation:**

The change from level switches to sensing elements with separate remote transmitters does not result in a modification, addition to, or removal of a structure, system, or component (SSC) such that a design function is adversely affected, has no impact on plant operating procedures or a method of control that adversely affects a design function, does not result in an adverse change to a method of evaluation or use of an alternate method of evaluation, does not represent tests or experiments outside the reference bounds of the design basis, and does not alter the assumptions or results of the ex-vessel severe accident assessment.

This departure did not involve a change to Tier 1 information, Tier 2\* information or the Technical Specifications. A 10 CFR 50.59/10 CFR 52 Appendix D Section VIII review determined that no prior NRC approval is required.

**Departure:** LCE-13-029

**Originating Document:** APP-FSAR-GLN-115

**Title:** Module Obstructions and Details

**Activity Description:**

UFSAR (plant-specific DCD) Section 3.8, Concrete and Steel Internal Structures of Steel Containment, is revised to acknowledge additional types of obstructions and interferences (other than the wall openings and penetrations already addressed by the UFSAR) that may cause a change to the spacing of shear studs and the design and spacing of wall module trusses in a local area, and to acknowledge appropriate weld types.

**Summary of Evaluation:**

This departure involved Tier 2\* information, and Tier 2 information in the UFSAR which involved changes to Tier 2\* information; therefore, a License Amendment Request (LAR 13-20) was submitted to the NRC.

The NRC approved this departure and issued License Amendment 9 to Combined Licenses NPF-93 and NPF-94 for V.C. Summer Units 2 and 3, respectively.

**Departure:** LCE-13-034

**Originating Document:** APP-FSAR-GLN-131

**Title:** Ancillary Diesel Fuel Oil Storage Tank

**Activity Description:**

UFSAR (plant-specific DCD) Chapter 9, Appendix 9A, Fire Protection Analysis, is updated to clarify the location of the ancillary diesel fuel oil storage tank in the ancillary diesel generator room.

**Summary of Evaluation:**

The change to the UFSAR to clarify the location of the ancillary diesel fuel oil storage tank does not result in a modification, addition to, or removal of a structure, system, or component (SSC) such that a design function is adversely affected, has no impact on plant operating procedures or a method of control that adversely affects a design function, does not result in an adverse change to a method of evaluation or use of an alternate method of evaluation, does not represent tests or experiments outside the reference bounds of the design basis, and does not alter the assumptions or results of the ex-vessel severe accident assessment.

This departure did not involve a change to Tier 1 information, Tier 2\* information or the Technical Specifications. A 10 CFR 50.59/10 CFR 52 Appendix D Section VIII review determined that no prior NRC approval is required.



**Departure:** LCE-13-036

**Originating Document:** CR-NND-13-00451

**Title:** Withdrawn Regulatory Guide RG 1.83 cited in UFSAR

**Activity Description:**

Two paragraphs UFSAR Section 5.4.2.5 "Steam Generator Inservice Inspection" refer to withdrawn Regulatory Guide 1.83. RG 1.83 rev 1 was issued 7/75, and was withdrawn per Federal Register 74 FR 58324. According to the Federal Register, RG 1.83 was withdrawn because it no longer describes a preferred approach for inservice inspection of steam generator tubing. This is a clarification change to make references to RG 1.83 in UFSAR Section 5.4.2.5 historical because RG 1.83 was withdrawn.

The cited Regulatory Guide in UFSAR Section 5.4.2.5 is part of original DCD material. There is a reference in the text of Section 5.4.2.5 to Section 1.9.1 (Appendix 1A). Appendix 1A appropriately states that RG 1.83 was withdrawn 11/12/2009, and the programmatic and/or operational aspects are not applicable since this guidance was withdrawn by NRC.

**Summary of Evaluation:**

The subject change does not result in modification, addition to, or removal of a structure, system, or component (SSC) such that a design function is adversely affected, has no impact on plant operating procedures or on the control of the reactions in the core design function, does not result in an adverse change to a method of evaluation or use of an alternate method of evaluation, does not represent tests or experiments outside the reference bounds of the design basis, and does not alter the assumptions or results of the ex-vessel severe accident assessment.

This departure did not involve a change to Tier 1 information, Tier 2\* information or the Technical Specifications. A 10 CFR 50.59 / 10 CFR 52 Appendix D Section VIII review determined that no prior NRC approval is required.

**Departure:** LCE-13-041

**Originating Document:** APP-FSAR-GLN-238

**Title:** Turbine Building Closed Cooling Water System (TCS) Heat Exchanger Plate Material

**Activity Description:**

UFSAR (plant-specific DCD) Chapter 9, Subsection 9.2.8, Turbine Building Closed Cooling Water System, is changed to permit the use of stainless steel plates in the TCS heat exchangers.

**Summary of Evaluation:**

The change to permit the use of stainless steel plates in the TCS heat exchangers does not result in a modification, addition to, or removal of a structure, system, or component (SSC) such that a design function is adversely affected, has no impact on plant operating procedures or a method of control that adversely affects a design function, does not result in an adverse change to a method of evaluation or use of an alternate method of evaluation, does not represent tests or experiments outside the reference bounds of the design basis, and does not alter the assumptions or results of the ex-vessel severe accident assessment.

This departure did not involve a change to Tier 1 information, Tier 2\* information or the Technical Specifications. A 10 CFR 50.59/10 CFR 52 Appendix D Section VIII review determined that no prior NRC approval is required.

**Departure:** LCE-13-042

**Originating Document:** APP-FSAR-GLN-182

**Title:** Changes to the Auxiliary Steam Boiler

**Activity Description:**

UFSAR (plant-specific DCD) Chapter 8, Figure 8.3.1-1, AC Power Station One Line Diagram, is changed to specify United States parameters rather than International parameters; and to show a new connection to allow manual alignment of the electric auxiliary boiler to the standby diesel generator. In UFSAR Chapter 10, Subsection 10.4.10, Auxiliary Steam System, the auxiliary steam boiler nominal net output capacity is changed from 100,000 pounds per hour to 62,000 pounds per hour of saturated steam.

**Summary of Evaluation:**

The change to the AC electrical one line diagram and auxiliary steam boiler output capacity does not result in a modification, addition to, or removal of a structure, system, or component (SSC) such that a design function is adversely affected, has no impact on plant operating procedures or a method of control that adversely affects a design function, does not result in an adverse change to a method of evaluation or use of an alternate method of evaluation, does not represent tests or experiments outside the reference bounds of the design basis, and does not alter the assumptions or results of the ex-vessel severe accident assessment.

This departure did not involve a change to Tier 1 information, Tier 2\* information or the Technical Specifications. A 10 CFR 50.59/10 CFR 52 Appendix D Section VIII review determined that no prior NRC approval is required.

**Departure:** LCE-13-049

**Originating Document:** APP-FSAR-GLN-132

**Title:** Auxiliary Building Structural Modules Tier 2 Departures

**Activity Description:**

The purpose of this departure is to address several discrepancies and inconsistencies within the licensing basis and between the licensing basis and other design documents related to the structural modules. The structural modules within the scope of this departure are modules that comprise the CA20 module in the auxiliary building. Subsection 3.8.4.1.2 states that the design of the modules for the auxiliary building is the same as for the containment internal structures. Although the containment internal structures modules and the auxiliary building structural modules are similar, they are not identical. The general design concept of concrete filled steel plates is common to both CA01 and CA20 modules. There are changes in dimensions and design details that reflect the differences in loadings and location between the modules. There are several licensing basis figures that relate to the text and illustrate various design details of the modules these figures generally use the containment internal structures modules as the examples. These figures do not necessarily show the detail design of the auxiliary building modules. Several items require changes or additions to Tier 2 text of the plant specific DCD in order to reconcile the discrepancies or inconsistencies. This change activity does not require changes to the design identified in the Tier 2\* portion of the plant specific DCD.

**Summary of Evaluation:**

The change to address these discrepancies or inconsistencies does not result in a modification, addition to, or removal of a structure, system, or component (SSC) such that a design function is adversely affected, has no impact on plant operating procedures or a method of control that adversely affects a design function, does not result in an adverse change to a method of evaluation or use of an alternate method of evaluation, does not represent tests or experiments outside the reference bounds of the design basis, and does not alter the assumptions or results of the ex-vessel severe accident assessment.

This departure did not involve a change to Tier 1 information, Tier 2\* information or the Technical Specifications. A 10 CFR 50.59/10 CFR 52 Appendix D Section VIII review determined that no prior NRC approval is required.

**Departure:** LCE-13-051

**Originating Document:** APP-FSAR-GLN-265

**Title:** WRS and WWS Pneumatic Diaphragm Sump Pump On/Off Air Supply

**Activity Description:**

The usual and customary means for controlling pneumatic diaphragm sump pump air supply is that solenoid valves are provided for on/off functions of air supply to the pneumatic diaphragm sump pump diaphragms. The changes involve using the positive on/off full-air-flow/no-air-flow solenoid operated valve, as opposed to the modulating air flow air-operated valve, for the start/stop air for the waste water system (WWS) and radioactive waste drain system (WRS) diaphragm sump pumps. This solenoid operated valve type of air flow control ensures that the desired and intended delivery of full flow air, as opposed to modulated air, will act on the pump diaphragms of the pneumatic WWS and WRS diaphragm sump pumps.

**Summary of Evaluation:**

The change from using modulating air flow air-operated valves to solenoid valves for controlling pneumatic diaphragm sump pump air supply does not result in a modification, addition to, or removal of a structure, system, or component (SSC) such that a design function is adversely affected, has no impact on plant operating procedures or a method of control that adversely affects a design function, does not result in an adverse change to a method of evaluation or use of an alternate method of evaluation, does not represent tests or experiments outside the reference bounds of the design basis, and does not alter the assumptions or results of the ex-vessel severe accident assessment.

This departure did not involve a change to Tier 1 information, Tier 2\* information or the Technical Specifications. A 10 CFR 50.59/10 CFR 52 Appendix D Section VIII review determined that no prior NRC approval is required.

**Departure:** LCE-13-052

**Originating Document:** APP-FSAR-GLN-239

**Title:** Liquid Radwaste System (WLS) Clarification

**Activity Description:**

UFSAR (plant-specific DCD) Chapter 11, Section 11.2, Liquid Waste Management Systems, is changed to clarify that portions of the WLS that do not contain radioactive material may not be of welded construction.

**Summary of Evaluation:**

The change to clarify the application of welded construction in the WLS does not result in a modification, addition to, or removal of a structure, system, or component (SSC) such that a design function is adversely affected, has no impact on plant operating procedures or a method of control that adversely affects a design function, does not result in an adverse change to a method of evaluation or use of an alternate method of evaluation, does not represent tests or experiments outside the reference bounds of the design basis, and does not alter the assumptions or results of the ex-vessel severe accident assessment.

This departure did not involve a change to Tier 1 information, Tier 2\* information or the Technical Specifications. A 10 CFR 50.59/10 CFR 52 Appendix D Section VIII review determined that no prior NRC approval is required.

**Departure:** LCE-13-053

**Originating Document:** APP-FSAR-GLN-248

**Title:** Changes to Components in the Liquid Radwaste System (WLS) and Chemical and Volume Control System (CVS).

**Activity Description:**

WLS and CVS component information and parameters in UFSAR (plant-specific DCD) Section 9.3 and Section 11.2 are updated to reflect current design information.

Some heat exchanger (HX) shell materials are changed to allow the use of stainless steel, and some design and operating parameters and a design feature that allows for tube cleaning of the nonsafety-related Liquid Radwaste System (WLS) Reactor Coolant Drain Tank (RCDT) HX were updated. The RCDT HX design pressure and shell side material were changed. The tubeside and shellside design flows and some operating water temperatures were changed for the nonsafety-related WLS Vapor Condenser. The Chemical and Volume Control System (CVS) HX design flows and pressures are changed. CVS letdown HX shell is changed to allow the use of carbon steel or stainless steel. None of the changes affected an equipment design function described in the UFSAR.

**Summary of Evaluation:**

The change to update the design information for components in the WLS and CVS does not result in a modification, addition to, or removal of a structure, system, or component (SSC) such that a design function is adversely affected, has no impact on plant operating procedures or a method of control that adversely affects a design function, does not result in an adverse change to a method of evaluation or use of an alternate method of evaluation, does not represent tests or experiments outside the reference bounds of the design basis, and does not alter the assumptions or results of the ex-vessel severe accident assessment.

This departure did not involve a change to Tier 1 information, Tier 2\* information or the Technical Specifications. A 10 CFR 50.59/10 CFR 52 Appendix D Section VIII review determined that no prior NRC approval is required.

**Departure:** LCE-14-001

**Originating Document:** APP-FSAR-GLN-136

**Title:** Containment and Auxiliary Building Structural Modules Tier 2 Departures

**Activity Description:**

The purpose of this departure is to address several discrepancies and inconsistencies within the licensing basis and between the licensing basis and other design documents related to the structural modules. The structural modules considered in this departure are the modules in containment and the modules in the auxiliary building. Design finalization of the modules, fabrication experience in the shop environment, and the comparison of text and figures presented in the UFSAR with shop assembly drawings has identified inconsistencies and discrepancies related to certain details of the structural modules. The design variances with the UFSAR figures include the size, material, and configuration of the structural shapes and plates, the amount and arrangement of the reinforcement, design of internals of modules, and design of connections. The result is a revision to UFSAR Section 3.8.3 text and figures in several places where these inconsistencies and discrepancies occur. Although the structural modules used in various locations in the plant are similar, they are not identical. While the general design concept of concrete filled steel plates is common to structural modules, there are changes in dimensions and design details that reflect the differences in functions and loadings among the modules.

**Summary of Evaluation:**

The change to address these discrepancies and inconsistencies does not result in a modification, addition to, or removal of a structure, system, or component (SSC) such that a design function is adversely affected, has no impact on plant operating procedures or a method of control that adversely affects a design function, does not result in an adverse change to a method of evaluation or use of an alternate method of evaluation, does not represent tests or experiments outside the reference bounds of the design basis, and does not alter the assumptions or results of the ex-vessel severe accident assessment.

This departure did not involve a change to Tier 1 information, Tier 2\* information or the Technical Specifications. A 10 CFR 50.59/10 CFR 52 Appendix D Section VIII review determined that no prior NRC approval is required.