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A SCANA COMPANY

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

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

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

Reference: 1. Letter from Ronald B. Clary (SCE&G) to Document Control Desk (NRC), July 26, 2012, 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 25, 2012 and ending January 24, 2013. 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 25, 2012 and ending January 24, 2013.

Should you have any questions, please contact Mr. Alfred M. Paglia by telephone at (803) 941-9876, or by email at apaglia@scana.com.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 24th day of January, 2013.

Sincerely,

Ronald A. Jones
Vice President
New Nuclear Operations

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Enclosure 1: V.C. Summer Nuclear Station Units 2 and 3 Departure Report: July 24, 2012 through January 24, 2013

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V.C. Summer Nuclear Station Units 2 and 3 Departure Report

July 24, 2012 through January 24, 2012

SCE&G Identifier	Consortium Identifier (If applicable)	Activity Description	Summary of Evaluation
LCE-12-033	APP-FSAR-GLN-119	The UFSAR (plant-specific DCD) Subsection 9.3.5.1.2 is revised to add Auxiliary Building Area 1 in the exception statement for the 1/8 inch per foot minimum slope requirements. The Waste Water System (WWS) drain pipe slope design is for 1/16" per foot in Areas 1 and 2 of the Auxiliary Building at elevation 66'-6". WWS drain size calculations were performed for both areas, and the 1/16 inch per foot slope was determined acceptable.	The change to add Auxiliary Building Area 1 to the UFSAR (plant-specific DCD) Subsection 9.3.5.1.2 exception statement was evaluated and it was determined that it is not a test or experiment or a modification or addition that affects 1) a design function of an SSC, or 2) an evaluation for demonstrating that intended design functions will be accomplished. There is no adverse affect on the frequency or consequences of accidents or malfunction of an SSC important to safety. There is no adverse impact on any fission product barrier design basis limits, and there is no failure of an SSC leading to a different result than previously analyzed. The slope of these drain lines is not a severe accident design feature. 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.

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LCE-12-034	APP-FSAR-GLN-092	DCD Tier 2 Appendix 3D, "Methodology for Qualifying AP1000 Safety Related Electrical and Mechanical Equipment," was revised to (1) incorporate the latest environmental information consistent with a revised "Master Equipment Qualification Environmental Summary" design specification, and (2) add post-accident radiation dose information to be used for Equipment Qualification (EQ) of safety-related equipment within the Auxiliary Building, in accordance with Regulatory Guide (RG) 1.183. The design specification was revised as part of the plant design process, and for completeness, additional radiation dose information was included for equipment outside the containment in the Auxiliary Building to support conformance to RG 1.183. Tier 2 Appendix 3D was revised to be consistent with the changes and additions in the revised design specification.	The updated and additional EQ information does not adversely affect any structure, system or component (SSC) design function, involve a procedure or method of control that affects the performance of a design function, involve a method of evaluation in the plant-specific DCD or Updated FSAR, involve a test or experiment, nor a design feature credited in 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.

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LCE-12-038	APP-FSAR-GLN-121	Detailed figures were provided in DCD Revision 19. This activity substitutes a DCD piping & instrumentation diagram with a simplified schematic such that all required information is maintained. It has been verified that the simplified figure together with associated DCD and FSAR text continue to provide sufficient understanding of design bases, safety analyses and facility operation. There is no change to the system design described in the DCD figures or supporting analysis. The actual system piping and instrumentation diagrams are not altered by this activity. This is a change to the level of detail documented in the DCD. The figure simplification effort removes extraneous detail from DCD figures. Also, in accordance with the criteria developed for information displayed on DCD Figures, a number of of vents and drains were also added to the simplified figures.	The departure to simplify plant-specific DCD and UFSAR Figure 9.1-6, add vent and drains for consistency with other Subsections, and an administrative clarification was evaluated and it was determined that it is not a test or experiment described in the plant-specific DCD or a modification or addition that affects 1) a design function of an SSC, or 2) an evaluation for demonstrating that intended design functions will be accomplished. There is no adverse effect on the frequency or consequences of accidents or malfunction of an SSC important to safety. There is no adverse impact on any fission product barrier design basis limits, and there is no failure of an SSC leading to a different result than previously analyzed. The SFS vents and drains have not been identified as a design feature in the plant-specific DCD for mitigating an ex-vessel severe accident. Consequently, this change has no impact on ex-vessel severe accident likelihood or consequences. 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.

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LCE-12-040	APP-FSAR-GLN-099	The existing Integrated Head Package (IHP) was reconfigured during the design certification amendment process so that it no longer requires shielding from water. Based on this change, the IHP storage tank, the existing drain to the in-containment refueling water storage tank (IRWST) and feed from spent fuel pool cooling system (SFS) are no longer needed. The water which may be drained into the IRWST during the in service inspection will contain contaminants from the inspection process which could adversely affect the water quality of the IRWST. The drain line is rerouted to the WLS sump rather than to the IRWST. Furthermore, Operating experience shows and Tech Specs require an accurate method of measuring and verifying water levels in the refueling cavity and spent fuel pool. Additionally, an accurate method of measuring and verifying water level in the cask loading pit is required to ensure the cask loading pit is considered operable as a fuel storage pool makeup water source. To ensure maintenance of the required water level in these areas, this activity specifies the installation of three indicators/alarms.	The IHP was previously reconfigured such that it no longer required shielding from water. This allows for the IHP storage tank and associated piping to be removed. These changes do not adversely affect any design function of any SSC as described in the licensing basis. The changes do not affect any procedure, method of evaluation, or test/experiment. The changes do not have an impact on ex-vessel severe accident consequences. A 10CFR50.59/10CFR52 Appendix D Section VIII review has determined that no prior NRC approval is required. This departure did not involve a change to Tier 1 information, Tier 2* information or the Technical Specifications. The changes to add additional level indicators/alarms to the spent fuel pool, refueling cavity, and cask loading pit do not adversely affect the design function of any SSC as described in the licensing basis. The changes do not affect any procedure, method of evaluation, or test/experiment. The changes do not have an impact on ex-vessel severe accident consequences. A 10CFR50.59/10CFR52 Appendix D Section VIII review has determined that no prior NRC approval is required. This departure did not involve a change to Tier 1 information, Tier 2* information or the Technical Specifications.

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LCE-12-041	APP-FSAR-GLN-113	The discussions of Liquid Radwaste System (WLS) components in the plant-specific DCD Subsection 11.2.2.3 were relocated to other areas within the same subsection to clarify their relationships to other components. The DCD within Subsection 11.2.2.3 is reorganized for clarity, but no information is changed. The technical descriptions within Subsection 11.2.2.3 are not affected nor is any information added or deleted; only the order in which these descriptions are presented is changed. The Containment Sump (WLS-MT-02) is part of the WLS. This tank is a stainless steel, rectangular sump tank designed for embedment in concrete. By design, the Containment Sump should be included within DCD Tier 2 Table 3.2-3, "AP1000 Classification of Mechanical and Fluid Systems, Components, and Equipment." Therefore, for completeness, a line item is added to DCD Tier 2 Table 3.2-3, within the WLS portion of the table, to include the Containment Sump. There is no design, operational or function change associated with this activity.	The plant-specific DCD clarifications do not change any design function, involve a procedure or method of control that affects the performance of a design function, involve a method of evaluation in the plant-specific DCD or Updated FSAR, involve a test or experiment, nor a design feature credited in the ex-vessel severe accident assessment. A 10 CFR 50.59/10 CFR 52 Appendix D Section VIII review determined that no prior NRC approval is required.

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LCE-12-043	APP-FSAR-GLN-041	Safety/relief valves V040A, V040B, V040C, and V040D and their associated inlet and outlet lines are being added back to DCD Tier 2 Figure 6.4-2 (Sheet 1). These valves were inadvertently deleted from that figure of the DCD in Revision 18. These relief valves serve to protect the VES Emergency Air Supply tanks from an overpressurizing event.	This departure adds the Emergency Air Supply Tank relief valves, which were inadvertently removed from the DCD in Revision 18, back into Figure 6.4-2. These valves already exist in the AP1000 design and are identified in DCD Revision 19, Tier 1 Table 2.2.5-1 and in Tier 2 Tables 3.2-3, 3.9-12, 3.9-16 and 3I.6-3, and therefore, this change is being made for consistency. There is no physical design change being made. Consequently, the design functions of the Main Control Room Emergency Habitability System (VES), the VES Emergency Air Supply Tanks and the VES Emergency Air Supply Tank relief system, are not adversely affected by this departure. The change has no affect on any analysis and it does not impact the Aircraft Impact Assessment. The change does not affect any procedure, method of evaluation, or test and experiment. The change does not have an impact on ex-vessel severe accident consequences. 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.

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LCE-12-044	APP-FSAR-GLN-042	Tier 2 Figure 1.2-11 general arrangement drawing was changed to depict the actual plant design location of the steam generator upper manway area grating elevation. This elevation change is the result of personnel safety and constructability improvements in the steam generator upper manway grating design. Without the incorporation of this change, the steam generator upper manway elevation would have been incorrectly represented in this general arrangement drawing. Tier 2 Figure 1.2-11 is being changed to incorporate the new steam generator upper manway elevation being lowered 2¼" from 166'-3¾" to 166'-1½"that was previously incorporated in Tier 2 Figure 1.2-13 and Tier 2 Figure 1.2-15 and makes Tier 2 consistent within itself.	The steam generator upper manway area grating elevation is being lowered 2¼". This change to Tier 2 Figure 1.2-11 was previously incorporated in Tier 2 Figure 1.2-13 and Figure 1.2-15 and effectively makes Tier 2 consistent within itself. This change has no affect on the QA plan, the Site Security Plan, the Emergency Plan, Loss of Large Areas Mitigation Strategy, the Aircraft Impact Analysis or the ex-vessel accident assessment. The actual plant steam generator upper manway area grating elevation being lowered 2¼" does not adversely affect a design function as described in the plant-specific DCD or Updated FSAR, nor a feature credited in the ex-vessel severe accident assessment, and is within the existing heat transport and mass transport phenomena analyses, because the characteristics of the grating area, volume and material remain unchanged. Additionally, the seismic impact of this structure has been analyzed so that the grating will not adversely affect the function of nearby seismic Category I equipment. 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.

SCE&G Identifier	Consortium Identifier (If applicable)	Activity Description	Summary of Evaluation
LCE-12-045	APP-FSAR-GLN-051	The RNS pump seal coolers are modified to add additional 1" vent and drain lines to the RNS process side of the pump seal coolers. These vent and drain lines include ASME-III isolation valves, because they are part of the Normal Residual Heat Removal System (RNS) pressure boundary. The additional 1" vent and drain lines are needed because of the possibility for air to be trapped in the seal cooler. Trapped air would degrade the ability of the cooler to remove heat. The pump seal cooler is considered its own entity, separate from the pump.	This change does not adversely impact the design function of the RNS pump seal coolers, which is to cool the seals to prevent seal degradation and pump outleakage. The change adds an additional vent and drain line to the coolers in order to remove any air which may accumulate inside the cooler. Accumulated gases could adversely affect the ability of the cooler to perform its design function of removing heat. Integrity of the RNS pressure boundary is maintained by the addition of AP1000 Code Letter C isolation valves on each of the added vent and drain lines. (Note that these vent and drain lines are being added outside of the reactor coolant pressure boundary (RCPB); therefore, RCPB integrity is unaffected by this change.) As defined in Table 3.2-1 of the plant-specific DCD, AP1000 Code Letter C is equivalent to ANS Equipment Safety Class 3, RG 1.29 Seismic Design Requirement I, and ASME Code Section III, Class 3. These valves will be designed to RG 1.26 NRC Quality Group C and 10 CFR 50, Appendix B requirements. They are in Environmental Zone 6 and function code PB (pressure boundary). Inspection, test and maintenance requirements are as defined in Table 3.2-1 of the plant-specific DCD. These valves are normally closed valves which are only opened for maintenance purposes to fill and drain the system. These maintenance procedures will include controls to verify that these valves are closed when maintenance is complete. The system pipe stress analyses consider the addition of these 1-inch lines and valves. The changes have no effect on any other analysis. These changes do not affect any procedure, method of evaluation, or test and experiment. The changes do not have an impact on ex-vessel severe accident consequences. 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.

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LCE-12-046	APP-FSAR-GLN-084	Nonsafety-related, post-accident, Normal Residual Heat Removal System (RNS) maximum flow from the In-containment Refueling Water Storage Tank (IRWST) or containment sump was increased from 2320 gpm to 2600 gpm. The RNS nonsafety-related function to prevent an unnecessary Automatic Depressurization System (ADS) Stage 4 actuation is accomplished by adequate RNS flow being provided to the reactor coolant system (RCS) from either the Cask Loading Pit or the IRWST. The calculated flow to prevent ADS Stage 4 actuation is 2162 gpm. The change provides a flow range of 438 gpm (2600 gpm - 2162 gpm), which is large enough to account for RNS flow instrument error and flow control variations.	The nonsafety-related RNS maximum flow increase during post-accident low-pressure injection to the RCS from the IRWST does not (1) adversely affect any design function described in the plant-specific DCD, (2) involve a procedure or method of control that affects the performance of a design function in the plant-specific DCD or UFSAR, (3) involve a change to a method of evaluation in the plant-specific DCD or Updated FSAR, (4) involve a test or experiment, or (5) adversely affect a design feature credited in the ex-vessel severe accident assessment. This departure did not involve a change to Tier 1 information, Tier 2* information or the Technical Specifications. Based on a 10 CFR 50.59/10 CFR 52 Appendix D Section VIII review, no prior NRC approval was required.

SCE&G Identifier	Consortium Identifier (If applicable)	Activity Description	Summary of Evaluation
LCE-12-047	APP-FSAR-GLN-054	The design change relocates high point gas collection volume and measurement equipment to the 107'2" floor, which is above the DVI A/B piping. With the gas collection point above this floor, the portion of piping above the floor will be isolated from the squib valve loads. This arrangement is oriented horizontally, with the level measurement devices being connected through the branches of each tee. The inlet and outlet of the gas collection chamber have eccentric reducers applied to facilitate venting. Also, the gas collection volume is less to reduce the potential for a larger volume of gas creating voids in the Direct Vessel Injection (DVI) lines on gas expansion and blowback during a SBLOCA.	This Tier 2 change was evaluated and it was determined that the design change to reduce stresses on instrumentation lines and gas collection and measurement components is not a test or experiment, or a modification or addition that affects: 1) a design function of an SSC, 2) a method of performing or controlling the design function, or 3) an evaluation for demonstrating that intended design functions will be accomplished. Further, this change has no adverse effect on the frequency or consequences of accidents or malfunction of an SSC important to safety. There is no adverse impact on any fission product barrier design basis limits, and there is no failure of an SSC leading to a different result than previously analyzed. These instrumentation lines and gas collection and measurement components have not been identified as a design feature in the plant-specific DCD for mitigating an ex-vessel severe accident. Consequently, this change has no impact on ex-vessel severe accident likelihood or consequences. 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.

SCE&G Identifier	Consortium Identifier (If applicable)	Activity Description	Summary of Evaluation
LCE-12-048	APP-FSAR-GLN-023	Piping class designations for portions of the SWS strainer backwash, normal and alternate blowdown lines, and normal makeup lines were revised. The CWS Strainer Backwash Line was restored. The SWS Position Switch channel was removed. These changes ensure that the DCD is consistent with actual design.	The correction of system connections and piping class designations does not impact the design function of the SWS but makes them consistent with design requirements and documentation. With these changes, the proper interfaces of SWS, WWS, and CWS are provided consistent with their intended functions. The SWS Position Switch removal does not affect the logic interface between the valve position and SWS pump start. The addition of the CWS strainer backwash line connection only restores the function to its previous status after having been inadvertently deleted. None of these changes adversely affect the design function of the SWS, constitutes an adverse change to procedures or a method of controlling the design function, incurs an adverse change to a method of evaluation, constitutes a test or experiment not described in the DCD or plant-specific Updated FSAR, or adversely impacts a design feature credited in 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.

SCE&G Identifier	Consortium Identifier (If applicable)	Activity Description	Summary of Evaluation
LCE-12-049	APP-FSAR-GLN-133	The top of rail elevation was revised and the associated dimensions with that rail was also adjusted. The "Top of Rail" elevation was 228'-6 1/4" is now 228'-5"; the "Top of Rail to Inside of Top of Head" dimension was 26'-11 ¾" is now 27'-1"; the "Top of Rail to Operational Floor" dimension was 93'-3 ¼" is now 93'-2". ASTM A490 has also been added as an applicable material standard and ASTM A194 has been updated to a newer version. Furthermore, a clarification is made in the UFSAR to specify that an edition of referenced specifications applicable after the start of construction or procurement activities will be used.	Plant-specific DCD and UFSAR Tier 2 changes consist of polar crane changes , materials additions, and clarification that the editions of industry specifications are those that are applicable after the start of construction or procurement activities. None of the changes involve a change to COL Appendix C, Tier 1, Tier 2*, or Technical Specifications. The crane design changes, materials additions, and industry specification applicable edition clarification do not adversely affect any design function, involve a procedure or method of control that affects the performance of a design function, involve a method of evaluation in the plant-specific DCD or Updated FSAR, involve a test or experiment, nor a design feature credited in the ex-vessel severe accident assessment. A 10 CFR 50.59/10 CFR 52 Appendix D Section VIII review determined that no prior NRC approval is required.

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LCE-12-050	APP-FSAR-GLN-086	Smoke dampers were added to the Nuclear Island Nonradioactive Ventilation System (VBS) to delay smoke migration. The VBS dampers delay smoke migration through ductwork in the event of a fire. Combination fire/smoke dampers are provided at duct penetrations through fire barriers to maintain the fire resistance ratings of the barriers. The use of smoke dampers more effectively delays smoke migration than the original design that used backdraft dampers for that function. For 2 inches or smaller manual isolation valves, the design was changed from packless metal diaphragm globe valves to hermetically sealed bellows globe valves. The valves' design feature to minimize leakage is enhanced by the change. Manual operation of the valves is not affected. The weight and size differences between the valve types are not significant. Therefore, loads and physical interference issues are not adversely affected.	The smoke damper changes, small diameter manual valve type changes, and drawing legends updates do not adversely affect any design function of any SSC. They do not involve a procedure or method of control that affects the performance of a design function, a method of evaluation in the plant-specific DCD or Updated FSAR, a test or experiment, or a design feature credited in 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.