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10 CFR 52.99(c)(1)U.S. Nuclear Regulatory Commission
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Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 3 and Unit 4
ITAAC Closure Notification on Completion of ITAAC 3.7.00.01 [Index Number 841]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), the purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 3.7.00.01 [Index Number 841] which confirms the design of Structures, Systems and Components (SSC) within the scope of the reliability assurance program is consistent with risk insights and key assumptions. The closure process for this ITAAC is based on the guidance described in Nuclear Energy Institute (NEI) 08-01, "Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52," which was endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact Tom Petrak at 706-848-1575.

Respectfully submitted,

Michael J. Yox
Regulatory Affairs Director Vogtle 3 & 4Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4
Completion of ITAAC 3.7.00.01 [Index Number 841]

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Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4
Completion of ITAAC 3.7.00.01 [Index Number 841]

ITAAC Statement

Design Commitment

1. The D-RAP ensures that the design of SSCs within the scope of the reliability assurance program (Table 3.7-1) is consistent with the risk insights and key assumptions (e.g., SSC design, reliability, and availability).

Inspections, Tests, Analyses

An analysis will confirm that the design of RAP SSCs identified in Table 3.7-1 has been completed in accordance with applicable D-RAP activities.

Acceptance Criteria

An analysis report documents that safety-related SSCs identified in Table 3.7-1 have been designed in accordance with a 10 CFR 50 Appendix B quality program.

An analysis report documents that non-safety-related SSCs identified in Table 3.7-1 have been designed in accordance with a program that satisfies quality assurance requirements for SSCs important to investment protection.

ITAAC Determination Basis

Risk-significant SSCs identified for the Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4 design are listed in the VEGP Unit 3 and Unit 4 Combined License (COL) Appendix C Table 3.7-1. Table 3.7-1 is provided in the attachment.

The Westinghouse Quality Management System (QMS) defines the 10 CFR 50 Appendix B quality program that was used for the design of the safety-related SSCs. The NRC approved Revision 7 to the Westinghouse QMS by letter dated December 29, 2014 (ML14336A487). Westinghouse procedure APP-GW-GAM-200, "AP1000 Quality Assurance Requirements for RTNSS Systems, Structures, and Components" (Reference 1), defines the quality program that was used for the design of non-safety-related SSCs.

Engineering Report APP-GW-GRR-011, "AP1000 Design Reliability Assurance Program Inspections, Test, Analyses, and Acceptance Criteria Report" (Reference 2), documents the analysis report that verified the components listed in VEGP Unit 3 and Unit 4 COL Appendix C Table 3.7-1 have been designed in accordance with a program that satisfies applicable quality assurance requirements. Safety-related SSCs identified in VEGP Unit 3 and Unit 4 COL Appendix C Table 3.7-1 have been designed in accordance with a 10 CFR 50 Appendix B program and the non-safety-related SSCs identified in VEGP Unit 3 and Unit 4 COL Appendix C Table 3.7-1 have been designed in accordance with a program that satisfies quality assurance requirements for SSCs important to investment protection.

ITAAC Finding Review

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all ITAAC findings pertaining to the subject ITAAC and

associated corrective actions. This review found that there are no relevant ITAAC findings associated with this ITAAC. The ITAAC finding review is documented in the VEGP Unit 3 and Unit 4 ITAAC Completion Package for ITAAC 3.7.00.01 [Index Number 841] (Reference 3) and is available for NRC inspection.

ITAAC Completion Statement

Based upon the above information, SNC hereby notifies the NRC that ITAAC 3.7.00.01 [Index Number 841] was performed for VEGP Unit 3 and Unit 4 and the prescribed acceptance criteria are met.

Systems, structures, and components verified as part of this ITAAC are being maintained in their as-designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

References (available for NRC inspection)

1. APP-GW-GAM-200, "AP1000 Quality Assurance Requirements for RTNSS Systems, Structures, and Components," Revision 2
2. APP-GW-GRR-011, "AP1000 Design Reliability Assurance Program Inspections, Test, Analyses, and Acceptance Criteria Report," Revision 1
3. ITAAC 3.7.00.01-U0-CP Completion Package for Unit 3 and Unit 4 [Index Number 841], Design Reliability Assurance Program

Attachment A

COL Appendix C, Table 3.7-1

Table 3.7-1 Risk-Significant Components	
Equipment Name	Tag No.
Component Cooling Water System (CCS)	
Component Cooling Water Pumps	CCS-MP-01A/B
Containment System (CNS)	
Containment Vessel	CNS-MV-01
Hydrogen Igniters	VLS-EH-1 through -66
Chemical and Volume Control System (CVS)	
Makeup Pumps	CVS-MP-01A/B
Makeup Pumps Suction and Discharge Check Valves	CVS-PL-V113 CVS-PL-V160A/B
Letdown Discharge Isolation Valves	CVS-PL-V045 CVS-PL-V047
Diverse Actuation System (DAS)	
DAS Processor Cabinets and Control Panel (used to provide automatic and manual actuation)	DAS-JD-001 DAS-JD-002 DAS-JD-003 OCS-JC-20
Auxiliary Building UPS Distribution Panels (provide power to DAS)	EDS2-EA-12, EDS3-EA-14A
Control Cabinets for the Rod Drive MG Sets (generator field control relays)	PLS-JD-RDM001 PLS-JD-RDM002
Containment Isolation Valves Controlled by DAS	CVS-PL-V045, -047 VFS-PL-V003, -V004, -V009, -V010 WLS-PL-V055, -V057
Main ac Power System (ECS)	
Reactor Coolant Pump Switchgear	ECS-ES-31, -32, -41, -42, -51, -52, -61, -62
Ancillary Diesel Generators	ECS-MS-01, -02
6900 Vac Buses	ECS-ES-1, -2

Attachment A

COL Appendix C, Table 3.7-1

Table 3.7-1 Risk-Significant Components	
Equipment Name	Tag No.
Main and Startup Feedwater System (FWS)	
Startup Feedwater Pumps	FWS-MP-03A/B
General I&C	
IRWST Wide Range Level Sensors	PXS-046, -047, -048
IRWST Lower Narrow Range Level Sensors	PXS-066, -067, -068, -069
RCS Hot Leg Level Sensors	RCS-160A/B
Pressurizer Pressure Sensors	RCS-191A/B/C/D
Pressurizer Level Sensors	RCS-195A/B/C/D
Steam Generator Narrow-Range Level Sensors	SGS-001, -002, -003, -004, -005, -006, -007, -008
Steam Generator Wide-Range Level Sensors	SGS-011, -012, -013, -014, -015, -016, -017, -018
Main Steam Line Pressure Sensors	SGS-030, -031, -032, -033, -034, -035, -036, -037
Main Feedwater Low-Range Flow Sensors	FWS-050A/C/E, -051A/C/E
Startup Feedwater Flow Sensors	SGS-055A/B/C/D/E, -056A/B/C/D/E
CMT Level Sensors	PXS-011A/B/C/D, -012A/B/C/D, -013A/B/C/D, -014A/B/C/D
Class 1E dc Power and Uninterruptible Power System (IDS)	
250 Vdc 24-Hour Batteries	IDSA-DB-1A/B, IDSB-DB-1A/B, IDSC-DB-1A/B, IDSD-DB-1A/B
250 Vdc 24-Hour Buses	IDSA-DS-1, IDSB-DS-1 IDSC-DS-1, IDSD-DS-1
250 Vdc 24-Hour Battery Chargers	IDSA-DC-1, IDSB-DC-1, IDSC-DC-1, IDSD-DC-1

Attachment A

COL Appendix C, Table 3.7-1

Table 3.7-1 Risk-Significant Components	
Equipment Name	Tag No.
250 Vdc and 120 Vac Distribution Panels	IDSA-DD-1, IDSA-EA-1/-2, IDSB-DD-1, IDSB-EA-1/-2/-3, IDSC-DD-1, IDSC-EA-1/-2/-3, IDSD-DD-1, IDSD-EA-1/-2
Fused Transfer Switch Boxes	IDSA-DF-1, IDSB-DF-1/-2, IDSC-DF-1/-2, IDSD-DF-1
250 Vdc Motor Control Centers	IDSA-DK-1, IDSB-DK-1, IDSC-DK-1, IDSD-DK-1
250 Vdc 24-Hour Inverters	IDSA-DU-1, IDSB-DU-1, IDSC-DU-1, IDSD-DU-1
Passive Containment Cooling System (PCS)	
Recirculation Pumps	PCS-MP-01A/B
PCCWST Drain Isolation Valves	PCS-PL-V001A/B/C
Plant Control System (PLS)	
PLS Actuation Software (used to provide control functions)	Refer to Table 3.7-2
PLS Actuation Hardware (used to provide control functions)	Refer to Table 3.7-2
Protection and Monitoring System (PMS)	
PMS Actuation Software (used to provide automatic control functions)	Refer to Tables 2.5.2-2 and 2.5.2-3
PMS Actuation Hardware (used to provide automatic control functions)	Refer to Tables 2.5.2-2 and 2.5.2-3
MCR 1E Displays and System Level Controls	OCS-JC-010, -011
Reactor Trip Switchgear	PMS-JD-RTS A01/02, B01/02, C01/02, D01/02
Passive Core Cooling System (PXS)	
IRWST Hood Vent Covers	PXS-MY-Y21, -Y22, -Y23, -Y24, -Y25, -Y26, -Y27, -Y28, -Y29, -Y30, -Y31, -Y32, -Y33, -Y41, -Y47, -Y48
IRWST Steam Generator Wall Vent Covers	PXS-MY-Y61, -Y62, -Y63, -Y64

Attachment A

COL Appendix C, Table 3.7-1

Table 3.7-1 Risk-Significant Components	
Equipment Name	Tag No.
IRWST Overflow Weir Covers	PXS-MY-Y71, -Y72, -Y73, -Y74, -Y75, -Y76
IRWST Screens	PXS-MY-Y01A/B/C
Containment Recirculation Screens	PXS-MY-Y02A/B
CMT Discharge Isolation Valves	PXS-PL-V014A/B, -V015A/B
CMT Discharge Check Valves	PXS-PL-V016A/B, -V017A/B
Accumulator Discharge Check Valves	PXS-PL-V028A/B, -V029A/B
PRHR HX Control Valves	PXS-PL-V108A/B
Containment Recirculation Squib Valves	PXS-PL-V118A/B, -V120A/B
IRWST Injection Check Valves	PXS-PL-V122A/B, -V124A/B
IRWST Injection Squib Valves	PXS-PL-V123A/B, -V125A/B
IRWST Gutter Bypass Isolation Valves	PXS-PL-V130A/B
Reactor Coolant System (RCS)	
ADS Stage 1/2/3 Valves (MOVs)	RCS-PL-V001A/B, -V011A/B RCS-PL-V002A/B, -V012A/B RCS-PL-V003A/B, -V013A/B
ADS Stage 4 Valves (Squibs)	RCS-PL-V004A/B/C/D
Pressurizer Safety Valves	RCS-PL-V005A/B
Reactor Vessel Insulation Water Inlet and Steam Vent Devices	RXS-MN-01
Reactor Cavity Doorway Damper	—
Fuel Assemblies	157 assemblies with tag numbers beginning with RXS-FA
Normal Residual Heat Removal System (RNS)	
Residual Heat Removal Pumps	RNS-MP-01A/B
RNS Motor-Operated Valves	RNS-PL-V011, -V022, -V023, -V055
RNS Stop Check Valves RNS Check Valves	RNS-PL-V015A/B RNS-PL-V017A/B
RNS Check Valves	RNS-PL-V007A/B, -V013, -V056

Attachment A

COL Appendix C, Table 3.7-1

Table 3.7-1 Risk-Significant Components	
Equipment Name	Tag No.
Spent Fuel Cooling System (SFS)	
Spent Fuel Cooling Pumps	SFS-MP-01A/B
Steam Generator System (SGS)	
Main Steam Safety Valves	SGS-PL-V030A/B, -V031A/B, -V032A/B, -V033A/B, -V034A/B, -V035A/B
Main Steam Line Isolation Valves	SGS-PL-V040A/B
Main Feedwater Isolation Valves	SGS-PL-V057A/B
Service Water System (SWS)	
Service Water Cooling Tower Fans	SWS-MA-01A/B
Service Water Pumps	SWS-MP-01A/B
Nuclear Island Nonradioactive Ventilation System (VBS)	
MCR Ancillary Fans	VBS-MA-10A/B
I&C Room B/C Ancillary Fans	VBS-MA-11, -12
Containment Air Filtration System (VFS)	
Containment Purge Isolation Valves	VFS-PL-V003 VFS-PL-V004 VFS-PL-V009 VFS-PL-V010
Chilled Water System (VWS)	
Air Cooled Chiller Pumps	VWS-MP-02, -03
Air Cooled Chillers	VWS-MS-02, -03
Liquid Radwaste System (WLS)	
Sump Containment Isolation Valves	WLS-PL-V055 WLS-PL-V057
Onsite Standby Power System (ZOS)	
Engine Room Exhaust Fans	VZS-MY-V01A/B, -V02A/B
Onsite Diesel Generators	ZOS-MS-05A/B

Note: Dash (-) indicates not applicable.