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Docket No.: 52-025

AUG D 1 2016

ND-16-1103 10 CFR 52.99(c)(3)

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

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 3
Notice of Uncompleted ITAAC 225-days Prior to Initial Fuel Load

Ladies and Gentlemen:

Pursuant to 10 CFR 52.99(c)(3), Southern Nuclear Operating Company hereby notifies the NRC that as of July 31, 2016, Vogtle Electric Generating Plant (VEGP) Unit 3 Partial Uncompleted Inspection, Test, Analysis, and Acceptance Criteria (ITAAC) items listed in Enclosure 1 have not been completed greater than 225-days prior to initial fuel load. With this letter, Southern Nuclear Operating Company is providing a partial set of notifications for ITAAC that have not been completed greater than 225-days prior to initial fuel load. Enclosure 2 describes the plans for completing each ITAAC listed in Enclosure 1. Southern Nuclear Operating Company will at a later date provide additional notifications for ITAAC that have not been completed 225-days prior to initial fuel load.

This notification is informed by the guidance described in 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. In accordance with NEI 08-01, this notification includes ITAAC for which required inspections, tests, or analyses have not been performed or have been only partially completed. All ITAAC will be fully completed and all Section 52.99(c)(1) ITAAC Closure Notifications will be submitted to NRC to support the Commission finding that all acceptance criteria are met prior to plant operation, as required by 10 CFR 52.103(g).

This letter contains no new NRC regulatory commitments.

If there are any questions, please contact David Woods at 706-848-6903.

Respectfully submitted,

Michael J. Yox

Regulatory Affairs Director Vogtle 3&4

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MJY/KMS/amm

Enclosures:

- 1. Vogtle Electric Generating Plant (VEGP) Unit 3 Partial List of Uncompleted ITAAC Items as of 07/31/16
- 2. Vogtle Electric Generating Plant (VEGP) Unit 3 Completion Plans for Uncompleted ITAAC Items Listed in Enclosure 1

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Southern Nuclear Operating Company

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Enclosure 1

Vogtle Electric Generating Plant (VEGP) Unit 3

Partial List of Uncompleted ITAAC Items as of 07/31/16

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58	Uncompleted ITAAC 2.1.02.12a.vi	13
59	Uncompleted ITAAC 2.1.02.12a.vii	15
61	Uncompleted ITAAC 2.1.02.12a.ix	17
73	Uncompleted ITAAC 2.1.03.04	19
125	Uncompleted ITAAC 2.2.02.04b	22
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141	Uncompleted ITAAC 2.2.02.07c	27
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Enclosure 2

Vogtle Electric Generating Plant (VEGP) Unit 3

Completion Plans for Uncompleted ITAAC Items Listed in Enclosure 1

Subject: Uncompleted ITAAC 2.1.02.03a [Index No. 15]

ITAAC Statement

Design Commitment

3.a) Pressure boundary welds in components identified in Table 2.1.2-1 as ASME Code Section III meet ASME Code Section III requirements.

Inspections/Tests/Analyses

Inspection of the as-built pressure boundary welds will be performed in accordance with the ASME Code Section III.

Acceptance Criteria

A report exists and concludes that the ASME Code Section III requirements are met for non-destructive examination of pressure boundary welds.

ITAAC Completion Description

Inspections are performed in accordance with American Society of Mechanical Engineers (ASME) Boiler & Pressure Vessel Code Section III (Reference 1) to demonstrate that as-built pressure boundary welds in components identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.1.2-1 (Attachment A) as ASME Code Section III meet ASME Code Section III requirements.

The applicable non-destructive examinations (including liquid penetrant, magnetic particle, radiographic, and ultrasonic testing, as required by Reference 1) of the components' pressure boundary welds are documented in the Non-Destructive Examination Report(s), which supports completion of the respective ASME Section III N-5 Code Data Report(s) XXX (Reference 2) signed by the Authorized Nuclear Inspector and identified in Attachment A for the applicable piping system.

Per ASME Code Section III the N-5 Code Data Reports identified in Attachment A exist and document satisfactory completion of the required examination and testing of the item, which includes non-destructive examinations of pressure boundary welds. Satisfactory completion of the non-destructive examination of pressure boundary welds ensures that the pressure boundary welds in components identified in VEGP Unit 3 COL Appendix C Table 2.1.2-1 as ASME Code Section III meet ASME Code Section III requirements. The N-5 Code Data Reports identified in Attachment A are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III requirements as described in VEGP 3&4 Updated Final Safety Analysis Report, Section 5.2.1, Compliance with Codes and Code Cases
- 2. ASME Section III N-5 Code Data Report XXX for the applicable piping systems
- 3. ITAAC 2.1.02.03a Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from VEGP Unit 3 COL Appendix C - Table 2.1.2-1

Equipment Name	Tag No.	ASME Code Section III	N-5 Code Data Report
Steam Generator 1	RCS-MB-01	Yes	XXX
Steam Generator 2	RCS-MB-02	Yes	XXX
RCP 1A	RCS-MP-01A	Yes	XXX
RCP 1B	RCS-MP-01B	Yes	XXX
RCP 2A	RCS-MP-02A	Yes	XXX
RCP 2B	RCS-MP-02B	Yes	XXX
Pressurizer	RCS-MV-02	Yes	XXX
Automatic Depressurization System (ADS) Sparger A	PXS-MW-01A	Yes	XXX
ADS Sparger B	PXS-MW-01B	Yes	XXX
Pressurizer Safety Valve	RCS-PL-V005A	Yes	XXX
Pressurizer Safety Valve	RCS-PL-V005B	Yes	XXX
First-stage ADS Motor-operated Valve (MOV)	RCS-PL-V001A	Yes	XXX
First-stage ADS MOV	RCS-PL-V001B	Yes	xxx
Second-stage ADS MOV	RCS-PL-V002A	Yes	XXX
Second-stage ADS MOV	RCS-PL-V002B	Yes	XXX
Third-stage ADS MOV	RCS-PL-V003A	Yes	XXX
Third-stage ADS MOV	RCS-PL-V003B	Yes	XXX
Fourth-stage ADS Squib Valve	RCS-PL-V004A	Yes	XXX
Fourth-stage ADS Squib Valve	RCS-PL-V004B	Yes	XXX
Fourth-stage ADS Squib Valve	RCS-PL-V004C	Yes	XXX
Fourth-stage ADS Squib Valve	RCS-PL-V004D	Yes	XXX
ADS Discharge Header A Vacuum Relief Valve	RCS-PL-V010A	Yes	XXX
ADS Discharge Header B Vacuum Relief Valve	RCS-PL-V010B	Yes	XXX
First-stage ADS Isolation MOV	RCS-PL-V011A	Yes	XXX

Equipment Name	Tag No.	ASME Code Section III	N-5 Code Data Report
First-stage ADS Isolation MOV	RCS-PL-V011B	Yes	XXX
Second-stage ADS Isolation MOV	RCS-PL-V012A	Yes	XXX
Second-stage ADS Isolation MOV	RCS-PL-V012B	Yes	XXX
Third-stage ADS Isolation MOV	RCS-PL-V013A	Yes	XXX
Third-stage ADS Isolation MOV	RCS-PL-V013B	Yes	XXX
Fourth-stage ADS MOV	RCS-PL-V014A	Yes	XXX
Fourth-stage ADS MOV	RCS-PL-V014B	Yes	XXX
Fourth-stage ADS MOV	RCS-PL-V014C	Yes	XXX
Fourth-stage ADS MOV	RCS-PL-V014D	Yes	XXX
Reactor Vessel Head Vent Valve	RCS-PL-V150A	Yes	XXX
Reactor Vessel Head Vent Valve	RCS-PL-V150B	Yes	XXX
Reactor Vessel Head Vent Valve	RCS-PL-V150C	Yes	XXX
Reactor Vessel Head Vent Valve	RCS-PL-V150D	Yes	XXX

Subject: Uncompleted ITAAC 2.1.02.04b [Index No. 18]

ITAAC Statement

Design Commitment

4.b) The piping identified in Table 2.1.2-2 as ASME Code Section III retains its pressure boundary integrity at its design pressure.

Inspections/Tests/Analyses

A hydrostatic test will be performed on the piping required by the ASME Code Section III to be hydrostatically tested.

Acceptance Criteria

A report exists and concludes that the results of the hydrostatic test of the piping identified in Table 2.1.2-2 as ASME Code Section III conform with the requirements of the ASME Code Section III.

ITAAC Completion Description

Hydrostatic tests are performed to verify that the piping identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.1.2-2 (Attachment A) as American Society of Mechanical Engineers (ASME) Code Section III retains its pressure boundary integrity at its design pressure. This ITAAC verifies that the piping identified in Attachment A fully meets all applicable ASME Boiler & Pressure Vessel Code Section III (Reference 1) requirements and retains its pressure boundary integrity at its design pressure.

A hydrostatic test is performed in accordance with procedure XYZ (as applicable) that complies with Reference 1 requirements to demonstrate that the piping identified in Attachment A as ASME Code Section III retains its pressure boundary integrity at its design pressure. The hydrostatic test verifies that there are no leaks at welds or piping, and that the pressure boundary integrity is retained at its design pressure.

The hydrostatic testing results of the pipe lines are documented in the Hydrostatic Testing Report(s). The Hydrostatic Testing Report(s) supports completion of the ASME Section III N-5 Code Data Report(s) XXX (Reference 2) identified in Attachment A for the applicable piping system (i.e., Reactor Coolant System (RCS) and Passive Core Cooling System (PXS)).

The applicable ASME Section III N-5 Code Data Reports identified in Attachment A exist and document that the results of the hydrostatic testing of the piping identified in VEGP Unit 3 COL Appendix C Table 2.1.2-2 as ASME Code Section III conform with the requirements of the

ASME Code Section III. The N-5 Code Data Reports identified in Attachment A are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III requirements as described in VEGP 3&4 Updated Final Safety Analysis Report, Section 5.2.1, Compliance with Codes and Code Cases
- 2. ASME Section III N-5 Code Data Report XXX for the applicable piping systems (RCS, PXS)
- 3. ITAAC 2.1.02.04b Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from VEGP Unit 3 COL Appendix C - Table 2.1.2-2

Line Name	Line Number	ASME Code Section III	N-5 Code Data Report(s)
Hot Legs	RCS-L001A RCS-L001B	Yes	XXX
Cold Legs	RCS-L002A RCS-L002B RCS-L002C RCS-L002D	Yes	XXX
Pressurizer Surge Line	RCS-L003	Yes	XXX
ADS Inlet Headers	RCS-L004A/B RCS-L006A/B RCS-L030A/B RCS-L020A/B	Yes	XXX
Safety Valve Inlet Piping	RCS-L005A RCS-L005B	Yes	XXX
Safety Valve Discharge Piping	RCS-L050A/B RCS-L051A/B	Yes	XXX
	RCS-L064A/B	Yes	XXX
ADS First-stage Valve Inlet Piping	RCS-L010A/B RCS-L011A/B	Yes	XXX
ADS Second-stage Valve Inlet Piping	RCS-L021A/B RCS-L022A/B	Yes	XXX
ADS Third-stage Valve Inlet Piping	RCS-L131 RCS-L031A/B RCS-L032A/B	Yes	XXX
ADS Outlet Piping	RCS-L012A/B RCS-L023A/B RCS-L033A/B RCS-L061A/B RCS-L063A/B RCS-L200 RCS-L069A/B PXS-L130A/B	Yes	XXX
	RCS-L240A/B	Yes	XXX
ADS Fourth-stage Inlet Piping	RCS-L133A/B RCS-L135A/B RCS-L136A/B RCS-L137A/B	Yes	XXX

Line Name	Line Number	ASME Code Section III	N-5 Code Data Report(s)
Pressurizer Spray Piping	RCS-L106 RCS-L110A/B RCS-L212A/B RCS-L213 RCS-L215	Yes	XXX
RNS Suction Piping	RCS-L139 RCS-L140	Yes	XXX
CVS Purification Piping	RCS-L111 RCS-L112	Yes	XXX

Subject: Uncompleted ITAAC 2.1.02.06 [Index No. 23]

ITAAC Statement

Design Commitment

6. Each of the as-built lines identified in Table 2.1.2-2 as designed for LBB meets the LBB criteria, or an evaluation is performed of the protection from the dynamic effects of a rupture of the line.

Inspections/Tests/Analyses

Inspection will be performed for the existence of an LBB evaluation report or an evaluation report on the protection from dynamic effects of a pipe break. Section 3.3, Nuclear Island Buildings, contains the design descriptions and inspections, tests, analyses, and acceptance criteria for protection from the dynamic effects of pipe rupture.

Acceptance Criteria

An LBB evaluation report exists and concludes that the LBB acceptance criteria are met by the as-built RCS piping and piping materials, or a pipe break evaluation report exists and concludes that protection from the dynamic effects of a line break is provided.

ITAAC Completion Description

Inspections are performed for the as-built lines identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.1.2-2 (Attachment A) to verify that each of the as-built lines designed for Leak Before Break (LBB) meets the LBB criteria, or an evaluation is performed of the protection from the dynamic effects of a rupture of the line. VEGP Unit 3 COL Appendix C, Section 3.3, Nuclear Island Buildings, contains the design descriptions and inspections, tests, analyses, and acceptance criteria for protection from the dynamic effects of pipe rupture.

LBB evaluations are performed to confirm that the as-built Reactor Coolant System (RCS) piping (and corresponding piping materials) identified in Attachment A meet the LBB acceptance criteria described in VEGP 3&4 Updated Final Safety Analysis Report, Appendix 3B, Leak-Before-Break Evaluation of the AP1000 Piping (Reference 1). In cases where an as-built RCS piping line in Attachment A cannot meet the LBB acceptance criteria, a pipe break evaluation is performed which concludes that protection from the dynamic effects of a line break is provided. The pipe break evaluation criteria is discussed in VEGP 3&4 Updated Final Safety Analysis Report, Section 3.6.4.1, Pipe Break Hazards Analysis (Reference 2) and is documented as a pipe rupture hazards evaluation.

Inspections are performed to verify that LBB as-built piping evaluation reports exist for the RCS piping (and corresponding piping materials) identified in Attachment A which conclude that the LBB acceptance criteria is met, and are documented in either the applicable American Society of Mechanical Engineers (ASME) Section III as-built piping design report(s) or in separate LBB

evaluation report(s). For cases where an as-built RCS piping line in Attachment A cannot meet the LBB acceptance criteria inspections are performed to verify that a pipe rupture hazards evaluation exists which concludes that protection from the dynamic effects of a line break is provided.

The applicable ASME Section III as-built piping design report(s), LBB evaluation report(s), or pipe rupture hazards evaluation(s) exist and are identified in Attachment A. These report(s) or evaluation(s) are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. VEGP 3&4 Updated Final Safety Analysis Report, Appendix 3B, Leak-Before-Break Evaluation of the AP1000 Piping
- 2. VEGP 3&4 Updated Final Safety Analysis Report, Section 3.6.4.1, Pipe Break Hazards Analysis
- 3. ITAAC 2.1.02.06 Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from COL Appendix C Table 2.1.2-2

Line Name	Line Number	Leak Before Break	ASME Section III Design Report, LBB Evaluation Report, or Pipe Rupture Hazards Evaluation No.
Hot Legs	RCS-L001A RCS-L001B	Yes	XXX
Cold Legs	RCS-L002A RCS-L002B RCS-L002C RCS-L002D	Yes	XXX
Pressurizer Surge Line	RCS-L003	Yes	XXX
ADS Inlet Headers	RCS-L004A/B RCS-L006A/B RCS-L030A/B RCS-L020A/B	Yes	XXX
Safety Valve Inlet Piping	RCS-L005A RCS-L005B	Yes	XXX
ADS Second-stage Valve Inlet Piping	RCS-L021A/B	Yes	XXX
ADS Third-stage Valve Inlet Piping	RCS-L131 RCS-L031A/B	Yes	XXX
ADS Fourth-stage Inlet Piping	RCS-L133A/B RCS-L135A/B RCS-L136A/B RCS-L137A/B	Yes	XXX
RNS Suction Piping	RCS-L139 RCS-L140	Yes	XXX

Subject: Uncompleted ITAAC 2.1.02.12a.vi [Index No. 58]

ITAAC Statement

Design Commitment

12.a) The automatic depressurization valves identified in Table 2.1.2-1 perform an active safety-related function to change position as indicated in the table.

Inspections/Tests/Analyses

vi) See item 8.d.i in this table.

Acceptance Criteria

vi) See item 8.d.i in this table. The ADS stage 1-3 valve flow resistances are verified to be consistent with the ADS stage 1-3 path flow resistances.

ITAAC Completion Description

This ITAAC Design Commitment is met by reference to ITAAC item 8d.i in VEGP Unit 3 Combined License (COL) Appendix C Table 2.1.2-4. Item 8d.i demonstrates flow testing and associated analysis for those Automatic Depressurization System (ADS) valve group connected to the pressurizer (i.e., ADS Stages 1-3) from the pressurizer through the outlet of the downstream ADS control valves. As the valves are included elements of the flow path, the valve flow resistances are verified to be consistent with the calculated path flow resistances. Additionally, Item 8d.i also verifies that piping flow paths from the discharge of the ADS valve groups connected to the pressurizer (i.e., ADS Stages 1-3) to the spargers are consistent with the line routings used for design flow resistance calculations.

The ITAAC Closure Notification (Reference 1) for item 8d.i in VEGP Unit 3 COL Appendix C Table 2.1.2-4 summarizes the methodology for conducting the Inspections/Tests/Analyses and the results that demonstrate that the acceptance criteria are satisfied. This closure notification is submitted to the NRC when the supporting ITAAC closure activities are complete.

The records (Tests, Reports, Completed Procedures, Completed Analyses, etc.) that form the ITAAC determination basis are referenced in the closure notification for Item 8d.i of VEGP Unit 3 COL Appendix C Table 2.1.2-4 and are available for NRC inspection as part of the ITAAC Completion Package (Reference 2).

List of ITAAC Findings

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

associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.1.02.08d.i [Index No. 32]
- 2. ITAAC 2.1.02.12a.vi Completion Package
- 3. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.1.02.12a.vii [Index No. 59]

ITAAC Statement

Design Commitment

12.a) The automatic depressurization valves identified in Table 2.1.2-1 perform an active safety-related function to change position as indicated in the table.

Inspections/Tests/Analyses

vii) See item 8.d.ii in this table.

Acceptance Criteria

vii) See item 8.d.ii in this table. The ADS stage 4 valve flow resistances are verified to be consistent with the ADS stage 4 path flow resistances.

ITAAC Completion Description

This ITAAC Design Commitment is met by reference to ITAAC item 8d.ii in VEGP Unit 3 Combined License (COL) Appendix C Table 2.1.2-4. Item 8.d.ii demonstrates inspections and associated analysis of each fourth-stage ADS valve group (four valves and associated piping connected to each hot leg) to verify the line routing is consistent with the line routing used for design flow resistance calculations. As the valves are included elements of the flow path, the valve flow resistances are verified to be consistent with the calculated path flow resistances.

The ITAAC Closure Notification (Reference 1) for item 8d.ii in VEGP Unit 3 COL Appendix C Table 2.1.2-4 summarizes the methodology for conducting the Inspections/Tests/Analyses and the results that demonstrate that the acceptance criteria are satisfied. This closure notification is submitted to the NRC when the supporting ITAAC closure activities are complete.

The records (Tests, Reports, Completed Procedures, Completed Analyses, etc.) that form the ITAAC determination basis are referenced in the closure notification for Item 8d.ii of VEGP Unit 3 COL Appendix C Table 2.1.2-4 and are available for NRC inspection as part of the ITAAC Completion Package (Reference 2).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.1.02.08d.ii [Index No. 33]
- 2. ITAAC 2.1.02.12a.vii Completion Package
- 3. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.1.02.12a.ix [Index No. 61]

ITAAC Statement

Design Commitment

12.a) The automatic depressurization valves identified in Table 2.1.2-1 perform an active safety-related function to change position as indicated in the table.

Inspections/Tests/Analyses

ix) See item 8.d.iv in this table.

Acceptance Criteria

ix) See item 8.d.iv in this table.

ITAAC Completion Description

This ITAAC Design Commitment is met by reference to ITAAC Item 8.d.iv in VEGP Unit 3 Combined License (COL) Appendix C Table 2.1.2-4. Item 8.d.iv demonstrates type tests and analysis to determine the effective flow area through each stage 1,2,3 ADS valve.

The ITAAC Closure Notification (Reference 1) for item 8d.iv in VEGP Unit 3 COL Appendix C Table 2.1.2-4 summarizes the methodology for conducting the Inspections/Tests/Analyses and the results that demonstrate that the acceptance criteria are satisfied. This closure notification is submitted to the NRC when the supporting ITAAC closure activities are complete.

The records (Tests, Reports, Completed Procedures, Completed Analyses, etc.) that form the ITAAC determination basis are referenced in the closure notification for Item 8d.iv of VEGP Unit 3 COL Appendix C Table 2.1.2-4 and are available for NRC inspection as part of the ITAAC Completion Package (Reference 2).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.1.02.08d.iv [Index No. 35]
- 2. ITAAC 2.1.02.12a.ix Completion Package
- 3. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.1.03.04 [Index No. 73]

ITAAC Statement

Design Commitment

4. Pressure boundary welds in components identified in Table 2.1.3-1 as ASME Code Section III meet ASME Code Section III requirements.

Inspections/Tests/Analyses

Inspection of as-built pressure boundary welds will be performed in accordance with the ASME Code Section III.

Acceptance Criteria

A report exists and concludes that the ASME Code Section III requirements are met for non-destructive examination of pressure boundary welds.

ITAAC Completion Description

Inspections are performed in accordance with American Society of Mechanical Engineers (ASME) Boiler & Pressure Vessel Code Section III (Reference 1) to demonstrate that as-built pressure boundary welds in components identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.1.3-1 (Attachment A) as ASME Code Section III meet ASME Code Section III requirements.

The applicable non-destructive examinations (including liquid penetrant, magnetic particle, radiographic, and ultrasonic testing, as required by Reference 1) of the components' pressure boundary welds are documented in the Non-destructive Examination Report(s), which supports completion of the respective ASME Section III N-5 Code Data Report(s) XXX (Reference 2) signed by the Authorized Nuclear Inspector and identified in Attachment A for the applicable system.

Per ASME Code Section III the N-5 Code Data Reports identified in Attachment A exist and document satisfactory completion of the required examination and testing of the item, which includes non-destructive examinations of pressure boundary welds. Satisfactory completion of the non-destructive examination of pressure boundary welds ensures that the pressure boundary welds in components identified in VEGP Unit 3 COL Appendix C Table 2.1.3-1 as ASME Code Section III meet ASME Code Section III requirements. The N-5 Code Data Reports identified in Attachment A are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III requirements as described in VEGP 3&4 Updated Final Safety Analysis Report, Section 5.2.1, Compliance with Codes and Code Cases
- 2. ASME Section III N-5 Code Data Report XXX for the applicable systems
- 3. ITAAC 2.1.03.04 Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from VEGP Unit 3 COL Appendix C - Table 2.1.3-1

Equipment Name	Tag No.	ASME Code Section III	N-5 Code Data Report
RV	RXS-MV-01	Yes	XXX
Reactor Upper Internals Assembly	RXS-MI-01	Yes	XXX
Reactor Lower Internals Assembly	RXS-MI-02	Yes	XXX
Control Rod Drive Mechanisms (CRDMs) (69 Locations)	RXS-MV-11B06/11B08/11B10/11C05/11C07/ 11C09/11C11/11D04/11D06/11D08/11D10/ 11D12/11E03/11E05/11E07/11E09/11E11/ 11E13/11F02/11F04/11F06/11F08/11F10/ 11F12/11F14/11G03/11G05/11G07/11G09/ 11G11/11G13/11H02/11H04/11H06/11H08/ 11H10/11H12/11H14/11J03/11J05/11J07/ 11J09/11J11/11J13/11K02/11K04/11K06/ 11K08/11K10/11K12/11K14/11L03/11L05/ 11L07/11L09/11L11/11L13/11M04/11M06/ 11M08/11M10/11M12/11N05/11N07/11N09/ 11N11/11P06/11P08/11P10	Yes	XXX
Incore Instrument QuickLoc Assemblies (8 Locations)	RXS-MY-Y11 through Y18	Yes	XXX

Subject: Uncompleted ITAAC 2.2.02.04b [Index No. 125]

ITAAC Statement

Design Commitment

4.b) The pipelines identified in Table 2.2.2-2 as ASME Code Section III retain their pressure boundary integrity at their design pressure.

Inspections/Tests/Analyses

A hydrostatic test will be performed on the piping required by the ASME Code Section III to be hydrostatically tested.

Acceptance Criteria

A report exists and concludes that the results of the hydrostatic test of the piping identified in Table 2.2.2-2 as ASME Code Section III conform with the requirements of the ASME Code Section III.

ITAAC Completion Description

Hydrostatic tests are performed to verify that the pipelines identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.2.2-2 (Attachment A) as American Society of Mechanical Engineers (ASME) Code Section III retains their pressure boundary integrity at their design pressure. This ITAAC verifies that the pipelines identified in Attachment A fully meet all applicable ASME Boiler & Pressure Vessel Code Section III (Reference 1) requirements and retain their pressure boundary integrity at their design pressure.

A hydrostatic test is performed in accordance with procedure XYZ (as applicable) that complies with Reference 1 requirements to demonstrate that the pipelines identified in Attachment A as ASME Code Section III retain their pressure boundary integrity at their design pressure. The hydrostatic test verifies that there are no leaks at welds or piping, and that the pressure boundary integrity is retained at the pipeline design pressure.

The hydrostatic testing results of the pipelines are documented in Hydrostatic Testing Report(s). The Hydrostatic Testing Report(s) supports completion of the ASME Section III N-5 Code Data Report(s) XXX (Reference 2) identified in Attachment A for the applicable piping system (i.e., Passive Containment Cooling System (PCS)).

The applicable ASME Section III N-5 Code Data Reports identified in Attachment A exist and document that the results of the hydrostatic testing of the pipelines identified in VEGP Unit 3 COL Appendix C Table 2.2.2-2 as ASME Code Section III conform with the requirements of the

ASME Code Section III. The N-5 Code Data Reports identified in Attachment A are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III requirements as described in VEGP 3&4 Updated Final Safety Analysis Report, Section 5.2.1, Compliance with Codes and Code Cases
- ASME Section III N-5 Code Data Report(s) XXX for the Passive Containment Cooling System
- 3. ITAAC 2.2.02.04b Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from VEGP Unit 3 COL Appendix C - Table 2.2.2-2

Line Name	Line No.	ASME Code Section III	N-5 Code Data Report
PCCWST Discharge Lines	PCS-PL-L001A/B/C/D	Yes	XXX
PCCWST Discharge Cross- connect Line	PCS-PL-L002	Yes	XXX
PCCWST Discharge Header Lines	PCS-PL-L003A/B PCS-PL-L005	Yes	XXX
Post-72-hour Supply Line Connection	PCS-PL-L051 PCS-PL-L054 PCS-PL-L065	Yes	XXX
Post-72-hour Containment Cooling Makeup From Supply Line Connections	PCS-PL-L004 PCS-PL-L007 PCS-PL-L008 PCS-PL-L023 PCS-PL-L050	Yes	XXX
Post-72-hour SFS Makeup From PCCWST	PCS-PL-L011 PCS-PL-L017 PCS-PL-L018 PCS-PL-L030* PCS-PL-L039* PCS-PL-L041 PCS-PL-L049* PCS-PL-L073	Yes	XXX
Post-72-hour SFS Makeup From Supply Line Connection	PCS-PL-L025 PCS-PL-L029 PCS-PL-L030* PCS-PL-L039* PCS-PL-L048 PCS-PL-L049* PCS-PL-L052	Yes	XXX

Note:

^{*} Lines PCS-PL-L049, L039, and L030 comprise a common makeup line from both sources.

Subject: Uncompleted ITAAC 2.2.02.07a.iii [Index No. 137]

ITAAC Statement

Design Commitment

7.a) The PCS delivers water from the PCCWST to the outside, top of the containment vessel.

Inspections/Tests/Analyses

iii) Inspection will be performed to determine the PCCWST standpipes elevations.

Acceptance Criteria

- iii) The elevations of the standpipes above the tank floor are:
 - $-16.8 \text{ ft} \pm 0.2 \text{ ft}$
 - $-20.3 \text{ ft} \pm 0.2 \text{ ft}$
 - $-24.1 \text{ ft} \pm 0.2 \text{ ft}$

ITAAC Completion Description

Multiple ITAAC are performed to demonstrate that the Passive Containment Cooling System (PCS) delivers water from the Passive Containment Cooling Water Storage Tank (PCCWST) to the outside, top of the containment vessel. The subject ITAAC requires that an inspection be performed to determine the PCCWST standpipes elevations.

The inspections to determine the PCCWST stand pipe elevations are performed in the PCCWST module after its installation at the top of the shield building. The PCCWST standpipes are identified in the VEGP 3&4 Updated Final Safety Analysis Report, Table 6.2.2-2, Component Data Passive Containment Cooling System (Nominal) (Reference 1) as the Third Standpipe, Second Standpipe, and Top Standpipe. The PCCWST standpipe elevations are measured using survey equipment in accordance with approved site survey procedures. The elevations of the standpipes above the PCCWST tank floor are determined by measuring the distance between the PCCWST floor and the opening at the high point of the inlet at each standpipe.

The results of the measurements are documented in Inspection Report(s) XXX (Reference 2) and confirm that the elevations of the standpipes above the tank floor are:

- $-16.8 \text{ ft} \pm 0.2 \text{ ft}$ (Third Standpipe)
- $-20.3 \text{ ft} \pm 0.2 \text{ ft}$ (Second Standpipe)
- -24.1 ft ± 0.2 ft (Top Standpipe)

The Reference 2 inspection report(s) are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. VEGP 3&4 Updated Final Safety Analysis Report, Table 6.2.2-2, Component Data Passive Containment Cooling System (Nominal)
- 2. Inspection Report(s) XXX
- 3. ITAAC 2.2.02.07a.iii Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.2.02.07c [Index No. 141]

ITAAC Statement

Design Commitment

7.c) The PCS provides air flow over the outside of the containment vessel by a natural circulation air flow path from the air inlets to the air discharge structure.

Inspections/Tests/Analyses

Inspections of the air flow path segments will be performed.

Acceptance Criteria

Flow paths exist at each of the following locations:

- Air inlets
- Base of the outer annulus
- Base of the inner annulus
- Discharge structure

ITAAC Completion Description

Visual inspections of the air flow path segments are performed to confirm that the Passive Containment Cooling System (PCS) provides air flow over the outside of the containment vessel by a natural circulation air flow path from the air inlets to the air discharge structure.

The following PCS air flow path segments are visually inspected:

- Air inlets
- Base of the outer annulus
- Base of the inner annulus
- Discharge structure

The air flow path visual inspection includes the air inlet louvers and screens, the inner and outer annulus air space, and the discharge structure discharge opening at the top of the shield building. The visual inspections are performed as part of the PCS turnover between construction completion and pre-operational testing.

The visual inspection results are documented in Inspection Report(s) XXX (Reference 1) and confirm that flow paths exist at the locations discussed above. Reference 1 is available for NRC inspection as part of the ITAAC Completion Package (Reference 2).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. Inspection Report(s) XXX
- 2. ITAAC 2.2.02.07c Completion Package
- 3. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.2.03.02a [Index No. 159]

ITAAC Statement

Design Commitment

2.a) The components identified in Table 2.2.3-1 as ASME Code Section III are designed and constructed in accordance with ASME Code Section III requirements.

Inspections/Tests/Analyses

Inspection will be conducted of the as-built components as documented in the ASME design reports.

Acceptance Criteria

The ASME Code Section III design reports exist for the as-built components identified in Table 2.2.3-1 as ASME Code Section III.

ITAAC Completion Description

An inspection is performed in accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III (Reference 1) to demonstrate that the as-built components identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.2.3-1 (Attachment A) as ASME Code Section III are designed and constructed in accordance with ASME Code Section III requirements.

Each component listed in Attachment A as ASME Code Section III is fabricated in accordance with the design and ASME Code Section III requirements. The ASME Code Section III Design Reports for these components exist and document that the as-built components conform to the approved design details. The ASME Section III Design Report for each component is documented in the component's completed ASME Section III Code Data Report. The individual ASME Section III Code Data Reports are documented on the ASME Section III N-5 Code Data Report for the Passive Core Cooling System (Reference 2).

The as-built piping system, including the components listed in VEGP Unit 3 COL Appendix C Table 2.2.3-1 as ASME Code Section III, is subjected to a reconciliation process (Reference 3), which verifies that the as-built piping system has been analyzed for applicable loads (e.g. stress reports) and for compliance with all design specification and Code provisions. Design reconciliation of the as-built system validates that construction completion, including field changes and any nonconforming condition dispositions, is consistent with and bounded by the approved design. All applicable fabrication, installation and testing records, as well as those for the related QA verification and inspection activities, which confirm adequate construction in compliance with the ASME Code Section III and the design provisions, are referenced in the N-5 Code Data Report and/or its sub-tier references.

The ASME Section III N-5 Code Data Report, which includes the Design Reports for all the components listed in VEGP Unit 3 COL Appendix C Table 2.2.3-1 as ASME Code Section III, exists and concludes that these components have been designed and constructed in accordance with the ASME Code Section III requirements. The N-5 Code Data Report is

identified in Attachment A and is available for NRC inspection as part of the ITAAC Completion Package (Reference 4).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found two open (2) notices of nonconformance (NONs) and two closed (2) NONs associated with this ITAAC.

- 1. 99901377/2012-201-02 (Open) Failure of vendor to effectively implement a commercial grade dedication (CGD) program.
- 2. 99901377/2012-201-03 (Open) Failure of vendor to have a test program that performs check valve in service testing in accordance with ASME QME-1-2007.
- 3. 99901431/2013-201-01 (Closed) Failure of vendor to establish adequate design control measures for the implementation of a seismic qualification testing program for valves.
 - a. The ITAAC completion review determined that all corrective actions associated with this finding are completed and closed. NRC closure of this finding is documented in NRC Inspection Report 99901431/2014-201.
- 4. 99900404/2011-201-02 (Closed) Failure of vendor purchase specifications and technical design requirements to account for potentially large hydrodynamic forces due to spurious valve opening.
 - a. The ITAAC completion review determined that all corrective actions associated with this finding are completed and closed. NRC closure of this finding is documented in NRC Inspection Report 99900404/2014-201.

Before submission of the ICN, corrective actions will be completed for all relevant ITAAC findings identified prior to ICN submission.

- American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III requirements as described in VEGP 3&4 Updated Final Safety Analysis Report, Section 5.2.1, Compliance with Codes and Code Cases
- 2. ASME Section III N-5 Code Data Report XXX for the Passive Core Cooling System
- 3. APP-GW-GER-031, Revision 0, "AP1000 As-built Reconciliation Program for ASME Section III Components"
- 4. ITAAC 2.2.03.02a Completion Package
- 5. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from COL Appendix C Table 2.2.3-1

Equipment Name	Tag No.	ASME Code Section III Classification	N-5 Code Data Report
Passive Residual Heat Removal Heat Exchanger (PRHR HX)	PXS-ME-01	Yes	XXX
Accumulator Tank A	PXS-MT-01A	Yes	XXX
Accumulator Tank B	PXS-MT-01B	Yes	XXX
Core Makeup Tank (CMT) A	PXS-MT-02A	Yes	XXX
СМТ В	PXS-MT-02B	Yes	XXX
CMT A Inlet Isolation Motor-operated Valve	PXS-PL-V002A	Yes	XXX
CMT B Inlet Isolation Motor-operated Valve	PXS-PL-V002B	Yes	XXX
CMT A Discharge Isolation Valve	PXS-PL-V014A	Yes	XXX
CMT B Discharge Isolation Valve	PXS-PL-V014B	Yes	XXX
CMT A Discharge Isolation Valve	PXS-PL-V015A	Yes	XXX
CMT B Discharge Isolation Valve	PXS-PL-V015B	Yes	XXX
CMT A Discharge Check Valve	PXS-PL-V016A	Yes	XXX
CMT B Discharge Check Valve	PXS-PL-V016B	Yes	XXX
CMT A Discharge Check Valve	PXS-PL-V017A	Yes	XXX
CMT B Discharge Check Valve	PXS-PL-V017B	Yes	XXX
Accumulator A Pressure Relief Valve	PXS-PL-V022A	Yes	XXX
Accumulator B Pressure Relief Valve	PXS-PL-V022B	Yes	XXX
Accumulator A Discharge Isolation Valve	PXS-PL-V027A	Yes	XXX
Accumulator B Discharge Isolation Valve	PXS-PL-V027B	Yes	XXX
Accumulator A Discharge Check Valve	PXS-PL-V028A	Yes	XXX
Accumulator B Discharge Check Valve	PXS-PL-V028B	Yes	XXX
Accumulator A Discharge Check Valve	PXS-PL-V029A	Yes	XXX
Accumulator B Discharge Check Valve	PXS-PL-V029B	Yes	XXX
Nitrogen Supply Containment Isolation Valve	PXS-PL-V042	Yes	XXX
Nitrogen Supply Containment Isolation Check Valve	PXS-PL-V043	Yes	XXX
PRHR HX Inlet Isolation Motor-operated Valve	PXS-PL-V101	Yes	XXX
PRHR HX Control Valve	PXS-PL-V108A	Yes	XXX
PRHR HX Control Valve	PXS-PL-V108B	Yes	XXX

		ASME Code Section III	N-5 Code
Equipment Name	Tag No.	Classification	Data Report
Containment Recirculation A Isolation Motor- operated Valve	PXS-PL-V117A	Yes	XXX
Containment Recirculation B Isolation Motor- operated Valve	PXS-PL-V117B	Yes	XXX
Containment Recirculation A Squib Valve	PXS-PL-V118A	Yes	XXX
Containment Recirculation B Squib Valve	PXS-PL-V118B	Yes	XXX
Containment Recirculation A Check Valve	PXS-PL-V119A	Yes	XXX
Containment Recirculation B Check Valve	PXS-PL-V119B	Yes	XXX
Containment Recirculation A Squib Valve	PXS-PL-V120A	Yes	XXX
Containment Recirculation B Squib Valve	PXS-PL-V120B	Yes	XXX
IRWST Injection A Check Valve	PXS-PL-V122A	Yes	XXX
IRWST Injection B Check Valve	PXS-PL-V122B	Yes	XXX
IRWST Injection A Squib Valve	PXS-PL-V123A	Yes	XXX
IRWST Injection B Squib Valve	PXS-PL-V123B	Yes	XXX
IRWST Injection A Check Valve	PXS-PL-V124A	Yes	XXX
IRWST Injection B Check Valve	PXS-PL-V124B	Yes	XXX
IRWST Injection A Squib Valve	PXS-PL-V125A	Yes	XXX
IRWST Injection B Squib Valve	PXS-PL-V125B	Yes	XXX
IRWST Gutter Isolation Valve	PXS-PL-V130A	Yes	XXX
IRWST Gutter Isolation Valve	PXS-PL-V130B	Yes	XXX
RNS Suction Leak Test Valve	PXS-PL-V208A	Yes	XXX

Subject: Uncompleted ITAAC 2.2.03.08b.02 [Index No. 176]

ITAAC Statement

Design Commitment

8.b) The PXS provides core decay heat removal during design basis events.

Inspections/Tests/Analyses

2. Inspection of the elevation of the PRHR HX will be conducted.

Acceptance Criteria

2. The elevation of the centerline of the HX's upper channel head is greater than the HL centerline by at least 26.3 ft.

ITAAC Completion Description

Multiple ITAAC are performed to demonstrate that the Passive Core Cooling System (PXS) provides core decay heat removal during design basis events. The subject ITAAC requires that an inspection be conducted of the Passive Residual Heat Removal Heat Exchanger (PRHR HX) to confirm that the centerline elevation of the PRHR HX's upper channel head is greater than the Hot Leg (HL) centerline by at least 26.3 ft.

Inspection of the centerline elevation of the PRHR HX's upper channel head and the centerline elevation of the HL is conducted following installation of the PRHR HX and the main reactor coolant loop piping using survey equipment in accordance with approved site survey procedures.

The elevation difference is determined by measuring the centerline elevation of the HL as shown in Drawing APP-PL01-V2-002 (Reference 1) and the centerline elevation of the PRHR HX's upper channel head as shown in Drawing APP-ME02-V2-001 (Reference 2) and comparing the results.

The inspection results, with specific measurement points and values, are documented in Inspection Report(s) XXX (Reference 3) and confirm that the elevation of the centerline of the PRHR HX's upper channel head is greater than the HL centerline by at least 26.3 ft. The Reference 3 inspection report(s) are available for NRC inspection as part of the ITAAC Completion Package (Reference 4).

List of ITAAC Findings

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

associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. Drawing APP-PL01-V2-002, Primary Coolant Loop Outline Elevation
- 2. Drawing APP-ME02-V2-001, AP1000 Passive Residual Heat Removal Heat Exchanger Assembly Drawing
- 3. Inspection Report(s) XXX
- 4. ITAAC 2.2.03.08b.02 Completion Package
- 5. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.2.04.02b [Index No. 221]

ITAAC Statement

Design Commitment

2.b) The piping identified in Table 2.2.4-2 as ASME Code Section III is designed and constructed in accordance with ASME Code Section III requirements.

Inspections/Tests/Analyses

Inspection will be conducted of the as-built piping as documented in the ASME design reports.

Acceptance Criteria

The ASME Code Section III design reports exist for the as-built piping identified in Table 2.2.4-2 as ASME Code Section III.

ITAAC Completion Description

An inspection is performed in accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III (Reference 1) to demonstrate that the as-built piping identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.2.4-2 as ASME Code Section III (Attachment A) is designed and constructed in accordance with ASME Code Section III requirements. This ITAAC is complete once the as-built ASME Code Section III design reports for the Steam Generator System (SGS) piping in Attachment A are completed, the piping is stamped with a Code Symbol N-Stamp, and the Authorized Nuclear Inspector (ANI) has signed the N-5 Code Data Reports (Reference 2) listed in Attachment A indicating the as-built piping is installed in accordance with ASME Code Section III requirements.

The as-built SGS piping listed in Attachment A is subjected to a design report reconciliation process which verifies that the as-built piping complies with all design specification and Code provisions. Design reconciliation of the as-built piping validates that construction completion, including field changes and any nonconforming condition dispositions, is consistent with and bounded by the approved design. All applicable fabrication, installation and testing records, as well as those for the related Quality Assurance verification and inspection activities, which confirm adequate construction in compliance with ASME Code Section III and the design provisions, are referenced in the N-5 Code Data Reports and its sub-tier references.

The completed ASME Code Section III design reports for the as-built SGS piping identified in Attachment A exist and document that the piping conforms to approved design details. The design reports support completion of the N-5 Code Data Reports signed by the Authorized Nuclear Inspector.

The completion of the SGS piping Code Symbol N-Stamp stamping, and the N-5 Code Data Reports which incorporate the design reports for the piping listed in Attachment A, confirm that the as-built piping is designed and constructed in accordance with ASME Code Section III requirements. The N-5 Code Data Reports and associated ASME Code Section III design reports are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III requirements as described in VEGP 3&4 Updated Final Safety Analysis Report, Section 5.2.1, Compliance with Codes and Code Cases
- 2. ASME Section III N-5 Code Data Report XXX for the Steam Generator System
- 3. ITAAC 2.2.04.02b Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from COL Appendix C Table 2.2.4-2

Line Name	Line No.	ASME Code Section III	N-5 Code Data Report
Main Feedwater Line	SGS-PL-L002A, L002B	Yes	XXX
Main Feedwater Line	SGS-PL-L003A, L003B	Yes	XXX
Startup Feedwater Line	SGS-PL-L004A, L004B	Yes	XXX
Startup Feedwater Line	SGS-PL-L005A, L005B	Yes	XXX
Main Steam Line (within containment)	SGS-PL-L006A, L006B	Yes	XXX
Main Steam Line (outside of containment)	SGS-PL-L006A, L006B	Yes	XXX
Main Steam Line	SGS-PL-L007A, L007B	Yes	XXX
Safety Valve Inlet Line	SGS-PL-L015A, L015B, L015C, L015D, L015E, L015F, L015G, L015H, L015J, L015K, L015L, L015M	Yes	XXX
Safety Valve Discharge Line	SGS-PL-L018A, L018B, L018C, L018D, L018E, L018F, L018G, L018H, L018J, L018K, L018L, L018M	Yes	XXX
Power-operated Relief Block Valve Inlet Line	SGS-PL-L024A, L024B	Yes	XXX
Power-operated Relief Valve Inlet Line	SGS-PL-L014A, L014B	Yes	XXX
Main Steam Isolation Valve Bypass Inlet Line	SGS-PL-L022A, L022B	Yes	XXX
Main Steam Isolation Valve Bypass Outlet Line	SGS-PL-L023A, L023B	Yes	xxx
Main Steam Condensate Drain Line	SGS-PL-L021A, L021B	Yes	XXX
Steam Generator Blowdown Line	SGS-PL-L009A, L009B	Yes	XXX
Steam Generator Blowdown Line	SGS-PL-L027A, L027B	Yes	XXX
Steam Generator Blowdown Line	SGS-PL-L010A, L010B	Yes	XXX

Subject: Uncompleted ITAAC 2.2.04.03a [Index No. 222]

ITAAC Statement

Design Commitment

3.a) Pressure boundary welds in components identified in Table 2.2.4-1 as ASME Code Section III meet ASME Code Section III requirements.

Inspections/Tests/Analyses

Inspection of the as-built pressure boundary welds will be performed in accordance with the ASME Code Section III.

Acceptance Criteria

A report exists and concludes that the ASME Code Section III requirements are met for non-destructive examination of pressure boundary welds.

ITAAC Completion Description

Inspections are performed in accordance with American Society of Mechanical Engineers (ASME) Boiler & Pressure Vessel Code Section III (Reference 1) to demonstrate that as-built pressure boundary welds in components identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.2.4-1 (Attachment A) as ASME Code Section III meet ASME Code Section III requirements.

The applicable non-destructive examinations (including liquid penetrant, magnetic particle, radiographic, and ultrasonic testing, as required by Reference 1) of the components' pressure boundary welds are documented in the Non-Destructive Examination Report(s), which supports completion of the respective ASME Section III N-5 Code Data Report(s) XXX (Reference 2) signed by the Authorized Nuclear Inspector and identified in Attachment A for the Steam Generator System (SGS).

Per ASME Code Section III the N-5 Code Data Reports identified in Attachment A exist and document satisfactory completion of the required examination and testing of the item, which includes non-destructive examinations of pressure boundary welds. Satisfactory completion of the non-destructive examination of pressure boundary welds ensures that the pressure boundary welds in components identified in VEGP Unit 3 COL Appendix C Table 2.2.4-1 as ASME Code Section III meet ASME Code Section III requirements. The N-5 Code Data Reports identified in Attachment A are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III requirements as described in VEGP 3&4 Updated Final Safety Analysis Report, Section 5.2.1, Compliance with Codes and Code Cases
- 2. ASME Section III N-5 Code Data Report(s) XXX for the SGS
- 3. ITAAC 2.2.04.03a Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from VEGP Unit 3 COL Appendix C - Table 2.2.4-1

Equipment Name	Tag No.	ASME Code Section III	N-5 Code Data Report
Main Steam Safety Valve SG01	SGS-PL-V030A	Yes	XXX
Main Steam Safety Valve SG02	SGS-PL-V030B	Yes	XXX
Main Steam Safety Valve SG01	SGS-PL-V031A	Yes	XXX
Main Steam Safety Valve SG02	SGS-PL-V031B	Yes	XXX
Main Steam Safety Valve SG01	SGS-PL-V032A	Yes	XXX
Main Steam Safety Valve SG02	SGS-PL-V032B	Yes	XXX
Main Steam Safety Valve SG01	SGS-PL-V033A	Yes	XXX
Main Steam Safety Valve SG02	SGS-PL-V033B	Yes	XXX
Main Steam Safety Valve SG01	SGS-PL-V034A	Yes	XXX
Main Steam Safety Valve SG02	SGS-PL-V034B	Yes	XXX
Main Steam Safety Valve SG01	SGS-PL-V035A	Yes	XXX
Main Steam Safety Valve SG02	SGS-PL-V035B	Yes	XXX
Power-operated Relief Valve Block Motor- operated Valve Steam Generator 01	SGS-PL-V027A	Yes	XXX
Power-operated Relief Valve Block Motor- operated Valve Steam Generator 02	SGS-PL-V027B	Yes	XXX
Steam Line Condensate Drain Isolation Valve	SGS-PL-V036A	Yes	XXX
Steam Line Condensate Drain Isolation Valve	SGS-PL-V036B	Yes	XXX
Main Steam Line Isolation Valve	SGS-PL-V040A	Yes	XXX
Main Steam Line Isolation Valve	SGS-PL-V040B	Yes	XXX
Steam Line Condensate Drain Control Valve	SGS-PL-V086A	Yes	XXX
Steam Line Condensate Drain Control Valve	SGS-PL-V086B	Yes	XXX
Main Feedwater Isolation Valve	SGS-PL-V057A	Yes	XXX

Equipment Name	Tag No.	ASME Code Section III	N-5 Code Data Report
Main Feedwater Isolation Valve	SGS-PL-V057B	Yes	XXX
Startup Feedwater Isolation Motor- operated Valve	SGS-PL-V067A	Yes	XXX
Startup Feedwater Isolation Motor- operated Valve	SGS-PL-V067B	Yes	xxx
Steam Generator Blowdown Isolation Valve	SGS-PL-V074A	Yes	XXX
Steam Generator Blowdown Isolation Valve	SGS-PL-V074B	Yes	XXX
Steam Generator Blowdown Isolation Valve	SGS-PL-V075A	Yes	XXX
Steam Generator Blowdown Isolation Valve	SGS-PL-V075B	Yes	XXX
Power-operated Relief Valve	SGS-PL-V233A	Yes	XXX
Power-operated Relief Valve	SGS-PL-V233B	Yes	XXX
Main Steam Isolation Valve Bypass Isolation	SGS-PL-V240A	Yes	XXX
Main Steam Isolation Valve Bypass Isolation	SGS-PL-V240B	Yes	xxx
Main Feedwater Control Valve	SGS-PL-V250A	Yes	XXX
Main Feedwater Control Valve	SGS-PL-V250B	Yes	XXX
Startup Feedwater Control Valve	SGS-PL-V255A	Yes	XXX
Startup Feedwater Control Valve	SGS-PL-V255B	Yes	XXX

Subject: Uncompleted ITAAC 2.2.4.03b [Index No. 223]

ITAAC Statement

Design Commitment

3.b) Pressure boundary welds in piping identified in Table 2.2.4-2 as ASME Code Section III meet ASME Code Section III requirements.

Inspections/Tests/Analyses

Inspection of the as-built pressure boundary welds will be performed in accordance with the ASME Code Section III.

Acceptance Criteria

A report exists and concludes that the ASME Code Section III requirements are met for non-destructive examination of pressure boundary welds.

ITAAC Completion Description

An inspection is performed in accordance with Procedure ABC (Reference 1) to demonstrate that the as-built pressure boundary welds in piping identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.2.4-2 (Attachment A) as American Society of Mechanical Engineers (ASME) Code Section III meet ASME Code Section III requirements (Reference 2). This ITAAC is completed when the Steam Generator System (SGS) piping, identified in Attachment A, Code Symbol N-Stamp and N-5 Code Data Report XXX (Reference 3) are completed.

The non-destructive examinations (including visual inspection, liquid penetrant, magnetic particle, radiographic, and ultrasonic testing, as required by Reference 2) of the SGS piping pressure boundary welds are documented in the Non-Destructive Examination Report(s) within the SGS piping system's supporting data package, which supports completion of the respective SGS Code Symbol N-Stamp Stamping and N-5 Code Data Report. The completion of stamping the SGS piping system along with the corresponding ASME N-5 Code Data Report listed in Attachment A (signed by the Authorized Nuclear Inspector) ensures that the SGS piping is constructed in accordance with the design specification(s) and ASME Code Section III and that the satisfactory completion of the non-destructive examinations of piping pressure boundary welds for the SGS pipe lines identified in Attachment A meet ASME Code Section III requirements and are documented in the Non-Destructive Examination Report(s) within the supporting data packages.

The SGS N-5 Code Data Report, which is supported by the Non-Destructive Examination Report(s) within the SGS piping system's supporting data package exists, and confirms that the ASME Code Section III requirements are met for the non-destructive examination of the SGS piping pressure boundary welds identified in Attachment A. The N-5 Code Data Report is available for NRC inspection as part of the ITAAC Completion Package (Reference 4).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. Procedure ABC
- 2. American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III requirements as described in VEGP 3&4 Updated Final Safety Analysis Report, Section 5.2.1, Compliance with Codes and Code Cases
- 3. ASME Section III N-5 Code Data Report XXX for the Steam Generator System
- 4. ITAAC 2.2.4.03b Completion Package
- 5. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from COL Appendix C Table 2.2.4-2

Line Name	Line No.	ASME Code Section III	N-5 Code Data Report
Main Feedwater Line	SGS-PL-L002A, L002B	Yes	XXX
Main Feedwater Line	SGS-PL-L003A, L003B	Yes	XXX
Startup Feedwater Line	SGS-PL-L004A, L004B	Yes	XXX
Startup Feedwater Line	SGS-PL-L005A, L005B	Yes	XXX
Main Steam Line (within containment)	SGS-PL-L006A, L006B	Yes	XXX
Main Steam Line (outside of containment)	SGS-PL-L006A, L006B	Yes	XXX
Main Steam Line	SGS-PL-L007A, L007B	Yes	XXX
Safety Valve Inlet Line	SGS-PL-L015A, L015B, L015C, L015D, L015E, L015F, L015G, L015H, L015J, L015K, L015L, L015M	Yes	XXX
Safety Valve Discharge Line	SGS-PL-L018A, L018B, L018C, L018D, L018E, L018F, L018G, L018H, L018J, L018K, L018L, L018M	Yes	XXX
Power-operated Relief Block Valve Inlet Line	SGS-PL-L024A, L024B	Yes	XXX
Power-operated Relief Valve Inlet Line	SGS-PL-L014A, L014B	Yes	XXX
Main Steam Isolation Valve Bypass Inlet Line	SGS-PL-L022A, L022B	Yes	XXX
Main Steam Isolation Valve Bypass Outlet Line	SGS-PL-L023A, L023B	Yes	XXX
Main Steam Condensate Drain Line	SGS-PL-L021A, L021B	Yes	XXX

		ASME Code	N-5 Code
Line Name	Line No.	Section III	Data Report
Steam Generator Blowdown Line	SGS-PL-L009A, L009B	Yes	XXX
Steam Generator Blowdown Line	SGS-PL-L027A, L027B	Yes	XXX
Steam Generator Blowdown Line	SGS-PL-L010A, L010B	Yes	XXX

Subject: Uncompleted ITAAC 2.2.04.04b [Index No. 225]

ITAAC Statement

Design Commitment

4.b) The piping identified in Table 2.2.4-2 as ASME Code Section III retains its pressure boundary integrity at its design pressure.

Inspections/Tests/Analyses

A hydrostatic test will be performed on the piping required by the ASME Code Section III to be hydrostatically tested.

Acceptance Criteria

A report exists and concludes that the results of the hydrostatic test of the piping identified in Table 2.2.4-2 as ASME Code Section III conform with the requirements of the ASME Code Section III.

ITAAC Completion Description

Hydrostatic tests are performed to verify that the piping identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.2.4-2 (Attachment A) as American Society of Mechanical Engineers (ASME) Code Section III retains its pressure boundary integrity at its design pressure. This ITAAC verifies that the piping identified in Attachment A fully meets all applicable ASME Boiler & Pressure Vessel Code Section III (Reference 1) requirements and retains its pressure boundary integrity at its design pressure.

A hydrostatic test is performed in accordance with procedure XYZ (as applicable) that complies with Reference 1 requirements to demonstrate that the piping identified in Attachment A as ASME Code Section III retains its pressure boundary integrity at its design pressure. The hydrostatic test verifies that there are no leaks at welds or piping, and that the pressure boundary integrity is retained at its design pressure.

The hydrostatic testing results of the pipe lines are documented in the Hydrostatic Testing Report(s). The Hydrostatic Testing Report(s) supports completion of the ASME Section III N-5 Code Data Report(s) XXX (Reference 2) identified in Attachment A for the applicable piping system (i.e., Steam Generator System (SGS)).

The applicable ASME Section III N-5 Code Data Reports identified in Attachment A exist and document that the results of the hydrostatic testing of the piping identified in VEGP Unit 3 COL Appendix C Table 2.2.4-2 as ASME Code Section III conform with the requirements of the

ASME Code Section III. The N-5 Code Data Reports identified in Attachment A are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III requirements as described in VEGP 3&4 Updated Final Safety Analysis Report, Section 5.2.1, Compliance with Codes and Code Cases
- 2. ASME Section III N-5 Code Data Report(s) XXX for the Steam Generator System
- 3. ITAAC 2.2.04.04b Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from VEGP Unit 3 COL Appendix C - Table 2.2.4-2

Line Name	Line No.	ASME Code Section III	N-5 Code Data Report
Main Feedwater Line	SGS-PL-L002A, L002B	Yes	XXX
Main Feedwater Line	SGS-PL-L003A, L003B	Yes	XXX
Startup Feedwater Line	SGS-PL-L004A, L004B	Yes	XXX
Startup Feedwater Line	SGS-PL-L005A, L005B	Yes	XXX
Main Steam Line (within containment)	SGS-PL-L006A, L006B	Yes	XXX
Main Steam Line (outside of containment)	SGS-PL-L006A, L006B	Yes	XXX
Main Steam Line	SGS-PL-L007A, L007B	Yes	XXX
Safety Valve Inlet Line	SGS-PL-L015A, L015B, L015C, L015D, L015E, L015F, L015G, L015H, L015J, L015K, L015L, L015M	Yes	XXX
Safety Valve Discharge Line	SGS-PL-L018A, L018B, L018C, L018D, L018E, L018F, L018G, L018H, L018J, L018K, L018L, L018M	Yes	XXX
Power-operated Relief Block Valve Inlet Line	SGS-PL-L024A, L024B	Yes	XXX
Power-operated Relief Valve Inlet Line	SGS-PL-L014A, L014B	Yes	XXX
Main Steam Isolation Valve Bypass Inlet Line	SGS-PL-L022A, L022B	Yes	XXX

Line Name	Line No.	ASME Code Section III	N-5 Code Data Report
Main Steam Isolation Valve Bypass Outlet Line	SGS-PL-L023A, L023B	Yes	XXX
Main Steam Condensate Drain Line	SGS-PL-L021A, L021B	Yes	XXX
Steam Generator Blowdown Line	SGS-PL-L009A, L009B	Yes	XXX
Steam Generator Blowdown Line	SGS-PL-L027A, L027B	Yes	XXX
Steam Generator Blowdown Line	SGS-PL-L010A, L010B	Yes	XXX

Subject: Uncompleted ITAAC 2.2.04.06 [Index No. 230]

ITAAC Statement

Design Commitment

6. Each of the as-built lines identified in Table 2.2.4-2 as designed for LBB meets the LBB criteria, or an evaluation is performed of the protection from the dynamic effects of a rupture of the line.

Inspections/Tests/Analyses

Inspection will be performed for the existence of an LBB evaluation report or an evaluation report on the protection from dynamic effects of a pipe break. Section 3.3, Nuclear Island Buildings, contains the design descriptions and inspections, tests, analyses, and acceptance criteria for protection from the dynamic effects of pipe rupture.

Acceptance Criteria

An LBB evaluation report exists and concludes that the LBB acceptance criteria are met by the as-built SGS piping and piping materials, or a pipe break evaluation report exists and concludes that protection from the dynamic effects of a line break is provided.

ITAAC Completion Description

Inspections are performed for the as-built lines identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.2.4-2 (Attachment A) to verify that each of the as-built lines designed for Leak Before Break (LBB) meets the LBB criteria, or an evaluation is performed of the protection from the dynamic effects of a rupture of the line. VEGP Unit 3 COL Appendix C, Section 3.3, Nuclear Island Buildings, contains the design descriptions and inspections, tests, analyses, and acceptance criteria for protection from the dynamic effects of pipe rupture.

LBB evaluations are performed to confirm that the as-built Steam Generator System (SGS) piping (and corresponding piping materials) identified in Attachment A meet the LBB acceptance criteria described in VEGP 3&4 Updated Final Safety Analysis Report, Appendix 3B, Leak-Before-Break Evaluation of the AP1000 Piping (Reference 1). In cases where an as-built SGS piping line in Attachment A cannot meet the LBB acceptance criteria, a pipe break evaluation is performed which concludes that protection from the dynamic effects of a line break is provided. The pipe break evaluation criteria is discussed in VEGP 3&4 Updated Final Safety Analysis Report, Section 3.6.4.1, Pipe Break Hazards Analysis (Reference 2) and is documented as a pipe rupture hazards evaluation.

Inspections are performed to verify that LBB as-built piping evaluation reports exist for the SGS piping (and corresponding piping materials) identified in Attachment A which conclude that the LBB acceptance criteria is met, and are documented in either the applicable American Society of Mechanical Engineers (ASME) Section III as-built piping design report(s) or in separate LBB

evaluation report(s). For cases where an as-built SGS piping line in Attachment A cannot meet the LBB acceptance criteria inspections are performed to verify that a pipe rupture hazards evaluation exists which concludes that protection from the dynamic effects of a line break is provided.

The applicable ASME Section III as-built piping design report(s), LBB evaluation report(s), or pipe rupture hazards evaluation(s) exist and are identified in Attachment A. These report(s) or evaluation(s) are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. VEGP 3&4 Updated Final Safety Analysis Report, Appendix 3B, Leak-Before-Break Evaluation of the AP1000 Piping
- VEGP 3&4 Updated Final Safety Analysis Report, Section 3.6.4.1, Pipe Break Hazards Analysis
- 3. ITAAC 2.2.04.06 Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from COL Appendix C Table 2.2.4-2

Line Name	Line Number	Leak Before Break	ASME Section III Design Report, LBB Evaluation Report, or Pipe Rupture Hazards Evaluation No.
Main Steam Line (within containment)	SGS-PL-L006A, L006B	Yes	XXX

Subject: Uncompleted ITAAC 2.3.02.03a [Index No. 287]

ITAAC Statement

Design Commitment

3.a) Pressure boundary welds in components identified in Table 2.3.2-1 as ASME Code Section III meet ASME Code Section III requirements.

Inspections/Tests/Analyses

Inspection of the as-built pressure boundary welds will be performed in accordance with the ASME Code Section III.

Acceptance Criteria

A report exists and concludes that the ASME Code Section III requirements are met for non-destructive examination of pressure boundary welds.

ITAAC Completion Description

Inspections are performed in accordance with American Society of Mechanical Engineers (ASME) Boiler & Pressure Vessel Code Section III (Reference 1) to demonstrate that as-built pressure boundary welds in components identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.3.2-1 (Attachment A) as ASME Code Section III meet ASME Code Section III requirements.

The applicable non-destructive examinations (including liquid penetrant, magnetic particle, radiographic, and ultrasonic testing, as required by Reference 1) of the components' pressure boundary welds are documented in the Non-Destructive Examination Report(s), which supports completion of the respective ASME Section III N-5 Code Data Report(s) XXX (Reference 2) signed by the Authorized Nuclear Inspector and identified in Attachment A for the Chemical and Volume Control System (CVS).

Per ASME Code Section III the N-5 Code Data Reports identified in Attachment A exist and document satisfactory completion of the required examination and testing of the item, which includes non-destructive examinations of pressure boundary welds. Satisfactory completion of the non-destructive examination of pressure boundary welds ensures that the pressure boundary welds in components identified in VEGP Unit 3 COL Appendix C Table 2.3.2-1 as ASME Code Section III meet ASME Code Section III requirements. The N-5 Code Data Reports identified in Attachment A are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III requirements as described in VEGP 3&4 Updated Final Safety Analysis Report, Section 5.2.1, Compliance with Codes and Code Cases
- 2. ASME Section III N-5 Code Data Report XXX for the CVS
- 3. ITAAC 2.3.02.03a Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from VEGP Unit 3 COL Appendix C - Table 2.3.2-1

Equipment Name	Tag No.	ASME Code Section III	N-5 Code Data Report
RCS Purification Motor- operated Isolation Valve	CVS-PL-V001	Yes	XXX
RCS Purification Motor- operated Isolation Valve	CVS-PL-V002	Yes	XXX
RCS Purification Motor- operated Isolation Valve	CVS-PL-V003	Yes	XXX
CVS Resin Flush Line Containment Isolation Valve	CVS-PL-V040	Yes	XXX
CVS Resin Flush Line Containment Isolation Valve	CVS-PL-V041	Yes	XXX
CVS Demineralizer Resin Flush Line Containment Isolation Thermal Relief Valve	CVS-PL-V042	Yes	XXX
CVS Letdown Containment Isolation Valve	CVS-PL-V045	Yes	XXX
CVS Letdown Containment Isolation Valve	CVS-PL-V047	Yes	XXX
CVS Letdown Line Containment Isolation Thermal Relief Valve	CVS-PL-V058	Yes	XXX
CVS Makeup Return Line Bypass Check Valve	CVS-PL-V067	Yes	XXX
CVS Purification Return Line Pressure Boundary Check Valve	CVS-PL-V080	Yes	XXX
CVS Purification Return Line Pressure Boundary Isolation Check Valve	CVS-PL-V081	Yes	XXX
CVS Purification Return Line Pressure Boundary Check Valve	CVS-PL-V082	Yes	XXX
CVS Auxiliary Pressurizer Spray Line Pressure Boundary Valve	CVS-PL-V084	Yes	XXX
CVS Auxiliary Pressurizer Spray Line Pressure Boundary Check Valve	CVS-PL-V085	Yes	XXX
CVS Makeup Line Containment Isolation Motor- operated Valve	CVS-PL-V090	Yes	XXX
CVS Makeup Line Containment Isolation Motor- operated Valve	CVS-PL-V091	Yes	XXX
CVS Zinc Injection Containment Isolation Valve ORC	CVS-PL-V092	Yes	XXX

Equipment Name	Tag No.	ASME Code Section III	N-5 Code Data Report
CVS Zinc Injection Containment Isolation Valve IRC	CVS-PL-V094	Yes	XXX
CVS Zinc Addition Line Ctmt Isol Thermal Relief Valve	CVS-PL-V098	Yes	XXX
CVS Makeup Line Containment Isolation Thermal Relief Valve	CVS-PL-V100	Yes	XXX
CVS Demineralized Water Isolation Valve	CVS-PL-V136A	Yes	XXX
CVS Demineralized Water Isolation Valve	CVS-PL-V136B	Yes	XXX
CVS Hydrogen Injection Containment Isolation Check Valve IRC	CVS-PL-V217	Yes	XXX
CVS Hydrogen Injection Containment Isolation Valve ORC	CVS-PL-V219	Yes	XXX

Subject: Uncompleted ITAAC 2.3.02.04b [Index No. 290]

ITAAC Statement

Design Commitment

4.b) The piping identified in Table 2.3.2-2 as ASME Code Section III retains its pressure boundary integrity at its design pressure.

Inspections/Tests/Analyses

A hydrostatic test will be performed on the piping required by the ASME Code Section III to be hydrostatically tested.

Acceptance Criteria

A report exists and concludes that the results of the hydrostatic test of the piping identified in Table 2.3.2-2 as ASME Code Section III conform with the requirements of the ASME Code Section III.

ITAAC Completion Description

Hydrostatic tests are performed to verify that the piping identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.3.2-2 (Attachment A) as American Society of Mechanical Engineers (ASME) Code Section III retains its pressure boundary integrity at its design pressure. This ITAAC verifies that the piping identified in Attachment A fully meets all applicable ASME Boiler & Pressure Vessel Code Section III (Reference 1) requirements and retains its pressure boundary integrity at its design pressure.

A hydrostatic test is performed in accordance with procedure XYZ (as applicable) that complies with Reference 1 requirements to demonstrate that the piping identified in Attachment A as ASME Code Section III retains its pressure boundary integrity at its design pressure. The hydrostatic test verifies that there are no leaks at welds or piping, and that the pressure boundary integrity is retained at its design pressure.

The hydrostatic testing results of the pipe lines are documented in the Hydrostatic Testing Report(s). The Hydrostatic Testing Report(s) supports completion of the ASME Section III N-5 Code Data Report(s) XXX (Reference 2) identified in Attachment A for the applicable piping system (i.e., Chemical and Volume Control System (CVS)).

The applicable ASME Section III N-5 Code Data Reports identified in Attachment A exist and document that the results of the hydrostatic testing of the piping identified in VEGP Unit 3 COL Appendix C Table 2.3.2-2 as ASME Code Section III conform with the requirements of the

ASME Code Section III. The N-5 Code Data Reports identified in Attachment A are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III requirements as described in VEGP 3&4 Updated Final Safety Analysis Report, Section 5.2.1, Compliance with Codes and Code Cases
- 2. ASME Section III N-5 Code Data Report(s) XXX for the Chemical and Volume Control System
- 3. ITAAC 2.3.02.04b Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from VEGP Unit 3 COL Appendix C - Table 2.3.2-2

Line Name	Line No.	ASME Code Section III	N-5 Code Data Report
CVS Purification Line	L001 L040	Yes	XXX
CVS Resin Flush Containment Penetration Line	L026	Yes	XXX
CVS Purification Line Return	L038	Yes	XXX
CVS Pressurizer Auxiliary Spray Connection	L070 L071	Yes	XXX
CVS Letdown Containment Penetration Line	L051	Yes	XXX
CVS Makeup Containment Penetration Line	L053	Yes	XXX
CVS Hydrogen Injection Containment Penetration Line	L213 L214 L217	Yes	XXX
CVS Zinc Injection Containment Penetration Line	L061	Yes	XXX
CVS Return Line from Regenerative Heat Exchanger	L036	Yes	XXX

Subject: Uncompleted ITAAC 2.3.04.07 [Index No. 334]

ITAAC Statement

Design Commitment

7. The FPS provides two fire water storage tanks, each capable of holding at least 300,000 gallons of water.

Inspections/Tests/Analyses

Inspection of each fire water storage tank will be performed.

Acceptance Criteria

The volume of each fire water storage tank supplying the FPS is at least 300,000 gallons.

ITAAC Completion Description

Inspections are performed to verify that the Fire Protection System (FPS) provides two fire water storage tanks, each capable of holding at least 300,000 gallons of water. Per the VEGP 3&4 Updated Final Safety Analysis Report, Table 9.5.1-2, Component Data – Fire Protection System (Nominal Values), (Reference 1) the FPS tanks are identified as the Primary Fire Water Tank and the Secondary Fire Water Tank. Measurements and calculations for these fire water storage tanks are conducted to verify that the dedicated volume of each tank to the FPS is at least 300,000 gallons.

The volumes of the Primary Fire Water Tank and the Secondary Fire Water Tank are determined by the following method:

The dimensions of each fire water storage tank are measured and recorded following tank construction using survey equipment in accordance with approved survey procedures. Each tank's as-built volume is calculated using the survey measurements and compared to the minimum dedicated volume acceptance criteria of 300,000 gallons per fire water storage tank.

The results of the Primary Fire Water Tank and the Secondary Fire Water Tank volume determinations are documented in the Quality Assurance Data Packages YYY-1 (Reference 2) and YYY-4 (Reference 3). The calculated dedicated volume of the Primary Fire Water Tank (Component 1, Tag No. FPS-MT-01A) is XXX gallons and the Secondary Fire Water Tank (Component 2, Tag. FPS-MT-01B) is XXX gallons. This confirms that the dedicated volume of each fire water storage tank supplying the FPS is at least 300,000 gallons. The inspection results are available for NRC inspection as part of the ITAAC Completion Package (Reference 4).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. VEGP 3&4 Updated Final Safety Analysis Report, Table 9.5.1-2, Component Data Fire Protection System (Nominal Values)
- 2. Quality Assurance Data Package YYY for the Fire Protection System Primary Fire Water Storage Tanks (YYY-1)
- 3. Quality Assurance Data Package YYY for the Fire Protection System Secondary Fire Water Storage Tanks (YYY-4)
- 4. ITAAC 2.3.04.07 Completion Package
- 5. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.3.05.02.iii [Index No. 342]

ITAAC Statement

Design Commitment

2. The seismic Category I equipment identified in Table 2.3.5-1 can withstand seismic design basis loads without loss of safety function.

Inspections/Tests/Analyses

iii) Inspection will be performed for the existence of a report verifying that the as-built equipment including anchorage is seismically bounded by the tested or analyzed conditions.

Acceptance Criteria

iii) A report exists and concludes that the as-built equipment including anchorage is seismically bounded by the tested or analyzed conditions.

ITAAC Completion Description

Multiple ITAAC are performed to demonstrate that the seismic Category I equipment identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.3.5-1 (Attachment A) can withstand seismic design basis loads without loss of safety function. The subject ITAAC requires that an inspection is performed for the existence of a report verifying that the as-built equipment including anchorage are seismically bounded by the tested or analyzed conditions.

Seismic qualification of the equipment in VEGP Unit 3 COL Appendix C Table 2.3.5-1 is verified by type tests, analyses, or a combination of type tests and analyses in accordance with ITAAC 2.3.05.02.ii (Reference 1). As part of the Mechanical Handling System (MHS) qualification program, consideration is given to the clearances needed around the equipment mounted in the plant to permit the equipment to move during a postulated seismic event without causing impact between adjacent pieces of safety-related equipment or between safety-related equipment and adjacent non-safety related structures or components. Justification is provided that the equipment will not impact adjacent equipment or structures as part of the Equipment Qualification (EQ) As-Built Reconciliation Reports (Reference 2) based on the walkdown inspection.

Seismic analyses of the equipment listed in Attachment A identify the equipment mounting employed for qualification and establish interface requirements for assuring that subsequent inplant installation does not degrade the established qualification. Interface requirements are defined based on the test configuration and other design requirements.

In accordance with EQ Walkdown Inspection Procedure XYZ (Reference 3), an inspection is conducted of the equipment identified in Attachment A to confirm the satisfactory installation of the seismically qualified equipment. The inspection includes verification of equipment make/model/serial number; verification of as-built equipment mounting orientation, anchorage and clearances; and verification of electrical and other interfaces.

The documentation of installed configuration of seismically qualified equipment includes photographs and/or sketches of equipment/mounting/interfaces. The verification of installed equipment configuration is documented in the EQ As-Built Reconciliation Reports.

Attachment A identifies the EQ As-Built Reconciliation Reports which verify that the installed configuration of the Seismic Category I equipment identified in VEGP Unit 3 COL Appendix C Table 2.3.5-1, including anchorage, is seismically bounded by the tested or analyzed conditions and IEEE Standard 344-1987 (Reference 4) and NRC Regulatory Guide 1.100, Rev. 2 (Reference 5). The EQ As-Built Reconciliation Reports are available for NRC inspection as part of the ITAAC Completion Package (Reference 6).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.3.05.02.ii
- 2. EQ As-Built Reconciliation Reports as identified in Attachment A
- 3. EQ Walkdown Inspection Procedure XYZ
- 4. IEEE Standard 344-1987, "Recommended Practices for Seismic Qualification of Class 1E Equipment for Nuclear Power Generating Stations"
- 5. Regulatory Guide 1.100, Rev. 2, "Seismic Qualification of Electric and Mechanical Equipment for Nuclear Power Plants"
- 6. ITAAC 2.3.05.02.iii Completion Package
- 7. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from COL Appendix C Table 2.3.5-1

ITAAC COMPLIANCE MATRIX FOR SEISMIC CATEGORY I EQUIPMENT (MECHANICAL HANDLING SYSTEM)

Equipment Name	Tag No.	Seismic Cat. I	EQ As-Built Reconciliation Report
Containment Polar Crane	MHS-MH-01	Yes	XXX
Cask Handling Crane	MHS-MH-02	Yes	XXX
Equipment Hatch Hoist	MHS-MH-05	Yes	XXX
Maintenance Hatch Hoist	MHS-MH-06	Yes	XXX

Subject: Uncompleted ITAAC 2.3.06.02a [Index No. 355]

ITAAC Statement

Design Commitment

2.a) The components identified in Table 2.3.6-1 as ASME Code Section III are designed and constructed in accordance with ASME Code Section III requirements.

Inspections/Tests/Analyses

Inspection will be conducted of the as-built components as documented in the ASME design reports.

Acceptance Criteria

The ASME Code Section III design reports exist for the as-built components identified in Table 2.3.6-1 as ASME Code Section III.

ITAAC Completion Description

An inspection is performed in accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III (Reference 1) to demonstrate that the as-built components identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.3.6-1 (Attachment A) as ASME Code Section III are designed and constructed in accordance with ASME Code Section III requirements.

Each component listed in Attachment A as ASME Code Section III is fabricated in accordance with the design and ASME Code Section III requirements. The ASME Code Section III Design Reports for these components exist and document that the as-built components conform to the approved design details. The ASME Section III Design Report for each component is documented in the component's completed ASME Section III Code Data Report. The individual ASME Section III Code Data Reports are documented on the ASME Section III N-5 Code Data Report for the Normal Residual Heat Removal System (Reference 2).

The as-built piping system, including the components listed in VEGP Unit 3 COL Appendix C Table 2.3.6-1 as ASME Code Section III, is subjected to a reconciliation process (Reference 3), which verifies that the as-built piping system has been analyzed for applicable loads (e.g. stress reports) and for compliance with all design specification and Code provisions. Design reconciliation of the as-built system validates that construction completion, including field changes and any nonconforming condition dispositions, is consistent with and bounded by the approved design. All applicable fabrication, installation and testing records, as well as those for the related QA verification and inspection activities, which confirm adequate construction in compliance with the ASME Code Section III and the design provisions, are referenced in the N-5 Code Data Report and/or its sub-tier references.

The ASME Section III N-5 Code Data Report, which includes the Design Reports for all the components listed in VEGP Unit 3 COL Appendix C Table 2.3.6-1 as ASME Code Section III, exists and concludes that these components have been designed and constructed in accordance with the ASME Code Section III requirements. The N-5 Code Data Report is

identified in Attachment A and is available for NRC inspection as part of the ITAAC Completion Package (Reference 4).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III requirements as described in VEGP 3&4 Updated Final Safety Analysis Report, Section 5.2.1, Compliance with Codes and Code Cases
- 2. ASME Section III N-5 Code Data Report XXX for the Normal Residual Heat Removal System
- 3. APP-GW-GER-031, Revision 0, "AP1000 As-built Reconciliation Program for ASME Section III Components"
- 4. ITAAC 2.3.06.02a Completion Package
- 5. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from COL Appendix C Table 2.3.6-1

Equipment Name	Tag No.	ASME Code Section III	N-5 Code Data Report
RNS Pump A (Pressure Boundary)	RNS-MP-01A	Yes	XXX
RNS Pump B (Pressure Boundary)	RNS-MP-01B	Yes	XXX
RNS Heat Exchanger A (Tube Side)	RNS-ME-01A	Yes	XXX
RNS Heat Exchanger B (Tube Side)	RNS-ME-01B	Yes	XXX
RCS Inner Hot Leg Suction Motor-operated Isolation Valve	RNS-PL-V001A	Yes	XXX
RCS Inner Hot Leg Suction Motor-operated Isolation Valve	RNS-PL-V001B	Yes	XXX
RCS Outer Hot Leg Suction Motor-operated Isolation Valve	RNS-PL-V002A	Yes	XXX
RCS Outer Hot Leg Suction Motor-operated Isolation Valve	RNS-PL-V002B	Yes	XXX
RCS Pressure Boundary Thermal Relief Check Valve	RNS-PL-V003A	Yes	XXX
RCS Pressure Boundary Thermal Relief Check Valve	RNS-PL-V003B	Yes	XXX
RNS Discharge Motor-operated Containment Isolation Valve	RNS-PL-V011	Yes	XXX
RNS Discharge Containment Isolation Test Connection	RNS-PL-V012	Yes	XXX
RNS Discharge Header Containment Isolation Check Valve	RNS-PL-V013	Yes	XXX
RNS Discharge RCS Pressure Boundary Check Valve	RNS-PL-V015A	Yes	XXX
RNS Discharge RCS Pressure Boundary Check Valve	RNS-PL-V015B	Yes	XXX
RNS Discharge RCS Pressure Boundary Check Valve	RNS-PL-V017A	Yes	XXX
RNS Discharge RCS Pressure Boundary Check Valve	RNS-PL-V017B	Yes	XXX
RNS Hot Leg Suction Pressure Relief Valve	RNS-PL-V021	Yes	XXX
RNS Suction Header Motor-operated Containment Isolation Valve	RNS-PL-V022	Yes	XXX
RNS Suction from IRWST Motor-operated Isolation Valve	RNS-PL-V023	Yes	XXX
RNS Discharge to IRWST Motor-operated Isolation Valve	RNS-PL-V024	Yes	XXX

Equipment Name	Tag No.	ASME Code Section III	N-5 Code Data Report
RNS Pump Discharge Relief	RNS-PL-V045	Yes	XXX
RNS Suction from Cask Loading Pit Motor- operated Isolation Valve	RNS-PL-V055	Yes	XXX
RNS Suction from Cask Loading Pit Check Valve	RNS-PL-V056	Yes	XXX
RNS Pump Miniflow Air-Operated Isolation Valve	RNS-PL-V057A	Yes	XXX
RNS Pump Miniflow Air-Operated Isolation Valve	RNS-PL-V057B	Yes	XXX
RNS Return from Chemical and Volume Control System (CVS) Containment Isolation Valve	RNS-PL-V061	Yes	XXX

Subject: Uncompleted ITAAC 2.3.06.05a.i [Index No. 361]

ITAAC Statement

Design Commitment

5.a) The seismic Category I equipment identified in Table 2.3.6-1 can withstand seismic design basis loads without loss of safety function.

Inspections/Tests/Analyses

i) Inspection will be performed to verify that the seismic Category I equipment identified in Table 2.3.6-1 is located on the Nuclear Island.

Acceptance Criteria

i) The seismic Category I equipment identified in Table 2.3.6-1 is located on the Nuclear Island.

ITAAC Completion Description

Multiple ITAAC are performed to demonstrate that the seismic Category I equipment identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.3.6-1 (Attachment A) can withstand seismic design basis loads without loss of safety function. The subject ITAAC requires an inspection to verify that the seismic Category I equipment identified in Attachment A is located on the Nuclear Island, which is a Seismic Category I structure.

To assure that seismic Category I equipment can withstand seismic design basis loads without loss of safety function, all of the equipment in VEGP Unit 3 COL Appendix C Table 2.3.6-1 is designed to be located on the seismic Category I Nuclear Island. In accordance with Inspection Procedure XYZ (Reference 1), an inspection is conducted of the equipment identified in Attachment A to confirm the satisfactory installation of the seismically qualified equipment. The inspection includes verification of the equipment make/model/serial number and verification of the as-built equipment location (Building, Elevation, Room). The inspection of the equipment locations is documented in Inspection Reports (Reference 2).

Attachment A identifies the Inspection Reports which verify that the installed locations of the Seismic Category I equipment identified in VEGP Unit 3 COL Appendix C Table 2.3.6-1 are located on the Nuclear Island. The Inspection Reports are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

- Inspection Procedure XYZ
 Inspection Reports as identified in Attachment A
- 3. ITAAC 2.3.06.05a.i Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from COL Appendix C Table 2.3.6-1

ITAAC COMPLIANCE MATRIX FOR SEISMIC CATEGORY I EQUIPMENT (NORMAL RESIDUAL HEAT REMOVAL SYSTEM)

Equipment Name	Tag No.	Seismic Cat. I	Inspection Report
RNS Pump A (Pressure Boundary)	RNS-MP-01A	Yes	XXX
RNS Pump B (Pressure Boundary)	RNS-MP-01B	Yes	XXX
RNS Heat Exchanger A (Tube Side)	RNS-ME-01A	Yes	XXX
RNS Heat Exchanger B (Tube Side)	RNS-ME-01B	Yes	XXX
RCS Inner Hot Leg Suction Motor- operated Isolation Valve	RNS-PL- V001A	Yes	XXX
RCS Inner Hot Leg Suction Motor- operated Isolation Valve	RNS-PL- V001B	Yes	XXX
RCS Outer Hot Leg Suction Motor- operated Isolation Valve	RNS-PL- V002A	Yes	XXX
RCS Outer Hot Leg Suction Motor- operated Isolation Valve	RNS-PL- V002B	Yes	XXX
RCS Pressure Boundary Thermal Relief Check Valve	RNS-PL- V003A	Yes	XXX
RCS Pressure Boundary Thermal Relief Check Valve	RNS-PL- V003B	Yes	XXX
RNS Discharge Motor-operated Containment Isolation Valve	RNS-PL-V011	Yes	XXX
RNS Discharge Containment Isolation Test Connection	RNS-PL-V012	Yes	XXX
RNS Discharge Header Containment Isolation Check Valve	RNS-PL-V013	Yes	XXX
RNS Discharge RCS Pressure Boundary Check Valve	RNS-PL- V015A	Yes	XXX
RNS Discharge RCS Pressure Boundary Check Valve	RNS-PL- V015B	Yes	XXX
RNS Discharge RCS Pressure Boundary Check Valve	RNS-PL- V017A	Yes	XXX
RNS Discharge RCS Pressure Boundary Check Valve	RNS-PL- V017B	Yes	XXX
RNS Hot Leg Suction Pressure Relief Valve	RNS-PL-V021	Yes	XXX

Equipment Name	Tag No.	Seismic Cat.	Inspection Report
RNS Suction Header Motor- operated Containment Isolation Valve	RNS-PL-V022	Yes	XXX
RNS Suction from IRWST Motor- operated Isolation Valve	RNS-PL-V023	Yes	XXX
RNS Discharge to IRWST Motor- operated Isolation Valve	RNS-PL-V024	Yes	XXX
RNS Pump Discharge Relief	RNS-PL-V045	Yes	XXX
RNS Suction from Cask Loading Pit Motor-operated Isolation Valve	RNS-PL-V055	Yes	XXX
RNS Suction from Cask Loading Pit Check Valve	RNS-PL-V056	Yes	XXX
RNS Pump Miniflow Air-Operated Isolation Valve	RNS-PL- V057A	Yes	XXX
RNS Pump Miniflow Air-Operated Isolation Valve	RNS-PL- V057B	Yes	XXX
RNS Return from Chemical and Volume Control System (CVS) Containment Isolation Valve	RNS-PL-V061	Yes	XXX

Subject: Uncompleted ITAAC 2.3.06.06 [Index No. 365]

ITAAC Statement

Design Commitment

6. Each of the as-built lines identified in Table 2.3.6-2 as designed for LBB meets the LBB criteria, or an evaluation is performed of the protection from the dynamic effects of a rupture of the line.

Inspections/Tests/Analyses

Inspection will be performed for the existence of an LBB evaluation report or an evaluation report on the protection from dynamic effects of a pipe break. Section 3.3, Nuclear Island Buildings, contains the design descriptions and inspections, tests, analyses, and acceptance criteria for protection from the dynamic effects of pipe rupture.

Acceptance Criteria

An LBB evaluation report exists and concludes that the LBB acceptance criteria are met by the as-built RNS piping and piping materials, or a pipe break evaluation report exists and concludes that protection from the dynamic effects of a line break is provided.

ITAAC Completion Description

Inspections are performed for the as-built lines identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.3.6-2 (Attachment A) to verify that each of the as-built lines designed for Leak Before Break (LBB) meets the LBB criteria, or an evaluation is performed of the protection from the dynamic effects of a rupture of the line. VEGP Unit 3 COL Appendix C, Section 3.3, Nuclear Island Buildings, contains the design descriptions and inspections, tests, analyses, and acceptance criteria for protection from the dynamic effects of pipe rupture.

LBB evaluations are performed to confirm that the as-built Normal Residual Heat Removal System (RNS) piping (and corresponding piping materials) identified in Attachment A meet the LBB acceptance criteria described in VEGP 3&4 Updated Final Safety Analysis Report, Appendix 3B, Leak-Before-Break Evaluation of the AP1000 Piping (Reference 1). In cases where an as-built RNS piping line in Attachment A cannot meet the LBB acceptance criteria, a pipe break evaluation is performed which concludes that protection from the dynamic effects of a line break is provided. The pipe break evaluation criteria is discussed in VEGP 3&4 Updated Final Safety Analysis Report, Section 3.6.4.1, Pipe Break Hazards Analysis (Reference 2) and is documented as a pipe rupture hazards evaluation.

Inspections are performed to verify that LBB as-built piping evaluation reports exist for the RNS piping (and corresponding piping materials) identified in Attachment A which conclude that the LBB acceptance criteria is met, and are documented in either the applicable American Society of Mechanical Engineers (ASME) Section III as-built piping design report(s) or in separate LBB

evaluation report(s). For cases where an as-built RNS piping line in Attachment A cannot meet the LBB acceptance criteria inspections are performed to verify that a pipe rupture hazards evaluation exists which concludes that protection from the dynamic effects of a line break is provided.

The applicable ASME Section III as-built piping design report(s), LBB evaluation report(s), or pipe rupture hazards evaluation(s) exist and are identified in Attachment A. These report(s) or evaluation(s) are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. VEGP 3&4 Updated Final Safety Analysis Report, Appendix 3B, Leak-Before-Break Evaluation of the AP1000 Piping
- 2. VEGP 3&4 Updated Final Safety Analysis Report, Section 3.6.4.1, Pipe Break Hazards Analysis
- 3. ITAAC 2.3.06.06 Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from COL Appendix C Table 2.3.6-2

Line Name	Line Number	Leak Before Break	ASME Section III Design Report, LBB Evaluation Report, or Pipe Rupture Hazards Evaluation No.
RNS Suction Lines, from the RCS Hot Leg Connection to the RCS Side of Valves RNS PL-V001A and RNS-PL-V001B	RNS-L001 RNS-L002A RNS-L002B	Yes	XXX
RNS Discharge Lines, from RCS Pressure Boundary Isolation Valves RNS-PL-V015A and RNS- PL-V015B to Reactor Vessel DVI Nozzles	PXS-L019A PXS-L019B	Yes	XXX

Subject: Uncompleted ITAAC 2.3.07.05.i [Index No. 396]

ITAAC Statement

Design Commitment

5. The seismic Category I components identified in Table 2.3.7-1 can withstand seismic design basis loads without loss of safety functions.

Inspections/Tests/Analyses

i) Inspection will be performed to verify that the seismic Category I components identified in Table 2.3.7-1 are located on the Nuclear Island.

Acceptance Criteria

i) The seismic Category I components identified in Table 2.3.7-1 are located on the Nuclear Island.

ITAAC Completion Description

Multiple ITAAC are performed to demonstrate that the seismic Category I components identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.3.7-1 (Attachment A) can withstand seismic design basis loads without loss of safety functions. The subject ITAAC requires an inspection to verify that the seismic Category I components identified in Attachment A are located on the Nuclear Island, which is a Seismic Category I structure.

To assure that seismic Category I components can withstand seismic design basis loads without loss of safety functions, all of the components in VEGP Unit 3 COL Appendix C Table 2.3.7-1 are designed to be located on the seismic Category I Nuclear Island. In accordance with Inspection Procedure XYZ (Reference 1), an inspection is conducted on the Spent Fuel Pool Cooling System (SFS) to confirm the satisfactory installation of the seismically qualified components. The inspection includes verification of the equipment make/model/serial number and verification of the as-built equipment location (Building, Elevation, Room). The inspection of the component locations is documented in Inspection Reports (Reference 2).

Attachment A identifies the Inspection Reports which verify that the installed locations of the Seismic Category I components identified in VEGP Unit 3 COL Appendix C Table 2.3.7-1 are located on the Nuclear Island. The Inspection Reports are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

- Inspection Procedure XYZ
 Inspection Reports as identified in Attachment A
- 3. ITAAC 2.3.07.05.i Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from COL Appendix C Table 2.3.7-1

ITAAC COMPLIANCE MATRIX FOR SEISMIC CATEGORY I COMPONENTS (SPENT FUEL POOL COOLING SYSTEM)

Equipment Name	Tag No.	Seismic Cat.	Inspection Report
Spent Fuel Pool Level Sensor	SFS-019A	Yes	XXX
Spent Fuel Pool Level Sensor	SFS-019B	Yes	XXX
Spent Fuel Pool Level Sensor	SFS-019C	Yes	XXX
Refueling Cavity Drain to SGS Compartment Isolation Valve	SFS-PL-V031	Yes	XXX
Refueling Cavity to SFS Pump Suction Isolation Valve	SFS-PL-V032	Yes	XXX
Refueling Cavity Drain to Containment Sump Isolation Valve	SFS-PL-V033	Yes	XXX
IRWST to SFS Pump Suction Line Isolation Valve	SFS-PL-V039	Yes	XXX
Fuel Transfer Canal to SFS Pump Suction Iso. Valve	SFS-PL-V040	Yes	XXX
Cask Loading Pit to SFS Pump Suction Isolation Valve	SFS-PL-V041	Yes	XXX
Cask Loading Pit to SFS Pump Suction Isolation Valve	SFS-PL-V042	Yes	XXX
SFS Pump Discharge Line to Cask Loading Pit Isolation Valve	SFS-PL-V045	Yes	XXX
Cask Loading Pit to WLS Isolation Valve	SFS-PL-V049	Yes	XXX
Spent Fuel Pool to Cask Washdown Pit Isolation Valve	SFS-PL-V066	Yes	XXX
Cask Washdown Pit Drain Isolation Valve	SFS-PL-V068	Yes	XXX
Refueling Cavity Drain Line Check Valve	SFS-PL-V071	Yes	XXX
Refueling Cavity Drain Line Check Valve	SFS-PL-V072	Yes	XXX
SFS Containment Floodup Isolation Valve	SFS-PL-V075	Yes	XXX

Subject: Uncompleted ITAAC 2.3.07.07b.iv [Index No. 405]

ITAAC Statement

Design Commitment

7.b) The SFS provides spent fuel cooling for 7 days by boiling the spent fuel pool water and makeup water from on-site storage tanks.

Inspections/Tests/Analyses

iv) See ITAAC Table 2.2.2-3, item 7.f for inspection, testing, and acceptance criteria for the makeup water supply from the passive containment cooling system (PCS) water storage tank to the spent fuel pool.

Acceptance Criteria

iv) See ITAAC Table 2.2.2-3, item 7.f for inspection, testing, and acceptance criteria for the makeup water supply from the PCS water storage tank to the spent fuel pool.

ITAAC Completion Description

This ITAAC's design commitment is met by reference to ITAAC items 7f.i and 7f.ii in VEGP Unit 3 Combined License (COL), Table 2.2.2-3. Item 7f.i demonstrates testing to measure the delivery rate from the Passive Core Cooling Water Storage Tank to the spent fuel pool. Item 7f.ii demonstrates an inspection of the Passive Core Cooling Water Storage Tank.

The ITAAC Closure Notifications (Reference 1 and 2) for Items 7f.i and 7f.ii in VEGP Unit 3 COL Table 2.2.2-3 summarize the methodology for conducting the Inspections/Tests/Analyses and the results that demonstrate that the acceptance criteria are met. These closure notifications are submitted to the NRC.

The records (Tests, Reports, Completed Procedures, Completed Analyses, etc.) that form the ITAAC determination bases are referenced in the closure notifications for Items 7f.i and 7f.ii from VEGP Unit 3 COL Table 2.2.2-3 and are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

- 1. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.2.02.07f.i [Index No. 145]
- 2. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.2.02.07f.ii [Index No. 146]
- 3. ITAAC 2.3.07.07b.iv Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.3.07.07b.v [Index No. 406]

ITAAC Statement

Design Commitment

7.b) The SFS provides spent fuel cooling for 7 days by boiling the spent fuel pool water and makeup water from on-site storage tanks.

Inspections/Tests/Analyses

v) Inspection will be performed to verify that the passive containment cooling system water storage tank includes a sufficient volume of water.

Acceptance Criteria

v) See ITAAC Table 2.2.2-3, item 7.f for the volume of the passive containment cooling system water storage tank.

ITAAC Completion Description

This ITAAC's design commitment is met by reference to ITAAC items 7f.i and 7f.ii in VEGP Unit 3 Combined License (COL), Table 2.2.2-3. Item 7f.i demonstrates testing to measure the delivery rate from the Passive Containment Cooling Water Storage Tank to the spent fuel pool. Item 7f.ii demonstrates an inspection of the Passive Containment Cooling Water Storage Tank.

The ITAAC Closure Notifications (Reference 1 and 2) for Items 7f.i and 7f.ii in VEGP Unit 3 COL Table 2.2.2-3 summarize the methodology for conducting the Inspections/Tests/Analyses and the results that demonstrate that the acceptance criteria are met. These closure notifications are submitted to the NRC.

The records (Tests, Reports, Completed Procedures, Completed Analyses, etc.) that form the ITAAC determination bases are referenced in the closure notifications for Items 7f.i and 7f.ii from VEGP Unit 3 COL Table 2.2.2-3 and are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

- 1. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.2.02.07f.i [Index No. 145]
- 2. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.2.02.07f.ii [Index No. 146]
- 3. ITAAC 2.3.07.07b.v Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.3.10.04b [Index No. 436]

ITAAC Statement

Design Commitment

4.b) The piping identified in Table 2.3.10-2 as ASME Code Section III retains its pressure boundary integrity at its design pressure.

Inspections/Tests/Analyses

A hydrostatic test will be performed on the piping required by the ASME Code Section III to be hydrostatically tested.

Acceptance Criteria

A report exists and concludes that the results of the hydrostatic test of the piping identified in Table 2.3.10-2 as ASME Code Section III conform with the requirements of the ASME Code Section III.

ITAAC Completion Description

Hydrostatic tests are performed to verify that the piping identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.3.10-2 (Attachment A) as American Society of Mechanical Engineers (ASME) Code Section III retains its pressure boundary integrity at its design pressure. This ITAAC verifies that the piping identified in Attachment A fully meets all applicable ASME Boiler & Pressure Vessel Code Section III (Reference 1) requirements and retains its pressure boundary integrity at its design pressure.

A hydrostatic test is performed in accordance with procedure XYZ (as applicable) that complies with Reference 1 requirements to demonstrate that the piping identified in Attachment A as ASME Code Section III retains its pressure boundary integrity at its design pressure. The hydrostatic test verifies that there are no leaks at welds or piping, and that the pressure boundary integrity is retained at its design pressure.

The hydrostatic testing results of the pipe lines are documented in the Hydrostatic Testing Report(s). The Hydrostatic Testing Report(s) supports completion of the ASME Section III N-5 Code Data Report(s) XXX (Reference 2) identified in Attachment A for the applicable piping system (i.e., Liquid Radwaste System (WLS)).

The applicable ASME Section III N-5 Code Data Reports identified in Attachment A exist and document that the results of the hydrostatic testing of the piping identified in VEGP Unit 3 COL

Appendix C Table 2.3.10-2 as ASME Code Section III conform with the requirements of the ASME Code Section III. The N-5 Code Data Reports identified in Attachment A are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III requirements as described in VEGP 3&4 Updated Final Safety Analysis Report, Section 5.2.1, Compliance with Codes and Code Cases
- 2. ASME Section III N-5 Code Data Report(s) XXX for the Liquid Radwaste System
- 3. ITAAC 2.3.10.04b Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from VEGP Unit 3 COL Appendix C - Table 2.3.10-2

Line Name	Line No.	ASME Code Section III	N-5 Code Data Report
WLS Drain from PXS Compartment A	WLS-PL-L062	Yes	XXX
WLS Drain from PXS Compartment B	WLS-PL-L063	Yes	XXX
WLS Drain from CVS Compartment	WLS-PL-L061	Yes	XXX

Subject: Uncompleted ITAAC 2.3.10.06b [Index No. 442]

ITAAC Statement

Design Commitment

6.b) Check valves in drain lines to the containment sump limit cross flooding of compartments.

Inspections/Tests/Analyses

Refer to item 9 in this table.

Acceptance Criteria

Refer to item 9 in this table.

ITAAC Completion Description

This ITAAC Design Commitment is met by reference to ITAAC item 9 in VEGP Unit 3 Combined License (COL) Appendix C Table 2.3.10-4. Item 9 demonstrates testing of the Liquid Radwaste System (WLS) check valves with active safety functions identified in VEGP Unit 3 COL Appendix C Table 2.3.10-1.

The ITAAC Closure Notification (Reference 1) for item 9 in VEGP Unit 3 COL Appendix C Table 2.3.10-4 summarizes the methodology for conducting the Inspections/Tests/Analyses and the results that demonstrate that the acceptance criteria are satisfied. This closure notification is submitted to the NRC when the supporting ITAAC closure activities are complete.

The records (Tests, Reports, Completed Procedures, Completed Analyses, etc.) that form the ITAAC determination basis are referenced in the closure notification for Item 9 of VEGP Unit 3 COL Appendix C Table 2.3.10-4 and are available for NRC inspection as part of the ITAAC Completion Package (Reference 2).

List of ITAAC Findings

- 1. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.3.10.09 [Index No. 447]
- 2. ITAAC 2.3.10.06b Completion Package
- 3. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.5.01.05 [Index No. 520]

ITAAC Statement

Design Commitment

5. The DAS manual actuation of ADS, IRWST injection, and containment recirculation can be executed correctly and reliably.

Inspections/Tests/Analyses

See ITAAC Table 3.2-1, item. 1.

Acceptance Criteria

See ITAAC Table 3.2-1, item. 1.

ITAAC Completion Description

This ITAAC Design Commitment is shown to be met by reference to ITAAC Items 1a, 1b, 1c.i, 1c.ii, 1d, and 1e in VEGP Unit 3 Combined License (COL) Appendix C Table 3.2.-1 [sic]. Item 1a demonstrates an evaluation of the implementation of the Human-System Interface (HSI) task support verification. Item 1b demonstrates an evaluation of the implementation of the Human Factors Engineering (HFE) design verification. Item 1c.i demonstrates an evaluation of the implementation of the integrated system validation. Item 1c.ii demonstrates tests and analyses of the following plant evolutions and transients: Normal plant heatup and startup to 100% power, Normal plant shutdown and cooldown to cold shutdown, Transients: reactor trip and turbine trip, and Accidents: Small-break Loss of Coolant Accident (LOCA), Large-break LOCA, Steam line break, Feedwater line break, and Steam generator tube rupture, using a facility that physically represents the Main Control Room (MCR) configuration and dynamically represents the MCR HSI and the operating characteristics and responses of the AP1000 design. Item 1d demonstrates an evaluation of the implementation of the plant HFE/HSI (as designed at the time of plant startup) verification.

The ITAAC Closure Notifications (Reference 1, 2, 3, 4, 5, and 6) for items 1a,1b,1c.i,1c.ii, 1d, and 1e in VEGP Unit 3 COL Appendix C Table 3.2.-1 [sic] summarize the methodology for conducting the Inspections/Tests/Analyses and the results that demonstrate that the acceptance criteria are satisfied. These closure notifications are submitted to the NRC when the supporting ITAAC closure activities are complete.

The records (Tests, Reports, Completed Procedures, Completed Analyses, etc.) that form the ITAAC determination basis are referenced in the closure notifications for Item 1a,1b,1c.i,1c.ii, 1d, and 1e of VEGP Unit 3 COL Appendix C Table 3.2.-1 [sic] and are available for NRC inspection as part of the ITAAC Completion Package (Reference 6).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 3.2.00.01a [Index No. 739]
- 2. ND-XX-XXXX ITAAC Closure Notification on Completion of 3.2.00.01b [Index No. 740]
- 3. ND-XX-XXXX ITAAC Closure Notification on Completion of 3.2.00.01c.i [Index No. 741]
- 4. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 3.2.00.01c.ii [Index No. 742]
- 5. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 3.2.00.01d [Index No. 743]
- 6. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 3.2.00.01e [Index No. 744]
- 7. ITAAC 2.5.01.05 Completion Package
- 8. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.6.01.04b [Index No. 585]

ITAAC Statement

Design Commitment

4.b) The 6900 Vac circuit breakers in switchgear ECS-ES-1 and ECS-ES-2 open after receiving a signal from the onsite standby power load system.

Inspections/Tests/Analyses

See ITAAC Table 2.6.4-1, item 2.a.

Acceptance Criteria

See ITAAC Table 2.6.4-1, item 2.a.

ITAAC Completion Description

This ITAAC Design Commitment is met by reference to ITAAC item 2.a in VEGP Unit 3 Combined License (COL) Appendix C Table 2.6.4-1. Item 2.a demonstrates tests on the asbuilt Onsite Standby Power System (ZOS) by providing a simulated loss-of-voltage signal to the system.

The ITAAC Closure Notification (Reference 1) for item 2.a in VEGP Unit 3 COL Appendix C Table 2.6.4-1 summarizes the methodology for conducting the Inspections/Tests/Analyses and the results that demonstrate that the acceptance criteria are satisfied. This closure notification is submitted to the NRC when the supporting ITAAC closure activities are complete.

The records (Tests, Reports, Completed Procedures, Completed Analyses, etc.) that form the ITAAC determination basis are referenced in the closure notification for Item 2.a of VEGP Unit 3 COL Appendix C Table 2.6.4-1 and are available for NRC inspection as part of the ITAAC Completion Package (Reference 2).

List of ITAAC Findings

- ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.04.02a [Index No. 622]
- 2. ITAAC 2.6.01.04b Completion Package
- 3. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.6.05.02.i [Index No. 628]

ITAAC Statement

Design Commitment

2. The ELS has six groups of emergency lighting fixtures located in the MCR and at the RSW. Each group is powered by one of the Class 1E inverters. The ELS has four groups of panel lighting fixtures located on or near safety panels in the MCR. Each group is powered by one of the Class 1E inverters in Divisions B and C (one 24-hour and one 72-hour inverter in each Division).

Inspections/Tests/Analyses

i) Inspection of the as-built system will be performed.

Acceptance Criteria

i) The as-built ELS has six groups of emergency lighting fixtures located in the MCR and at the RSW. The ELS has four groups of panel lighting fixtures located on or near safety panels in the MCR.

ITAAC Completion Description

Multiple ITAAC are performed to demonstrate that the Lighting System (ELS) has six groups of emergency lighting fixtures located in the Main Control Room (MCR) and at the Remote Shutdown Workstation (RSW). Each group is powered by one of the Class 1E inverters. The ELS has four groups of panel lighting fixtures located on or near safety panels in the MCR. Each group is powered by one of the Class 1E inverters in Divisions B and C (one 24-hour and one 72-hour inverter in each Division). The subject ITAAC requires that an inspection of the as-built ELS be performed to verify that the as-built ELS has six groups of emergency lighting fixtures located in the MCR and at the RSW, and that the ELS has four groups of panel lighting fixtures located on or near safety panels in the MCR.

The inspection is performed in accordance with Inspection Procedure XYZ (Reference 1), which requires the preparation of a detailed inspection plan, performance of visual observations that compare the as-built installation to the design, and documentation of the visual observations.

The inspection is documented in Inspection Report XXX (Reference 2) and verifies that the asbuilt ELS has six groups of emergency lighting fixtures located in the MCR and at the RSW, and that the ELS has four groups of panel lighting fixtures located on or near safety panels in the MCR. This inspection report is available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

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

associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. Inspection Procedure XYZ
- 2. Inspection Report XXX
- 3. ITAAC 2.6.5.02.i Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.6.05.03.i [Index No. 630]

ITAAC Statement

Design Commitment

3. The lighting fixtures located in the MCR utilize seismic supports.

Inspections/Tests/Analyses

i) Inspection will be performed to verify that the lighting fixtures located in the MCR are located on the Nuclear Island.

Acceptance Criteria

i) The lighting fixtures located in the MCR are located on the Nuclear Island.

ITAAC Completion Description

Multiple ITAAC are performed to verify the lighting fixtures located in the Main Control Room (MCR) utilize seismic supports. The subject ITAAC requires an inspection of the lighting fixtures located in the MCR to verify that the lighting fixtures are located on the Nuclear Island.

The inspection is completed in accordance with Inspection Procedure XYZ (Reference 1), which requires the preparation of a detailed inspection plan, performance of visual observations that compare the as-built installation to approved design drawings, and documentation of the visual observations.

The inspection results are documented in Inspection Report XXX (Reference 2) and verify that the lighting fixtures located in the MCR are located on the Nuclear Island. This inspection report is available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. Inspection Procedure XYZ
- 2. Inspection Report XXX
- 3. ITAAC 2.6.05.03.i Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.6.05.03.ii [Index No. 631]

ITAAC Statement

Design Commitment

3. The lighting fixtures located in the MCR utilize seismic supports.

Inspections/Tests/Analyses

ii) Analysis of seismic supports will be performed.

Acceptance Criteria

ii) A report exists and concludes that the seismic supports can withstand seismic design basis loads.

ITAAC Completion Description

Multiple ITAAC are performed to verify the lighting fixtures located in the Main Control Room (MCR) utilize seismic supports. The subject ITAAC requires that an analysis be performed to verify that the seismic supports for the lighting fixtures located in the MCR can withstand seismic design basis loads.

A seismic analysis is performed to confirm that the MCR lighting fixture seismic supports meet Seismic Category I requirements as identified in VEGP 3&4 Updated Final Safety Analysis Report, Table 3.7.3-1, Seismic Category I Equipment Outside Containment by Room Number, (Reference 1).

The results of the MCR lighting fixture seismic support analysis exist and are documented in the MCR Lighting Fixture Support Seismic Analysis Report (Reference 2). The report concludes that the MCR lighting fixture seismic supports can withstand seismic design basis loads, and is available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

- 1. VEGP 3&4 Updated Final Safety Analysis Report, Table 3.7.3-1, Seismic Category I Equipment Outside Containment by Room Number
- 2. MCR Lighting Fixture Support Seismic Analysis Report
- 3. ITAAC 2.6.05.03.ii Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 2.7.01.05.i [Index No. 684]

ITAAC Statement

Design Commitment

5. The seismic Category I equipment identified in Table 2.7.1-1 can withstand seismic design basis loads without loss of safety function.

Inspections/Tests/Analyses

i) Inspection will be performed to verify that the seismic Category I equipment identified in Table 2.7.1-1 is located on the Nuclear Island.

Acceptance Criteria

i) The seismic Category I equipment identified in Table 2.7.1-1 is located on the Nuclear Island.

ITAAC Completion Description

Multiple ITAAC are performed to demonstrate that the seismic Category I equipment identified in VEGP Unit 3 Combined License (COL) Appendix C Table 2.7.1-1 (Attachment A) can withstand seismic design basis loads without loss of safety function. The subject ITAAC requires an inspection to verify that the seismic Category I equipment identified in Attachment A is located on the Nuclear Island, which is a Seismic Category I structure.

To assure that seismic Category I equipment can withstand seismic design basis loads without loss of safety function, all of the equipment in VEGP Unit 3 COL Appendix C Table 2.7.1-1 is designed to be located on the seismic Category I Nuclear Island. In accordance with Inspection Procedure XYZ (Reference 1), an inspection is conducted of the equipment identified in Attachment A to confirm the satisfactory installation of the seismically qualified equipment. The inspection includes verification of the equipment make/model/serial number and verification of the as-built equipment location (Building, Elevation, Room). The inspection of the component locations is documented in Inspection Reports (Reference 2).

Attachment A identifies the Inspection Reports which verify that the installed locations of the Seismic Category I equipment identified in VEGP Unit 3 COL Appendix C Table 2.7.1-1 are located on the Nuclear Island. The Inspection Reports are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

- 1. Inspection Procedure XYZ
- 2. Inspection Reports as identified in Attachment A
- 3. ITAAC 2.7.01.05.i Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from COL Appendix C Table 2.7.1-1 ITAAC COMPLIANCE MATRIX FOR SEISMIC CATEGORY I EQUIPMENT (VARIOUS SYSTEMS SERVING MAIN CONTROL ROOM)

Equipment Name	Tag No.	Seismic Cat.	Inspection Report
MCR Supply Air Isolation Valve	VBS-PL-V186	Yes	XXX
MCR Supply Air Isolation Valve	VBS-PL-V187	Yes	XXX
MCR Return Air Isolation Valve	VBS-PL-V188	Yes	XXX
MCR Return Air Isolation Valve	VBS-PL-V189	Yes	· XXX
MCR Exhaust Air Isolation Valve	VBS-PL-V190	Yes	XXX
MCR Exhaust Air Isolation Valve	VBS-PL-V191	Yes	XXX
PWS MCR Isolation Valve	PWS-PL-V418	Yes	XXX
PWS MCR Isolation Valve	PWS-PL-V420	Yes	XXX
PWS MCR Vacuum Relief	PWS-PL-V498	Yes	XXX
MCR SDS (Vent) Isolation Valve	SDS-PL-V001	Yes	XXX
MCR SDS (Vent) Isolation Valve	SDS-PL-V002	Yes	XXX
MCR WWS Isolation Valve	WWS-PL-V506	Yes	XXX

Subject: Uncompleted ITAAC 2.7.01.07 [Index No. 689]

ITAAC Statement

Design Commitment

7. The VBS and SDS provide the safety-related function to isolate the pipe that penetrates the MCR pressure boundary.

Inspections/Tests/Analyses

See item 10.b in this table.

Acceptance Criteria

See item 10.b in this table.

ITAAC Completion Description

This ITAAC Design Commitment is met by reference to ITAAC item 10.b in VEGP Unit 3 Combined License (COL) Appendix C Table 2.7.1-4. Item 10.b demonstrates testing of the valves identified in VEGP Unit 3 COL Appendix C Table 2.7.1-1 as having Protection and Safety Monitoring System (PMS) control. The testing is performed using real or simulated signals into the PMS.

The ITAAC Closure Notification (Reference 1) for item 10.b in VEGP Unit 3 COL Appendix C Table 2.7.1-4 summarizes the methodology for conducting the Inspections/Tests/Analyses and the results that demonstrate that the acceptance criteria are satisfied. This closure notification is submitted to the NRC when the supporting ITAAC closure activities are complete.

The records (Tests, Reports, Completed Procedures, Completed Analyses, etc.) that form the ITAAC determination basis are referenced in the closure notification for Item 10.b of VEGP Unit 3 COL Appendix C Table 2.7.1-4 and are available for NRC inspection as part of the ITAAC Completion Package (Reference 2).

List of ITAAC Findings

- 1. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.7.01.10b [Index No. 696]
- 2. ITAAC 2.7.01.07 Completion Package
- 3. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Subject: Uncompleted ITAAC 3.5.00.01.i [Index No. 823]

ITAAC Statement

Design Commitment

1. The seismic Category I equipment identified in Table 3.5-1 can withstand seismic design basis loads without loss of safety function.

Inspections/Tests/Analyses

i) Inspection will be performed to verify that the seismic Category I equipment identified in Table 3.5-1 is located on the Nuclear Island.

Acceptance Criteria

i) The seismic Category I equipment identified in Table 3.5-1 is located on the Nuclear Island.

ITAAC Completion Description

Multiple ITAAC are performed to demonstrate that the seismic Category I equipment identified in VEGP Unit 3 Combined License (COL) Appendix C Table 3.5-1 (Attachment A) can withstand seismic design basis loads without loss of safety function. The subject ITAAC requires an inspection to verify that the seismic Category I equipment identified in Table 3.5-1 is located on the Nuclear Island, which is a Seismic Category I structure.

To assure that seismic Category I equipment can withstand seismic design basis loads without loss of safety function, all of the equipment in VEGP Unit 3 COL Appendix C Table 3.5-1 is designed to be located on the seismic Category I Nuclear Island. In accordance with Inspection Procedure XYZ (Reference 1), an inspection is conducted of the Radiation Monitoring equipment identified in VEGP Unit 3 COL Appendix C Table 3.5-1 to confirm the satisfactory installation of the seismically qualified equipment. The inspection includes verification of the equipment make/model/serial number and verification of the as-built equipment location (Building, Elevation, Room). The inspection of the component locations is documented in Inspection Reports (Reference 2).

Attachment A identifies the Inspection Reports which verify that the installed location of the Seismic Category I equipment identified in VEGP Unit 3 COL Appendix C Table 3.5-1 is located on the Nuclear Island. The Inspection Reports are available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

- 1. Inspection Procedure XYZ
- 2. Inspection Reports as identified in Attachment A
- ITAAC 3.5.00.01.i Completion Package
 NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Excerpt from COL Appendix C Table 3.5-1 ITAAC COMPLIANCE MATRIX FOR SEISMIC CATEGORY I EQUIPMENT

(RADIATION MONITORING)

Equipment Name	Tag No.	Seismic Cat.	Inspection Report
Containment High Range Monitor	PXS-RE160	Yes	XXX
Containment High Range Monitor	PXS-RE161	Yes	XXX
Containment High Range Monitor	PXS-RE162	Yes	XXX
Containment High Range Monitor	PXS-RE163	Yes	XXX
MCR Radiation Monitoring Package A ⁽¹⁾	VBS-JS01A	Yes	XXX
MCR Radiation Monitoring Package B ⁽¹⁾	VBS-JS01B	Yes	XXX
Containment Atmosphere Monitor (Gaseous)	PSS-RE026	Yes	XXX
Containment Atmosphere Monitor (particulate, for RCS pressure boundary leakage detection)	PSS-RE027	Yes	XXX

Notes: (1) Each MCR Radiation Monitoring Package includes particulate, iodine and gaseous radiation monitors.

Subject: Uncompleted ITAAC 3.5.00.06 [Index No. 831]

ITAAC Statement

Design Commitment

6. The effluent radiation monitors listed in Table 3.5-3 are provided.

Inspections/Tests/Analyses

Inspection for the existence of the monitors will be performed.

Acceptance Criteria

Each of the monitors listed in Table 3.5-3 exists.

ITAAC Completion Description

Inspections for the existence of radiation monitors are performed to verify that the effluent radiation monitors listed in VEGP Unit 3 Combined License (COL) Appendix C Table 3.5-3 (Attachment A) are provided.

Walkdown inspections of the as-built effluent radiation monitors are conducted between construction and pre-operational testing to confirm that each of the monitors listed in VEGP Unit 3 COL Appendix C Table 3.5-3 exist in the component locations shown in VEGP Unit 3 COL Appendix C Table 3.5-7 (Attachment B). The inspections involve visual observations of the effluent radiation monitors and verification that the monitors are installed in their specified locations. The make/model and other nameplate data of the monitors is also inspected and compared to that specified in design documents to verify that the installed radiation monitors have the appropriate nominal detection ranges, as identified in VEGP 3&4 Updated Final Safety Analysis Report, Table 11.5-1, Radiation Monitor Detector Parameters (Reference 1), to provide indication of unusual radiological events.

The walkdown inspections are documented in Walkdown Inspection Report XXX (Reference 2) and confirm that the effluent radiation monitors listed in VEGP Unit 3 COL Appendix C Table 3.5-3 exist and are located in the component locations shown in VEGP Unit 3 COL Appendix C Table 3.5-7. The Walkdown Inspection Report is available for NRC inspection as part of the ITAAC Completion Package (Reference 3).

List of ITAAC Findings

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

associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

- 1. VEGP 3&4 Updated Final Safety Analysis Report, Table 11.5-1, Radiation Monitor Detector Parameters
- 2. Walkdown Inspection Report XXX for the Effluent Radiation Monitors
- 3. ITAAC 3.5.00.06 Completion Package
- 4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: COL Appendix C Table 3.5-3

Table 3.5-3 Effluent Radiation Monitors			
Equipment List	Equipment No.		
Plant Vent (Normal Range Particulate)	VFS-RE101		
Plant Vent (Normal Range Iodine)	VFS-RE102		
Plant Vent (Normal Range Radiogas)	VFS-RE103		
Plant Vent (Mid Range Radiogas)	VFS-RE104A		
Plant Vent (High Range Radiogas)	VFS-RE104B		
Turbine Island Vent ⁽¹⁾	TDS-RE001		
Liquid Radwaste Discharge	WLS-RE229		
Wastewater Discharge	WWS-RE021		

Note:

1. The turbine island vent includes a low and a high range detector.

Attachment B: Excerpt from COL Appendix C Table 3.5-7

Component Name	Tag No.	Component Location
Plant Vent (Normal Range Particulate) Radiation Monitor	VFS-RE101	Auxiliary Building
Plant Vent (Normal Range Iodine) Radiation Monitor	VFS-RE102	Auxiliary Building
Plant Vent (Normal Range Radiogas) Radiation Monitor	VFS-RE103	Auxiliary Building
Plant Vent (Mid Range Radiogas) Radiation Monitor	VFS-RE104A	Auxiliary Building
Plant Vent (High Range Radiogas) Radiation Monitor	VFS-RE104B	Auxiliary Building
Turbine Island Vent Radiation Monitor	TDS-RE001	Turbine Building
Liquid Radwaste Discharge Monitor	WLS-RE229	Radwaste Building
Wastewater Discharge Radiation Monitor	WWS-RE021	Turbine Building