

SEP 23 2019

Docket Nos.: 52-025
52-026ND-19-1138
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 and Unit 4
Notice of Uncompleted ITAAC 225-days Prior to Initial Fuel Load
Item 2.2.02.07b.i [Index Number 138]

Ladies and Gentlemen:

Pursuant to 10 CFR 52.99(c)(3), Southern Nuclear Operating Company hereby notifies the NRC that as of September 23, 2019, Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4 Uncompleted Inspections Tests Analyses and Acceptance Criteria (ITAAC) Item 2.2.02.07b.i [Index Number 138] has not been completed greater than 225-days prior to initial fuel load. The Enclosure describes the plan for completing this ITAAC. 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.

Southern Nuclear Operating Company (SNC) previously submitted Notice of Uncompleted ITAAC 225-days Prior to Initial Fuel Load for Item 2.2.02.07b.i [Index Number 138] ND-18-1573 [ML19030A201], dated Jan. 29, 2019. This resubmittal supersedes ND-18-1573 in its entirety.

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)(3) 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.

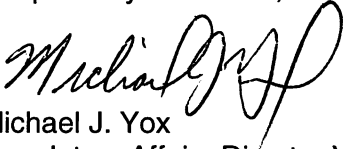
If there are any questions, please contact Tom Petrak at 706-848-1575.

U.S. Nuclear Regulatory Commission

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Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael J. Yox". The signature is fluid and cursive, with the first name "Michael" being more legible than the last name "Yox".

Michael J. Yox

Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4
Completion Plan for Uncompleted ITAAC 2.2.02.07b.i [Index Number 138]

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Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4
Completion Plan for Uncompleted ITAAC 2.2.02.07b.i [Index Number 138]

ITAAC Statement

Design Commitment

- 7.a) The PCS delivers water from the PCCWST to the outside, top of the containment vessel.
- 7.b) The PCS wets the outside surface of the containment vessel. The inside and the outside of the containment vessel above the operating deck are coated with an inorganic zinc material.
- 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.
- 7.d) The PCS drains the excess water from the outside of the containment vessel through the two upper annulus drains.
- 7.e) The PCS provides a flow path for long-term water makeup to the PCCWST.
- 9. Safety-related displays identified in Table 2.2.2-1 can be retrieved in the MCR.
- 10.a) Controls exist in the MCR to cause the remotely operated valves identified in Table 2.2.2-1 to perform active functions.
- 10.b) The valves identified in Table 2.2.2-1 as having PMS control perform an active safety function after receiving a signal from the PMS.
- 11.a) The motor-operated valves identified in Table 2.2.2-1 perform an active safety-related function to change position as indicated in the table.
- 11.b) After loss of motive power, the remotely operated valves identified in Table 2.2.2-1 assume the indicated loss of motive power position.

Inspections/Tests/Analyses

- i) Testing will be performed to measure the PCCWST delivery rate from each one of the three parallel flow paths.
 - ii) Testing and or analysis will be performed to demonstrate the PCCWST inventory provides 72 hours of adequate water flow.
 - i) Testing will be performed to measure the outside wetted surface of the containment vessel with one of the three parallel flow paths delivering water to the top of the containment vessel.
 - ii) Inspection of the containment vessel exterior coating will be conducted.
 - iii) Inspection of the containment vessel interior coating will be conducted.
- Inspections of the air flow path segments will be performed.
- Testing will be performed to verify the upper annulus drain flow performance.

ii) Testing will be performed to measure the delivery rate from the long-term makeup connection to the PCCWST.

Inspection will be performed for retrievability of the safety-related displays in the MCR.

Stroke testing will be performed on the remotely operated valves identified in Table 2.2.2-1 using the controls in the MCR.

Testing will be performed on the remotely operated valves in Table 2.2.2-1 using real or simulated signals into the PMS.

iii) Tests of the motor-operated valves will be performed under preoperational flow, differential pressure, and temperature conditions.

Testing of the remotely operated valves will be performed under the conditions of loss of motive power.

Acceptance Criteria

i) When tested, each one of the three flow paths delivers water at greater than or equal to:

- 469.1 gpm at a PCCWST water level of 27.4 ft + 0.2, - 0.0 ft above the tank floor
- 226.6 gpm when the PCCWST water level uncovers the first (i.e. tallest) standpipe
- 176.3 gpm when the PCCWST water level uncovers the second tallest standpipe
- 144.2 gpm when the PCCWST water level uncovers the third tallest standpipe
- or a report exists and concludes that the as-measured flow rates delivered by the PCCWST to the containment vessel provides sufficient heat removal capability such that the limiting containment pressure and temperature values are not affected and the PCS is able to perform its safety function to remove heat from containment to maintain plant safety.

ii) When tested and/or analyzed with all flow paths delivering and an initial water level at 27.4 + 0.2, - 0.00 ft, the PCCWST water inventory provides greater than or equal to 72 hours of flow, and the flow rate at 72 hours is greater than or equal to 100.7 gpm or a report exists and concludes that the as-measured flow rates delivered by the PCCWST to the containment vessel provides sufficient heat removal capability such that the limiting containment pressure and temperature values are not affected and the PCS is able to perform its safety function to remove heat from containment to maintain plant safety.

i) A report exists and concludes that when the water in the PCCWST uncovers the standpipes at the following levels, the water delivered by one of the three parallel flow paths to the containment shell provides coverage measured at the spring line that is equal to or greater than the stated coverages.

- 24.1 ± 0.2 ft above the tank floor; at least 90% of the perimeter is wetted.
- 20.3 ± 0.2 ft above the tank floor; at least 72.9% of the perimeter is wetted.
- 16.8 ± 0.2 ft above the tank floor; at least 59.6% of the perimeter is wetted.

ii) A report exists and concludes that the containment vessel exterior surface is coated with an inorganic zinc coating above elevation 135'-3".

iii) A report exists and concludes that the containment vessel interior surface is coated with an inorganic zinc coating above the operating deck.

Flow paths exist at each of the following locations:

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

With a water level within the upper annulus $10" \pm 1"$ above the annulus drain inlet, the flow rate through each drain is greater than or equal to 525 gpm.

ii) With a water supply connected to the PCS long-term makeup connection, each PCS recirculation pump delivers greater than or equal to 100 gpm when tested separately.

Safety-related displays identified in Table 2.2.2-1 can be retrieved in the MCR.

Controls in the MCR operate to cause remotely operated valves identified in Table 2.2.2-1 to perform active functions.

The remotely operated valves identified in Table 2.2.2-1 as having PMS control perform the active function identified in the table after receiving a signal from the PMS.

iii) Each motor-operated valve changes position as indicated in Table 2.2.2-1 under preoperational test conditions.

After loss of motive power, each remotely operated valve identified in Table 2.2.2-1 assumes the indicated loss of motive power position.

ITAAC Completion Description

This ITAAC requires inspections, tests, and analyses be performed and documented to ensure the Passive Containment Cooling System (PCS) performs the required safety-related functions, and that the components identified in Combined License (COL) Appendix C, Table 2.2.2-1, (Attachments A – E), meet the applicable criteria of retrievable safety-related displays, be remotely operated, perform the active safety function, and assume the indicated loss of motive power position as indicated in the table.

7.a. i) When tested, each one of the three flow paths delivers water at greater than or equal to:
– 469.1 gpm at a PCCWST water level of 27.4 ft + 0.2, - 0.0 ft above the tank floor
– 226.6 gpm when the PCCWST water level uncovers the first (i.e. tallest) standpipe
– 176.3 gpm when the PCCWST water level uncovers the second tallest standpipe
– 144.2 gpm when the PCCWST water level uncovers the third tallest standpipe
– or a report exists and concludes that the as-measured flow rates delivered by the PCCWST to the containment vessel provides sufficient heat removal capability such that the limiting containment pressure and temperature values are not affected and the PCS is able to perform its safety function to remove heat from containment to maintain plant safety.

The preoperational test is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-PCS-ITPP-502 and 4-PCS-ITPP-502, (References 1 and 2, respectively), to measure the PCCWST delivery rate from each one of the three parallel flow paths. The PCCWST is filled to 58.2%(16.8 ft) and flow is initiated by opening one of the PCCWST outlet lines supplying the water distribution bucket. The outlet line flow instruments are monitored, the

steady-state flow rate is recorded and provides DDD.D (gpm) when the water level uncovers the third tallest standpipe. This is performed for the remaining 2 parallel flow paths and the most limiting flow path measurement is utilized. Level in the PCCWST is then raised to 70.72% (20.3 ft) and flow is initiated by opening one of the PCCWST outlet lines. The outlet line flow instruments are monitored, the steady-state flow rate is recorded and provides CCC.C gpm when the water level uncovers the second tallest standpipe. This is performed for the remaining 2 parallel flow paths and the most limiting flow path measurement is utilized. Level in the PCCWST is then raised to 84.3% (24.1 ft) and flow is initiated by opening one of the PCCWST outlet lines. The outlet line flow instruments are monitored, the steady-state flow rate is recorded and provides BBB.B gpm when the water level uncovers the first (i.e. tallest) standpipe. This is performed for the remaining 2 parallel flow paths and the most limiting flow path measurement is utilized. Level in the PCCWST is then raised to between 96.07% (27.4 ft) and 96.79% (27.6 ft) and flow is initiated by opening one of the PCCWST outlet lines. The outlet line flow instruments are monitored, the steady-state flow is recorded and provides AAA.A gpm with a water level of 27.4 ft + 0.2, - 0.0 ft above the tank floor. This is performed for the remaining 2 parallel flow paths and the most limiting flow path measurement is utilized. The minimum flow rates measured are shown below and demonstrate the acceptance criteria is met for Unit 3:
AAA.A gpm at a PCCWST water level of 27.4 ft + 0.2, - 0.0 ft above the tank floor
BBB.B gpm when the PCCWST water level uncovers the first (i.e. tallest) standpipe
CCC.C gpm when the PCCWST water level uncovers the second tallest standpipe
DDD.D gpm when the PCCWST water level uncovers the third tallest standpipe

The minimum flow rates measured are shown below and demonstrate the acceptance criteria is met for Unit 4:

AAA.A gpm at a PCCWST water level of 27.4 ft + 0.2, - 0.0 ft above the tank floor
BBB.B gpm when the PCCWST water level uncovers the first (i.e. tallest) standpipe
CCC.C gpm when the PCCWST water level uncovers the second tallest standpipe
DDD.D gpm when the PCCWST water level uncovers the third tallest standpipe

These values confirm that the ITAAC acceptance criteria are satisfied or if any flow values do not meet the ITAAC acceptance criteria values, an analysis is performed and a report exists and concludes that the as-measured flow rates delivered by the PCCWST to the containment vessel provides sufficient heat removal capability such that the limiting containment pressure and temperature values are not affected and the PCS is able to perform its safety function to remove heat from containment to maintain plant safety.

7.a.ii) When tested and/or analyzed with all flow paths delivering and an initial water level at 27.4 + 0.2, - 0.00 ft, the PCCWST water inventory provides greater than or equal to 72 hours of flow, and the flow rate at 72 hours is greater than or equal to 100.7 gpm or a report exists and concludes that the as-measured flow rates delivered by the PCCWST to the containment vessel provides sufficient heat removal capability such that the limiting containment pressure and temperature values are not affected and the PCS is able to perform its safety function to remove heat from containment to maintain plant safety.

The preoperational test is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-PCS-ITPP-502 and 4-PCS-ITPP-502, (References 1 and 2), to demonstrate the PCCWST delivery rate at 72 hours is greater than or equal to 100.7 gpm. The test is started with the PCCWST at 27.4 + 0.2, -0.0 ft and all flow paths are opened. After 72 hours the flow rate is taken from all flowing standpipes and summed. The measured flow rate is XXX.X gpm for Unit 3 and YYY.Y gpm for Unit 4 and confirms the ITAAC acceptance criteria have been met. If the flow rate is less than the ITAAC acceptance criteria analysis is performed and a report

exists and concludes that the as-measured flow rates delivered by the PCCWST to the containment vessel provide sufficient heat removal capability such that the limiting containment pressure and temperature values are not affected and the PCS is able to perform its safety function to remove heat from containment to maintain plant safety.

7.b.i) A report exists and concludes that when the water in the PCCWST uncovers the standpipes at the following levels, the water delivered by one of the three parallel flow paths to the containment shell provides coverage measured at the spring line that is equal to or greater than the stated coverages.

- 24.1 ± 0.2 ft above the tank floor; at least 90% of the perimeter is wetted.
- 20.3 ± 0.2 ft above the tank floor; at least 72.9% of the perimeter is wetted.
- 16.8 ± 0.2 ft above the tank floor; at least 59.6% of the perimeter is wetted.

The preoperational test is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-PCS-ITPP-502 and 4-PCS-ITPP-502, (References 1 and 2), to demonstrate the water delivered by one of the three parallel flow paths to the containment shell provides coverage measured in accordance with the acceptance criteria that is equal to or greater than the required coverages. The wetted coverage measurements are performed by obtaining the as-built outer circumference of containment, dividing containment into 32 equal radial segments, measuring the dry portions of each section with a tape measure, and recording the data. The total dry length is divided by the circumference and subtracted from one (1) to convert to percent perimeter wetted. Testing is started by adjusting PCCWST level to 16.8 ± 0.2 ft above the tank floor, opening the PCCWST outlet motor-operated valve (MOV) and monitoring and measuring the linear length of the containment vessel dry perimeter. PCCWST level is then adjusted to 20.3 ± 0.2 ft above the tank floor, the PCCWST outlet MOV is opened and monitoring and measuring the linear length of the containment vessel dry perimeter. PCCWST level is then adjusted to 24.1 ± 0.2 ft above the tank floor, the PCCWST outlet MOV is opened and monitoring and measuring the linear length of the containment vessel dry perimeter. The results of the testing demonstrate for Unit 3 that at 24.1 ± 0.2 ft above the tank floor XX% of the perimeter is wetted, at 20.3 ± 0.2 ft above the tank floor XX.X% of the perimeter is wetted, and at 16.8 ± 0.2 ft above the tank floor XX.X% of the perimeter is wetted. The results of the testing demonstrate for Unit 4 that at 24.1 ± 0.2 ft above the tank floor XX% of the perimeter is wetted, at 20.3 ± 0.2 ft above the tank floor XX.X% of the perimeter is wetted, and at 16.8 ± 0.2 ft above the tank floor XX.X% of the perimeter is wetted. These results conclude that when the water in the PCCWST uncovers the standpipes at the following levels, the water delivered by one of the three parallel flow paths to the containment shell provides coverage measured in accordance with the acceptance criteria that is equal to or greater than the stated coverages.

- 24.1 ± 0.2 ft above the tank floor; at least 90% of the perimeter is wetted.
- 20.3 ± 0.2 ft above the tank floor; at least 72.9% of the perimeter is wetted.
- 16.8 ± 0.2 ft above the tank floor; at least 59.6% of the perimeter is wetted.

7.b.ii) A report exists and concludes that the containment vessel exterior surface is coated with an inorganic zinc coating above elevation 135'-3".

The containment exterior vessel is coated and inspected by individual panels and then the panels are welded together. The seams are coated after welding and inspections are performed to ensure compliance with the requirements for inorganic zinc coatings. The inspections are compiled and reviewed, and a report concludes that the containment vessel exterior surface is coated with an inorganic zinc coating above elevation 135'-3". The inspection reports SV3-PCS-

ITR-XXXX and SV4-PCS-ITR-XXXX, (References 3 and 4), exists and concludes that the containment vessel exterior surface is coated with an inorganic zinc coating above elevation 135'-3".

7.b.iii) A report exists and concludes that the containment vessel interior surface is coated with an inorganic zinc coating above the operating deck.

The containment interior vessel is coated and inspected by individual panels and then the panels are welded together. The seams are coated after welding and inspections are performed to ensure compliance with the requirements for inorganic zinc coatings. The inspections are compiled and reviewed and conclude that the containment vessel exterior surface is coated with an inorganic zinc coating above the operating deck. The inspection reports SV3-PCS-ITR-YYYY and SV4-PCS-ITR-YYYY, (References 5 and 6), exists and concludes that the containment vessel interior surface is coated with an inorganic zinc coating above the operating deck.

7.c) Flow paths exist at each of the following locations:

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

The containment exterior natural circulation airflow path is performed using SV3-PCS-ITR-800141 and SV4-PCS-ITR-800141 (References 7 and 8). Each location is visually inspected to ensure each segment of the airflow path is free of obstructions, the results are documented in the inspection report and validate that the airflow paths exist at the air inlets, base of the outer annulus, base of the inner annulus, and discharge structure.

7.d) With a water level within the upper annulus $10" \pm 1"$ above the annulus drain inlet, the flow rate through each drain is greater than or equal to 525 gpm.

The preoperational test is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-PCS-ITPP-502 and 4-PCS-ITPP-502, (References 1 and 2), to demonstrate the annulus drain flow rate through each drain is greater than or equal 525 gpm when the water level above the drain inlet is $10" \pm 1"$. There are 2 drains in the upper annulus that drain the water that flows down the containment vessel when PCS is actuated. These drains prevent water accumulation around the containment vessel and direct it to the plant waste system. A temporary water box is installed inside the annulus around each drain outlet and marked to show 9" to 11" above each annulus drain. A temporary water source with a calibrated flow instrument is provided and the drains are verified to be clear of obstructions. With the drain plugged, flow is initiated into the temporary water box at a rate of 525 gpm until level reaches $10" \pm 1"$ then the drain is opened and the water flow into the temporary water box is adjusted to maintain the level at $10" \pm 1"$. Since the inflow of water to the temporary water box is at a rate of 525 gpm or greater and maintaining the level between 9 inches and 11 inches, the drain rate is equal to the water inflow rate. Flow readings are taken on the temporary supply at approximately 10-second intervals for 30 readings and averaged. This testing is repeated for the other drain. The flow through the Unit 3 annulus drains is XXX gpm and YYY gpm and XXX gpm and YYY gpm for the Unit 4 annulus drains. These values confirm that each annulus drain flow rate is greater than or equal to 525 gpm with water level in the upper annulus at $10" \pm 1"$.

7.e.ii) With a water supply connected to the PCS long-term makeup connection, each PCS recirculation pump delivers greater than or equal to 100 gpm when tested separately.

The preoperational test is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-PCS-ITPP-502 and 4-PCS-ITPP-502, (References 1 and 2), to demonstrate that, with a water supply connected to the PCS long-term makeup connection, each PCS recirculation pump delivers greater than or equal to 100 gpm when tested separately.

A temporary flow instrument is installed on the recirculation pumps discharge line to the PCCWST to monitor flow. A water source is connected to the long-term makeup connection and the system appropriately aligned to provide a suction path to the PCS recirculation pumps. The A recirculation pump is started, and the recirculation throttle valve is throttled to obtain between 110 gpm and 120 gpm, 30 flow meter readings are recorded at approximately 10-second intervals and the readings are averaged. The B recirculation pump is started, and the A recirculation pump is stopped, and the process is repeated for the B recirculation pump. The Unit 3 A recirculation pump flow is XXX gpm and the B recirculation pump flow is YYY gpm. The Unit 4 A recirculation pump flow is XXX gpm and the B recirculation pump flow is YYY gpm. These values confirm with a water supply connected to the PCS long-term makeup connection, each PCS recirculation pump delivers greater than or equal to 100 gpm when tested separately.

9.) Safety-related displays identified in Table 2.2.2-1 can be retrieved in the MCR.

The inspection is performed in accordance with Unit 3 and Unit 4 component test procedures SV3-ITAAC-ST-2.2.02.07b.i, item 9 and SV4-ITAAC-ST-2.2.02.07b.i, item 9 (References 9 and 10) to demonstrate the safety-related displays identified in Table 2.2.2-1 (Attachment A) can be retrieved in the MCR.

The component test directs using PMS Safety Display A, negotiating to the appropriate screens and verifying the safety-related displays in Attachment A are retrievable. This is repeated for all 3 of the remaining safety-related display panels. The results of the testing confirm the safety-related displays identified in Table 2.2.2-1 can be retrieved in the Unit 3 MCR and the Unit 4 MCR.

10.a) Controls in the MCR operate to cause remotely operated valves identified in Table 2.2.2-1 to perform active functions.

The stroke testing is performed in accordance with Unit 3 and Unit 4 component test procedures SV3-ITAAC-ST-2.2.02.07b.i, 10a and SV4-ITAAC-ST-2.2.02.07b.i, 10a, (References 11 and 12), to demonstrate that controls exist in the MCR and the controls operate to cause the remotely operated valves identified in Table 2.2.2-1 (Attachment B) to perform active functions.

The component test verifies the valves in Attachment B are in the closed position. The valves are stroked to the active function position using controls in the MCR, verified to be in the correct position locally and documented in the test. The test results confirm that controls in Unit 3 and Unit 4 MCR operate to cause remotely operated valves identified in Table 2.2.2-1 to perform active functions.

10.b) The remotely operated valves identified in Table 2.2.2-1 as having PMS control perform the active function identified in the table after receiving a signal from the PMS.

Testing is performed in accordance with Unit 3 and Unit 4 component test packages SNCXXXXXX and SNCYYYYYY (References 13 and 14). These component test packages utilize B-GEN-ITPCI-039 (Reference 15) to direct the performance of Quarterly Valve Stroke Test Procedures 3-GEN-OTS-10-001, 3-GEN-OTS-10-002, 3-GEN-OTS-10-003, 4-GEN-OTS-10-001, 4-GEN-OTS-10-002, and 4-GEN-OTS-10-003, (References 16 through 21), to demonstrate the valves identified in Table 2.2.2-1 (Attachment C) as having PMS control perform their active function after receiving a signal from PMS.

The test verifies the valves in Attachment C are in the closed position. A manual PMS containment cooling initiation signal is actuated, and the valves are verified to go to the open position locally. The test results confirm the remotely operated valves identified in Table 2.2.2-1 as having PMS control for Unit 3 and Unit 4 perform the active function identified in the table after receiving a signal from the PMS.

11.a.iii) Each motor-operated valve changes position as indicated in Table 2.2.2-1 under preoperational test conditions.

The preoperational test is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-PCS-ITPP-502 and 4-PCS-ITPP-502, (References 1 and 2), to demonstrate each motor-operated valve changes position as indicated in Table 2.2.2-1 (Attachment D) under preoperational test conditions.

The test ensures the PCCWST is filled and the PCCWST outlet valves are aligned to support testing. The flow path is aligned to allow the motor-operated valves identified in Attachment D to initiate flow when opened and each motor-operated valve is stroked open under these preoperational test conditions and verified by MCR indication. The test results demonstrate that for Unit 3 and Unit 4 each motor-operated valve changes position as indicated in Table 2.2.2-1 under preoperational test conditions.

11.b) After loss of motive power, each remotely operated valve identified in Table 2.2.2-1 assumes the indicated loss of motive power position.

Testing is performed in accordance with Unit 3 and Unit 4 component test procedures ITAAC: SV3-2.2.02.07b.i, Item 11b and ITAAC: SV4-2.2.02.07b.i, Item 11b, (References 22 and 23), to demonstrate that after a loss of motive power, each valve identified in Table 2.2.2-1 (Attachment E) assumes the indicated loss of motive power position.

The component test configures and documents the air operated valves in the closed position and then removes power to the solenoid valve supplying air to the valve operator. The valve is verified to fail to the open position. Power is restored and the valve is positioned as required by plant conditions. The motor-operated valves are placed in the open position, power is removed, and the valve is verified to still be open (fail as-is). An attempt is made to reposition the valve and it is verified to not change position. Power is restored and the valves are positioned as required by plant conditions. The test results demonstrate that after a loss of motive power, each Unit 3 and Unit 4 remotely operated valve identified in Attachment E assumes the indicated loss of motive power position.

References 1 through 23 are available for NRC inspection as part of the ITAAC 2.2.02.07b.i Completion Packages (References 24 and 25).

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.

References (available for NRC inspection)

1. 3-PCS-ITPP-502, "Passive Containment Cooling System PCCWST Preoperational Test Procedure"
2. 4-PCS-ITPP-502, "Passive Containment Cooling System PCCWST Preoperational Test Procedure"
3. SV3-PCS-ITR-XXXX, "Containment Vessel Exterior Coating Report"
4. SV4-PCS-ITR-XXXX, "Containment Vessel Exterior Coating Report"
5. SV3-PCS-ITR-YYYY, "Containment Vessel Interior Coating Report"
6. SV4-PCS-ITR-YYYY, "Containment Vessel Interior Coating Report"
7. SV3-PCS-ITR-800141, "Unit 3 Passive Containment Cooling System (PCS) Inspection of Air Flow Path Segments"
8. SV4-PCS-ITR-800141, "Unit 4 Passive Containment Cooling System (PCS) Inspection of Air Flow Path Segments"
9. SV3-ITAAC-ST-2.2.02.07b.i, Item 9, "Passive Containment Cooling Indication Verifications"
10. SV4-ITAAC-ST-2.2.02.07b.i, Item 9, "Passive Containment Cooling Indication Verifications"
11. SV3-ITAAC-ST-2.2.02.07b.i, 10a, "Manual Containment Cooling Actuation Test"
12. SV4-ITAAC-ST-2.2.02.07b.i, 10a, "Manual Containment Cooling Actuation Test"
13. SNCXXXXXX
14. SNCYYYYYY
15. B-GEN-ITPCI-039, "PMS CIM Component Test Procedure"
16. 3-GEN-OTS-10-001, "Division A Quarterly Valve Stroke Test"
17. 4-GEN-OTS-10-002, "Division B Quarterly Valve Stroke Test"
18. 3-GEN-OTS-10-003, "Division C Quarterly Valve Stroke Test"
19. 4-GEN-OTS-10-001, "Division A Quarterly Valve Stroke Test"
20. 4-GEN-OTS-10-002, "Division B Quarterly Valve Stroke Test"
21. 4-GEN-OTS-10-003, "Division C Quarterly Valve Stroke Test"
22. ITAAC: SV3-2.2.02.07b.i, Item 11b, "PCCWST Outlet Valve Loss of Motive Force Test"
23. ITAAC: SV4-2.2.02.07b.i, Item 11b, "PCCWST Outlet Valve Loss of Motive Force Test"
24. 2.2.02.07b.i-U3-CP-Rev0, ITAAC Completion Package
25. 2.2.02.07b.i-U4-CP-Rev0, ITAAC Completion Package
26. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A

Excerpt from COL Appendix C Table 2.2.2-1

Component Name	Tag No.	Safety-Related Display
PCCWST Isolation Valve	PCS-PL-V001A	Yes (Valve Position)
PCCWST Isolation Valve	PCS-PL-V001B	Yes (Valve Position)
PCCWST Isolation Valve MOV	PCS-PL-V001C	Yes (Valve Position)
PCCWST Isolation Block MOV	PCS-PL-V002A	Yes (Valve Position)
PCCWST Isolation Block MOV	PCS-PL-V002B	Yes (Valve Position)
PCCWST Isolation Block MOV	PCS-PL-V002C	Yes (Valve Position)
PCS Water Delivery Flow Sensor	PCS-001	Yes
PCS Water Delivery Flow Sensor	PCS-002	Yes
PCS Water Delivery Flow Sensor	PCS-003	Yes
PCS Water Delivery Flow Sensor	PCS-004	Yes
Containment Pressure Sensor	PCS-005	Yes
Containment Pressure Sensor	PCS-006	Yes
Containment Pressure Sensor	PCS-007	Yes
Containment Pressure Sensor	PCS-008	Yes
PCCWST Water Level Sensor	PCS-010	Yes
PCCWST Water Level Sensor	PCS-011	Yes
High-range Containment Pressure Sensor	PCS-012	Yes
High-range Containment Pressure Sensor	PCS-013	Yes
High-range Containment Pressure Sensor	PCS-014	Yes

Attachment B

Excerpt from COL Appendix C Table 2.2.2-1

Component Name	Tag No.	Remotely Operated Valve	Active Function
PCCWST Isolation Valve	PCS-PL-V001A	Yes	Transfer Open
PCCWST Isolation Valve	PCS-PL-V001B	Yes	Transfer Open
PCCWST Isolation Valve MOV	PCS-PL-V001C	Yes	Transfer Open
PCCWST Isolation Block MOV	PCS-PL-V002A	Yes	Transfer Open
PCCWST Isolation Block MOV	PCS-PL-V002B	Yes	Transfer Open
PCCWST Isolation Block MOV	PCS-PL-V002C	Yes	Transfer Open

Attachment C

Excerpt from COL Appendix C Table 2.2.2-1

Component Name	Tag No.	Control PMS/DAS	Remotely Operated Valve	Active Function
PCCWST Isolation Valve	PCS-PL-V001A	Yes/Yes	Yes	Transfer Open
PCCWST Isolation Valve	PCS-PL-V001B	Yes/Yes	Yes	Transfer Open
PCCWST Isolation Valve MOV	PCS-PL-V001C	Yes/Yes	Yes	Transfer Open
PCCWST Isolation Block MOV	PCS-PL-V002A	Yes/No	Yes	Transfer Open
PCCWST Isolation Block MOV	PCS-PL-V002B	Yes/No	Yes	Transfer Open
PCCWST Isolation Block MOV	PCS-PL-V002C	Yes/No	Yes	Transfer Open

Attachment D

Excerpt from COL Appendix C Table 2.2.2-1

Component Name	Tag No.	Active Function
PCCWST Isolation Valve MOV	PCS-PL-V001C	Transfer Open
PCCWST Isolation Block MOV	PCS-PL-V002A	Transfer Open
PCCWST Isolation Block MOV	PCS-PL-V002B	Transfer Open
PCCWST Isolation Block MOV	PCS-PL-V002C	Transfer Open

Attachment E

Excerpt from COL Appendix C Table 2.2.2-1

Component Name	Tag No.	Remotely Operated Valve	Loss of Motive Power position
PCCWST Isolation Valve	PCS-PL-V001A	Yes	Open
PCCWST Isolation Valve	PCS-PL-V001B	Yes	Open
PCCWST Isolation Valve MOV	PCS-PL-V001C	Yes	As Is
PCCWST Isolation Block MOV	PCS-PL-V002A	Yes	As Is
PCCWST Isolation Block MOV	PCS-PL-V002B	Yes	As Is
PCCWST Isolation Block MOV	PCS-PL-V002C	Yes	As Is