

Vogle PEmails

From: Habib, Donald
Sent: Monday, March 25, 2019 12:10 PM
To: Vogle PEmails
Subject: FW: FW: UIN ICN comment status sheet ITAAC Index 145 (March 21 Public Meeting)
Attachments: ITAAC Index 145.pptx

From: Petrak, Tom G. <TGPETRAK@southernco.com>
Sent: Monday, March 25, 2019 11:23 AM
To: Hoellman, Jordan <Jordan.Hoellman2@nrc.gov>
Cc: Welch, Christopher <Christopher.Welch@nrc.gov>; Hall, Victor <Victor.Hall@nrc.gov>; Habib, Donald <Donald.Habib@nrc.gov>; Agee, Stephanie Y. <SYAGEE@southernco.com>
Subject: [External_Sender] FW: UIN ICN comment status sheet ITAAC Index 145 (March 21 Public Meeting)

Jordan,

Attached is material to address the question that was raised about ITAAC Index 145 for this Thursday's NRC public call. Please call if you have any questions.

Thomas G. Petrak

Vogle 3&4 ITAAC Manager
Southern Nuclear Operating Company
7835 River Road, Bldg. 302 - Waynesboro, GA 30830
(706) 848-1575(o)
(706) 833-7581 (c)



From: Habib, Donald <Donald.Habib@nrc.gov>
Sent: Monday, March 25, 2019 9:26 AM
To: Petrak, Tom G. <TGPETRAK@southernco.com>
Cc: Vogle PEmails <Vogle.PEmails@nrc.gov>; Welch, Christopher <Christopher.Welch@nrc.gov>; Hall, Victor <Victor.Hall@nrc.gov>; Agee, Stephanie Y. <SYAGEE@southernco.com>
Subject: RE: UIN ICN comment status sheet ITAAC Index 145 (March 21 Public Meeting)

EXTERNAL MAIL: Caution Opening Links or Files

Tom –

When SNC transmits the document (diagram) to NRC that was discussed at the 3/21 public meeting, please make sure that I am on the cc. This is for the discussion public meeting discussion on 3/28.

Thank you,

Don Habib
U.S. Nuclear Regulatory Commission
Office of New Reactors
Project Manager
NRO/DLSE, Licensing Branch 2
O-8D13
301-415-1035

From: Habib, Donald
Sent: Monday, March 18, 2019 4:37 PM
To: 'Agee, Stephanie Y.' <SYAGEE@southernco.com>; 'tgpetrak@southernco.com' <tgpetrak@southernco.com>
Cc: Vogtle PEmails <Vogtle.PEmails@nrc.gov>; Welch, Christopher <Christopher.Welch@nrc.gov>
Subject: UIN ICN comment status sheet ITAAC Index 145 (March 21 Public Meeting)

Tom – Attached is the UIN/ICN Comment I indicated to you on the phone.

Stephanie – The staff is interested in discussing this item on the public teleconference this week.

Thanks

Don Habib
U.S. Nuclear Regulatory Commission
Office of New Reactors
Project Manager
NRO/DLSE, Licensing Branch 2
O-8D13
301-415-1035

Hearing Identifier: Vogtle_COL_Docs_Public
Email Number: 434

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Subject: FW: FW: UIN ICN comment status sheet ITAAC Index 145 (March 21 Public Meeting)
Sent Date: 3/25/2019 12:09:52 PM
Received Date: 3/25/2019 12:09:57 PM
From: Habib, Donald

Created By: Donald.Habib@nrc.gov

Recipients:
"Vogtle PEmails" <Vogtle.PEmails@nrc.gov>
Tracking Status: None

Post Office: SN4PR0901MB2175.namprd09.prod.outlook.com

Files	Size	Date & Time
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ITAAC Index 145.pptx	837302	

Options
Priority: Standard
Return Notification: No
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Sensitivity: Normal
Expiration Date:
Recipients Received:





Passive Containment Cooling Water Flow Tests ITAAC Index 145

Thomas G. Petrak
ITAAC Manager
03/28/19

Makeup from PCS to SFP

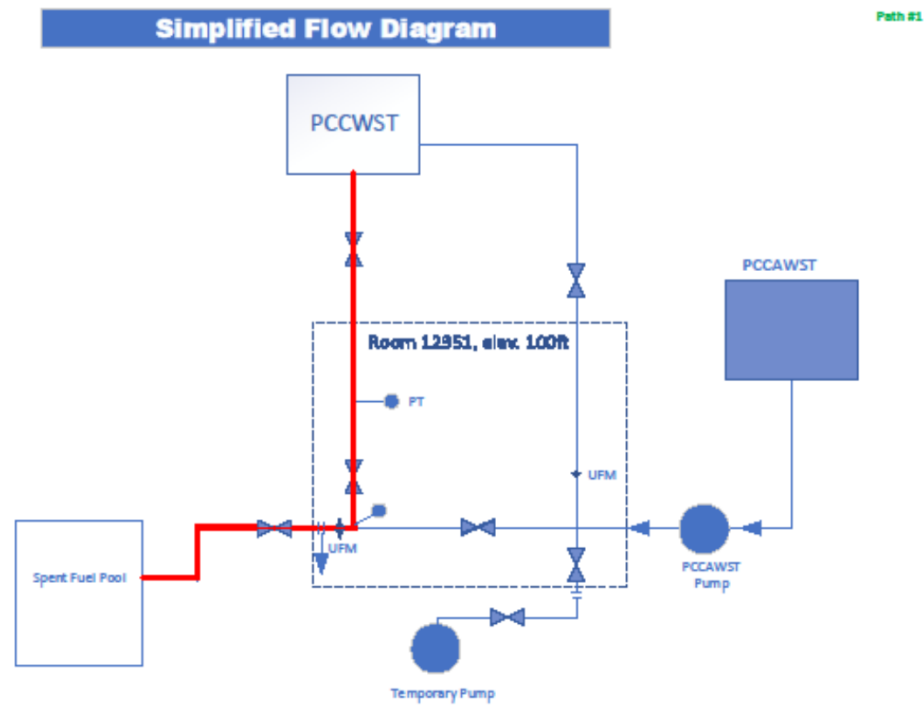
ITAAC Index 145

Design Commitment	Inspections, Test, Analyses	Acceptance Criteria
<p style="text-align: center;">Flow path #1</p> <p>7.f) The PCS provides a flow path for long-term water makeup from the PCCWST to the spent fuel pool.</p>	<p>i) Testing will be performed to measure the delivery rate from the PCCWST to the spent fuel pool.</p>	<p>i) With the PCCWST water level at 27.4 ft + 0.2, - 0.0 ft above the bottom of the tank, the flow path from the PCCWST to the spent fuel pool delivers greater than or equal to 118 gpm.</p>
<p style="text-align: center;">Flow path #2</p> <p>8.b) The PCS delivers water from the PCCAWST to the PCCWST and spent fuel pool simultaneously.</p>	<p>Testing will be performed to measure the delivery rate from the PCCAWST to the PCCWST and spent fuel pool simultaneously.</p>	<p>With PCCAWST aligned to the suction of the recirculation pumps, each pump delivers greater than or equal to 100 gpm to the PCCWST and 35 gpm to the spent fuel pool simultaneously when each pump is tested separately.</p>

Test Strategy

- The Spent Fuel Pool (SFP) will not be available for testing at the time the Passive Containment Cooling Water Storage Tank (PCCWST) is undergoing preoperational testing.
- Each of the PCS flow paths (flow path #1 and flow path #2) will be tested in two segments each. Each segment shares a common point.
- Each test will establish the required acceptance criteria flowrate and the pressure is measured at the common point.
- With measured flowrates established for each segment, a comparison of the measured pressures at common point will determine if the entire flow path meets the ITAAC acceptance criteria.

Flow path #1



UFM – Ultrasonic Flow Meter

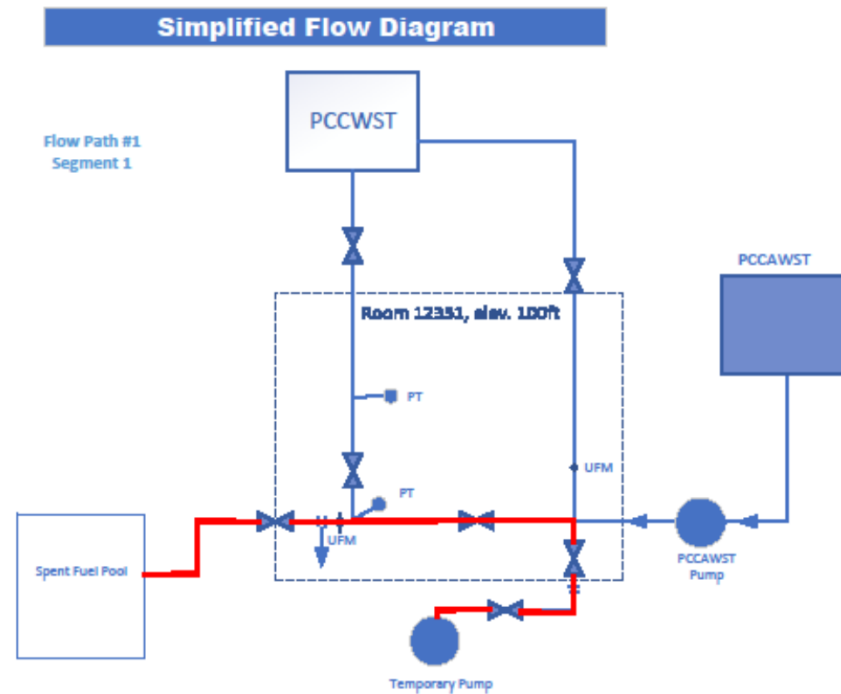
Figure 1

ITAAC 2.2.02.07.i Flow Path

Flow path #1 – Segment #1

- A temporary pump skid is connected to the system upstream of the common point. (See Figure 2)
- A flowrate of ≥ 118 gpm is established to the SFP. A throttle valve on the temporary pump skid is used to establish the acceptance criteria flowrate
- The pressure is measured at the common point.

Flow path #1 – Segment 1



UFM – Ultrasonic Flow Meter

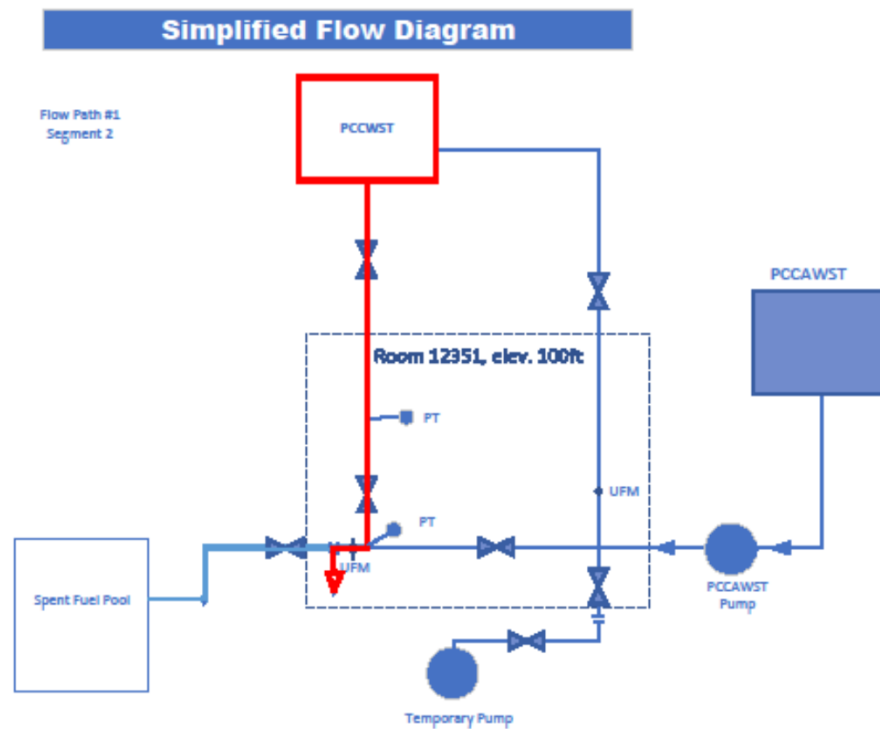
ITAAC 2.2.02.07f Flow Path
8.b SFS Testing

Figure 2

Flow path #1 – Segment #2

- A temporary flow path is established downstream of the common point, creating a flow path away from the SFP (See Figure 3)
- Flow is initiated from the PCCWST past the common point to the temporary flow path. A throttle valve in the temporary flow path is used to establish a flowrate of ≥ 118 gpm
- The ITAAC acceptance criteria for flow path #1 is met when the pressure measure at the common point for segment 2 is \geq the measured pressure at the common point for segment 1.

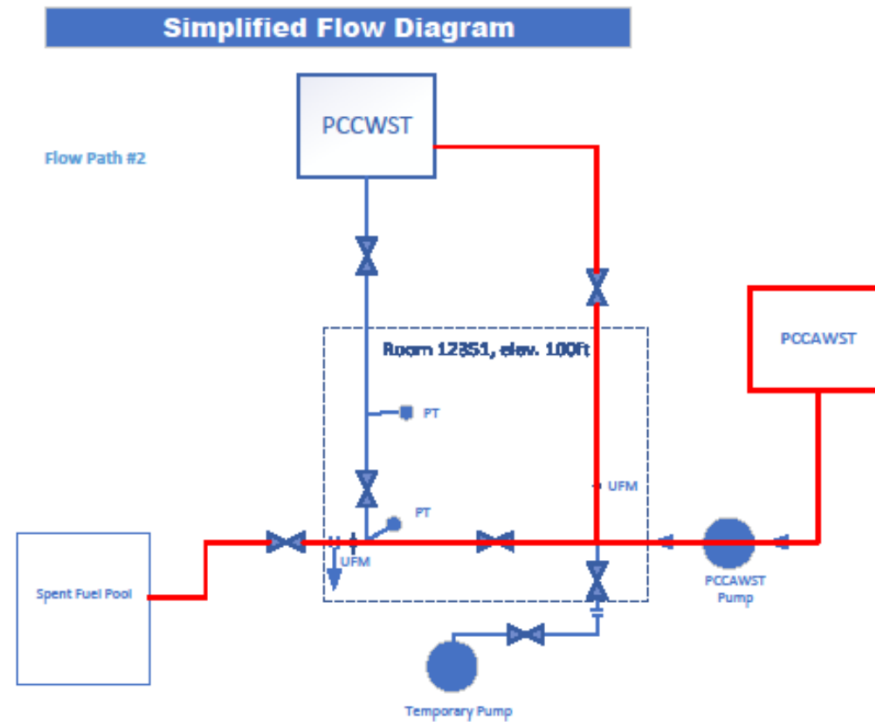
Flow path #1 – Segment 2



UFM – Ultrasonic Flow Meter
ITAAC 2.2.02.07.i
PCC WST Testing

Figure 3

Flow path #2



UFM – Ultrasonic Flow Meter

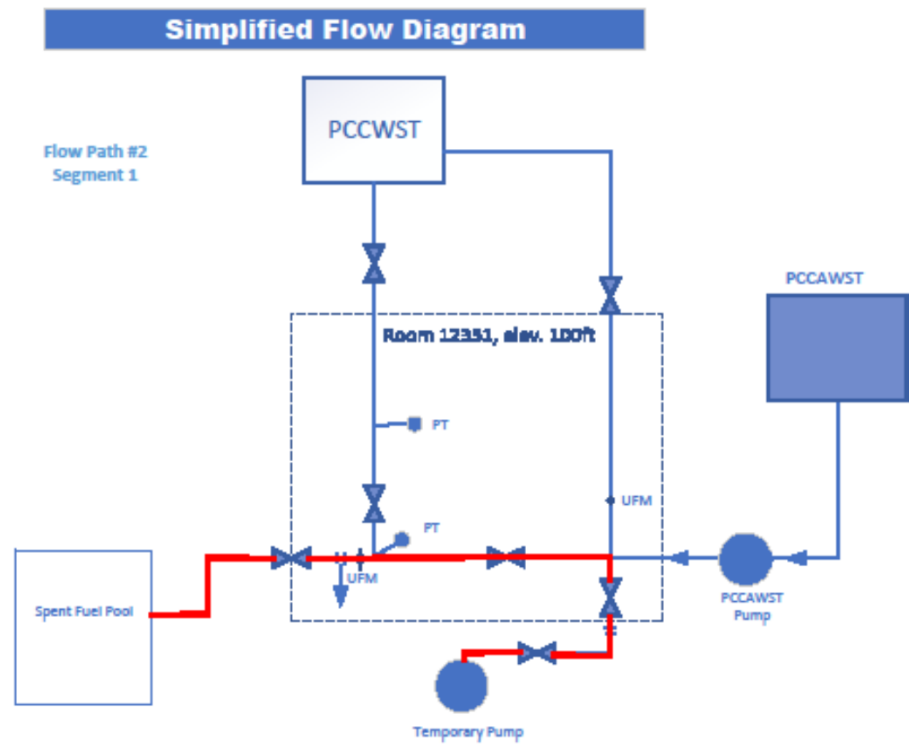
Figure 4

ITAAC 2.2.02.07f.i Flow Path

Flow path #2 – Segment #1

- A temporary pump skid is connected to the system upstream of the common point. (See Figure 5)
- A flowrate of ≥ 35 gpm is established to the SFP. A throttle valve on the temporary pump skid is used to establish the acceptance criteria flowrate
- The pressure is measured at the common point.

Flow path #2 – Segment #1



UFM – Ultrasonic Flow Meter

Figure 5

ITAAC 2.2.02.07f: Flow Path

Flow path #2 – Segment #2

- A temporary flow path is established downstream of the common point, creating a flow path away from the SFP (See Figure 6)
- Flow is initiated from the PCCAWST past the common point to the temporary flow path and to the PCCWST. A throttle valve in the temporary flow path is used to establish a flowrate of ≥ 35 gpm to the temporary flow path and the flow to the PCCWST is measured.
- The ITAAC acceptance criteria for flow path #2 is met when the pressure measure at the common point for segment 2 is \geq the measured pressure at the common point for segment 1 and the flowrate to the PCCWST is ≥ 100 gpm.

Flow path #2 – Segment #2

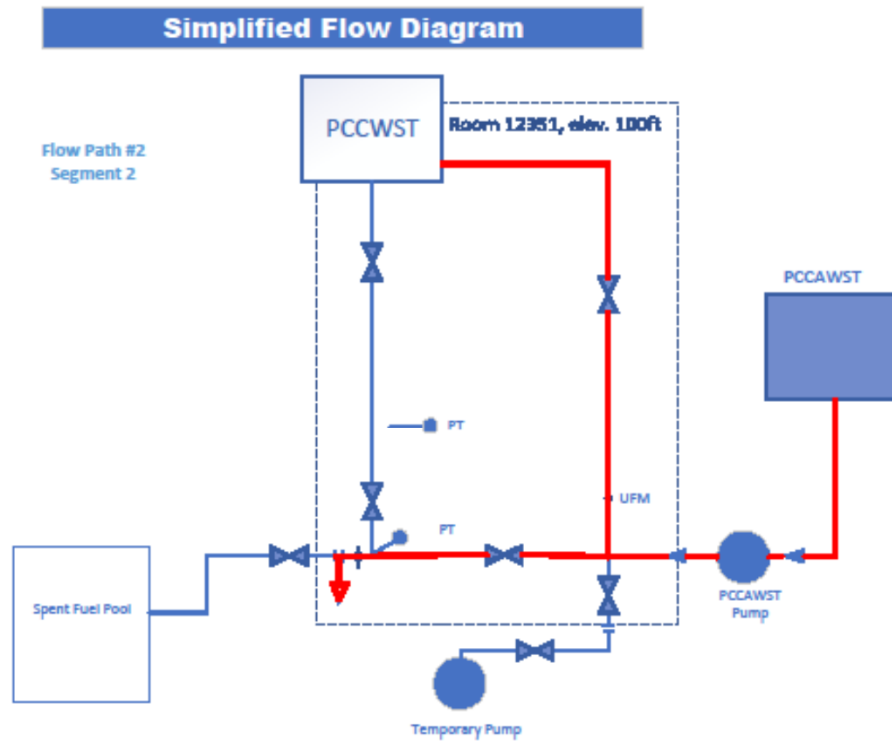


Figure 6

UFM – Ultrasonic Flow Meter

ITAAC 2.2.02.07f Flow Path