# **Vogtle PEmails**

From:	Gleaves, Bill	
Sent:	Tuesday, May 29, 2018 10:16 AM	
То:	Vogtle PEmails	
Cc:	Cusumano, Victor; Sweat, Tarico; Hoellman, Jordan	
Subject:	FW: Vogtle LAR-17-024 Draft RAI No3 3Q 5-29-2018	
Attachments:	Vogtle LAR-17-024 Draft RAI No3 3Q 5-29-2018.pdf	

By this email, I am entering the draft RAI #3 for Vogtle 3&4 LAR-17-024 into public ADAMS.

From: Gleaves, Bill

Sent: Tuesday, May 29, 2018 10:13 AM

To: Henderson, Ryan Donald (RDHENDER@SOUTHERNCO.COM) <RDHENDER@SOUTHERNCO.COM>
Cc: Neil Haggerty - SNC (x2hagge@southernco.com) <x2hagge@southernco.com>; Patel, Chandu
(Chandu.Patel@nrc.gov) <Chandu.Patel@nrc.gov>; Dixon-Herrity, Jennifer <Jennifer.Dixon-Herrity@nrc.gov>; Wes
Sparkman (WASPARKM@southernco.com) <WASPARKM@southernco.com>; Cusumano, Victor
<Victor.Cusumano@nrc.gov>; Sweat, Tarico <Tarico.Sweat@nrc.gov>; Vogtle PEmails <Vogtle.PEmails@nrc.gov>
Subject: Vogtle LAR-17-024 Draft RAI No3 3Q 5-29-2018

Ryan,

Draft RAI No. 3 related to Vogtle Units 3 and 4 LAR 17-024 has been approved and is issued this morning. You received draft RAI #2 on Thursday last week.

You should receive a notification from the US Army "SAFE" file access exchange website AMRDEC (as is NRCs recent practice for transmitting sensitive information) that they have a file for you to download. You will receive an email from that site allowing you to download the file. I will be informed by the AMRDEC when you have successfully downloaded this document.

As we discussed on the phone, I believe a clarification call on Thursday will be important even if everyone is not fully prepared to discuss. I propose that we discuss both draft RAIs on 5.31.18.

Billy William (Billy) Gleaves Senior Project Manager Licensing Branch 4 Office OWFN 8H17 US NRC, Office of New Reactors The contents of this message may be sensitive. If this message has been received in error, please delete it without reading it. Your receipt of this message is not intended to waive any applicable privilege. Do not disseminate this message without the permission of the author. Communications by this author are not binding on The Commission.

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Subject:	FW: Vogtle LAR-17-024 Draft RAI No3 3Q 5-29-2018
Sent Date:	5/29/2018 10:16:12 AM
Received Date:	5/29/2018 10:16:16 AM
From:	Gleaves, Bill

Created By: Bill.Gleaves@nrc.gov

#### **Recipients:**

"Cusumano, Victor" <Victor.Cusumano@nrc.gov> Tracking Status: None "Sweat, Tarico" <Tarico.Sweat@nrc.gov> Tracking Status: None "Hoellman, Jordan" <Jordan.Hoellman2@nrc.gov> Tracking Status: None "Vogtle PEmails" <Vogtle.PEmails@nrc.gov> Tracking Status: None

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Standard
No
No
Normal

# DRAFT

# **Request for Additional Information #3**

### Vogtle 3 & 4 LAR-17-024 "Technical Specification Updates for Reactivity Controls and other Miscellaneous Changes" Issue Date: 05/29/2018 Operating Company: Southern Nuclear Operating Co. Docket No. 52-025 and 52-026 Application Section: Technical Specifications

This request for additional information relates to SNC's application for license amendment request (LAR) 17-024, titled, "Technical Specification Updates for Reactivity Controls and other Miscellaneous Changes," dated July 28, 2017 (ML17209A755) as supplemented January 23 and March 23, 2018 (ML17209A755 and ML18082B370, respectively). By this request, the staff is informing SNC that it requires additional information in order to complete its review.

Title 10, "Energy," of the Code of Federal Regulations (10 CFR) Section 50.36(c)(2)(i), "Limiting conditions for operation," states that limiting conditions for operation (LCO) are the lowest functional capability or performance levels of equipment required for safe operation of the facility. 10 CFR 50.36(c)(2)(ii)(C), "Limiting conditions of operation" Criterion 3 establishes criterion for operation of a nuclear reactor and states, "a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier."

Also, Title 10, "Energy," of the Code of Federal Regulations (10 CFR) Section 50.36(c)(3), "Surveillance requirements," requires, "test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met."

Technical Specification (TS) LCO 3.3.5 requires that the RTS manual actuation channels for each Function in Table 3.3.5-1 shall be OPERABLE. SR 3.3.5.1 requires that the licensee perform a TADOT for each RTS manual actuation channels for each Function in TS Table 3.3.5-1 every 24 months. TS 1.1, "Definitions," states that a TADOT shall consist of operating the trip actuating device and verifying the OPERABILITY of all devices in the channel required for trip actuating device OPERABILITY. Also, SR 3.3.5.1 TS Bases state that the test shall independently verify the OPERABILITY of the undervoltage and shunt trip mechanisms for the Manual Reactor Trip Function for the Reactor Trip Breakers. However, the proposed changes to Table 3.3.5-1, read together with the title of Table 3.3.5-1, Column 3, "REQUIRED CHANNELS," creates an ambiguity in TS 3.3.5 about whether the operability and surveillance requirements apply to the identified equipment within the channels (undervoltage and shunt trip mechanisms) for accomplishing each function identified in Table 3.3.5-1.

### Question 1

Function 1 in Table 3.3.5-1 under the "REQUIRED CHANNELS" column states "2" while LAR-17-024 proposes to change "2" to "2 switches."

- (a) Explain why the proposed amendment does not create the ambiguity described above.
- (b) Additionally, justify how testing "2 switches" verifies all equipment associated with the channel performing the manual reactor trip function, not including reactor trip circuit breakers, is operable.

### Question 2

Function 2 in Table 3.3.5-1 under the "REQUIRED CHANNELS" column states "2" while LAR-17-024 proposes to change "2" to "2 switches."

- (a) Explain why the proposed amendment does not create the ambiguity described in the paragraph preceding Question 1.
- (b) Additionally, justify how testing "2 switches" verifies all equipment associated with the channel performing the Safeguards Actuation Input from Engineered Safety Feature Actuation System - Manual and associated manual reactor trip function, not including reactor trip circuit breakers, is operable.

### Question 3

In regard to Function 4, the Institute of Electrical and Electronic Engineers Standards (page 1035 of Institute of Electrical and Electronic Engineers, IEEE 100, "The Authoritative Dictionary of IEEE Standards Terms," Seventh Edition, 2000) defines a "set" as "*A unit or units and necessary assemblies, subassemblies and basic parts connected or associated together to perform an operational function.*" Accordingly, the term "switch set," as used in Table 3.3.5-1, refers to all the equipment in a required channel, including undervoltage and shunt trip mechanisms.

Function 4 in Table 3.3.5-1 under the "REQUIRED CHANNELS" column states "2 switch sets" while LAR-17-024 proposes to change "2 switch sets" to "2 switches."

- (a) Explain why the proposed amendment does not create the ambiguity described in the paragraph preceding Question 1.
- (b) Additionally, justify how testing "2 switches" verifies all equipment associated with the channel performing the Core Makeup Tank Actuation Input from Engineered Safety Feature Actuation System - Manual and associated manual reactor trip function, not including reactor trip circuit breakers, is operable.