

NRR-DRMAPEm Resource

From: Thomas, Vaughn
Sent: Wednesday, October 23, 2019 1:57 PM
To: Gary D Miller
Cc: Miller, Ed
Subject: RAI for Surry ISTF-411 LAR To Extend Rx Trip Breakers TS CT to 24 Hours
Attachments: RAI Regarding Surry TSTF-411 LAR to Extend Rx Trip Breaker TS CT to 24 Hours.docx

Gary,

Attached is the NRC staff's draft RAI for the subject license amendment request. The question is being transmitted to you to determine 1) if the question clearly convey the NRC informational needs, 2) Whether the regulatory basis for the question is clear, and 3) If the information has already been provided in existing docketed correspondence. Additionally, review of the draft question will allow you to determine whether you are able to support a 30 day response time. After you've had a chance to review the draft request, please contact me to set up that interaction. Thank you.

Vaughn Thomas
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Hearing Identifier: NRR_DRMA
Email Number: 281

Mail Envelope Properties (BN7PR09MB25294FC161E5C263C766E9F0F46B0)

Subject: RAI for Surry ISTF-411 LAR To Extend Rx Trip Breakers TS CT to 24 Hours
Sent Date: 10/23/2019 1:56:34 PM
Received Date: 10/23/2019 1:56:00 PM
From: Thomas, Vaughn

Created By: Vaughn.Thomas@nrc.gov

Recipients:
"Miller, Ed" <Ed.Miller@nrc.gov>
Tracking Status: None
"Gary D Miller" <gary.d.miller@dominionenergy.com>
Tracking Status: None

Post Office: BN7PR09MB2529.namprd09.prod.outlook.com

Files	Size	Date & Time
MESSAGE	661	10/23/2019 1:56:00 PM
RAI Regarding Surry TSTF-411 LAR to Extend Rx Trip Breaker TS CT to 24 Hours.docx		
33090		

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

REQUEST FOR ADDITIONAL INFORMATION
PERTAINING TO
TECHNICAL SPECIFICATION LICENSING AMENDMENT REQUEST FOR
24-HOUR ALLOWED OUTAGE TIME FOR INOPERABLE REACTOR TRIP BREAKERS

APLA RAI 01 – Avoidance of Risk Significant Plant Configurations

RG 1.177, “An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications,” (ADAMS Accession No. ML100910008) states, “[t]he licensee should provide reasonable assurance that risk-significant plant equipment outage configurations will not occur when specific plant equipment is out of service consistent with the proposed TS [technical specification] change.”

The LAR states that the proposed change to the RTB completion time (CT) has been developed using the risk-informed processes described in WCAP-15376-P-A, "Risk-Informed Assessment of the RTS and ESFAS Surveillance Test Intervals and Reactor Trip Breaker Test and Completion Times," Revision 1. LAR Section 3.3 states that a “*detailed review of PRA importance metrics (Risk Achievement Worth, Fussell-Vesely) from the Tier 1 PRA model did not reveal any risk significant maintenance configurations when one RTB [reactor trip breaker] is unavailable.*” Furthermore, LAR Section 6.0 identifies only one system (i.e., Anticipated Transient without Scram (ATWS) Mitigating System Actuation Circuitry (AMSAC)) where no maintenance will be planned while one RTB is inoperable. However, Section 8.5 of WCAP-15376 identifies restrictions that should be placed on certain equipment when an RTB is out of service (i.e., reactor coolant system (RCS) pressure relief system, auxiliary feedwater flow, AMSAC, turbine trip, activities that degrade other components of the Reactor Protection System (RPS) (including master relays or slave relays and activities that cause analog channels to be unavailable), and AC and DC power distributions that support the restricted components). Considering these observations;

Explain how the importance factors were used to assess the risk-significant plant equipment configurations while an RTB is out of service during the extended CT. Include the criteria used (e.g., Risk Achievement Worth (RAW) and Risk Reduction Worth (RRW) threshold values, etc.) to determine risk significance. In the response, also confirm (i.e., include justification) that the unavailability of the systems/components identified in Section 8.5 of WCAP-15376 (i.e., RCS pressure relief system, auxiliary feedwater flow, ASMAC, turbine trip, other RPS components including master and slave relays, and AC and DC power distribution) along with an out-of-service RTB would not create a risk significant configuration.