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10 CFR 50.90

RBG-47983

November 18, 2019

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

Subject: Application to Revise Technical Specification 3.3.5.2, "RPV Water Inventory Control Instrumentation" to Adopt TSTF-425, "Relocate Surveillance Frequencies to Licensee Control - RITSTF Initiative 5b."

River Bend Station, Unit 1
NRC Docket No. 50-458
Renewed Facility Operating License No. NPF-47

In accordance with Title 10 of the Code of Federal Regulations (CFR) Part 50, Section 50.90, "Application for amendment of license, construction permit, or early site permit," Entergy Operations, Inc. (Entergy) is submitting a request for an amendment to Renewed Facility Operating License, Appendix A, "Technical Specifications" (TS) for River Bend Station, Unit 1 (RBS).

The proposed amendment would modify RBS TS 3.3.5.2, "RPV Water Inventory Control Instrumentation" by removing the surveillance frequencies and placing them in a licensee-controlled program through the adoption of Technical Specification Task Force (TSTF)-425, Revision 3, "Relocate Surveillance Frequencies to Licensee Control - RITSTF Initiative 5b." The Enclosure to this letter provides a description and assessment of the proposed change. Attachment 1 to the Enclosure provides the existing TS page marked-up to show the proposed change. Attachment 2 provides the revised TS page. Attachment 3 provides, for information only, a marked-up version of existing TS Bases pages to show the proposed changes.

Approval of the proposed amendment is requested by December 19, 2020. Once approved, the amendment shall be implemented within 90 days.

This letter contains no new regulatory commitments.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), a copy of this license amendment request, with enclosure, is being provided to the designated State Officials.

Should you have any questions or require additional information, please contact Tim Schenk, Regulatory Assurance Manager, River Bend Station at 225-381-4177.

I declare under penalty of perjury, that the foregoing is true and correct.

Executed on November 18, 2019.

Respectfully,

Ron Gaston

RWG/twf

Enclosure: Description and Assessment of the Proposed Change

Attachments to Enclosure:

1. Technical Specification Page Markup
2. Revised Technical Specification Page
3. Technical Specification Bases Pages Markup

cc: NRC Region IV Regional Administrator
NRC Senior Resident Inspector – River Bend Station, Unit 1
Louisiana of Department of Environmental Quality
NRC Project Manager – River Bend Station, Unit 1

Enclosure

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Description and Assessment of the Proposed Change

DESCRIPTION AND ASSESSMENT OF THE PROPOSED CHANGE

1.0 Description

Entergy Operations, Inc. (Entergy) requests a revision to the River Bend Station, Unit 1 (RBS) Technical Specifications (TS) by removing TS 3.3.5.2, "RPV Water Inventory Control Instrumentation" surveillance frequencies and placing them in a licensee-controlled program through the adoption of Technical Specification Task Force (TSTF)-425, Revision 3, "Relocate Surveillance Frequencies to Licensee Control - RITSTF Initiative 5b."

On November 7, 2018, the U.S. Nuclear Regulatory Commission (NRC) approved the adoption of TSTF-542, "Reactor Pressure Vessel Water Inventory Control," at RBS in TS Amendment 193 (Reference 1). This amendment added, in part, a new TS 3.3.5.2, "RPV Water Inventory Control Instrumentation" to Appendix A, "Technical Specifications." The surveillance requirements for this new TS were located on new TS Page 3.3-43c.

On April 29, 2019, the NRC approved the adoption of TSTF-425 into the RBS TS in Amendment 196 (Reference 2). Prior to final approval of Amendment 196, Entergy submitted a supplement to the RBS TSTF-425 license amendment request (Reference 3) that provided revised marked-up TS pages. These revised marked-up TS pages incorporated the changes approved in RBS TS Amendment 193. However, the Reference 3 supplement inadvertently omitted a revised markup of TS page 3.3-43c for the new TS 3.3.5.2 (i.e., "RPV Water Inventory Control Instrumentation") surveillance requirements.

The proposed changes are consistent with NRC approved Industry/TSTF Standard Technical Specifications (STS) change TSTF-425, Revision 3, (NRC Agencywide Documents Access and Management System (ADAMS) Accession No. ML090850642). The Federal Register notice published on July 6, 2009 (74 FR 31996) announced the availability of this TS improvement.

2.0 Assessment

2.1 Applicability of Published Safety Evaluation

Entergy has reviewed the NRC model SE for TSTF-425 provided in Federal Register Notice 74 FR 31996, dated July 6, 2009 and concluded that the justifications presented in the SE are applicable to RBS and justify this change request for incorporation into the RBS TS.

Entergy has determined that relocating the SR frequencies of RBS TS section 3.3.5.2 is consistent with TSTF-425, Revision 3; and with the NRC staff's scope exclusions identified in the model SE.

Specifically, these SR frequencies are not:

1. Frequencies that reference other approved programs for the specific interval (such as the Inservice Testing Program or the Primary Containment Leakage Rate Testing Program).

2. Frequencies that are purely event driven (e.g., "Each time the control rod is withdrawn to the 'full out' position").

3. Frequencies that are event-driven but have a time component for performing the surveillance on a one-time basis once the event occurs (e.g., "within 24 hours after thermal power reaching 95% RTP").

4. Frequencies that are related to specific conditions (e.g., battery degradation, age, and capacity) or conditions for the performance of a surveillance requirement (e.g., "drywall to suppression chamber differential pressure decrease").

Changes to the frequency for these SRs will be controlled under the SFCP in accordance with TSTF-425. The SFCP provides the necessary administrative controls to ensure that SRs related to testing, calibration, and inspection are conducted at a frequency necessary to assure the 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.

Furthermore, TSTF-542 recognizes that the SFCP is acceptable for the SRs of RBS TS section 3.3.5.2.

2.2 Variations

The proposed amendment is consistent with the changes described in TSTF–425, Revision 3.

3.0 Regulatory Analysis

3.1 No Significant Hazards Consideration Analysis

Entergy Operations, Inc (Entergy) has reviewed the proposed no significant hazards consideration (NSHC) determination published in Federal Register 74 FR 32000, dated July 6, 2009. Entergy has concluded that the proposed NSHC presented in the Federal Register notice is applicable to River Bend Station, Unit 1 (RBS), and is provided below. This satisfies the requirements of 10 CFR 50.91(a).

1. Does the proposed change involve a significant increase in the probability or consequences of any accident previously evaluated?

   Response: No

   The proposed change relocates the specified frequencies for periodic surveillance requirements to licensee control under a new Surveillance Frequency Control Program. Surveillance frequencies are not an initiator to any accident previously evaluated. As a result, the probability of any accident previously evaluated is not significantly increased. The systems and components required by the technical specifications for which the surveillance frequencies are relocated are still required to be operable, meet the acceptance criteria for the surveillance requirements, and be capable of performing any mitigation function assumed in the accident analysis. As a result, the consequences of any accident previously evaluated are not significantly increased.

   Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any previously evaluated?

   Response: No

   No new or different accidents result from utilizing the proposed change. The changes do not involve a physical alteration of the plant (i.e., no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. In addition, the changes do not impose any new or different requirements. The changes do not alter assumptions made in the safety analysis. The proposed changes are consistent with the safety analysis assumptions and current plant operating practice.

   Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

   Response: No

   The design, operation, testing methods, and acceptance criteria for systems, structures, and components (SSCs), specified in applicable codes and standards (or alternatives approved for use by the NRC) will continue to be met as described in the plant licensing basis (including the final safety analysis report and bases to TS), since these are not affected by changes to the surveillance frequencies. Similarly, there is no impact to safety analysis acceptance criteria as described in the plant licensing basis. To evaluate a change in the relocated surveillance frequency, Entergy will perform a probabilistic risk evaluation using the guidance contained in NRC approved NEI 04–10, Rev. 1 in accordance with the TS SFCP. NEI 04–10, Rev. 1, methodology provides reasonable acceptance guidelines and methods for evaluating the risk increase of proposed changes to surveillance frequencies consistent with Regulatory Guide 1.177.

   Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

Based upon the reasoning presented above, Entergy concludes that the requested change does not involve a significant hazards consideration as set forth in 10 CFR 50.92(c), Issuance of amendment.

3.2 Precedent

Including the SRs of the TS section "RPV Water Inventory Control Instrumentation" in the SFCP was approved for multiple licensed facilities including; Peach Bottom Units 2 and 3 per License Amendment Nos. 317 and 320, respectively, issued on December 27, 2017 (NRC ADAMS Accession No. ML17325B708), Susquehanna Units 1 and 2 per License Amendment Nos. 271 and 253, respectively, issued on September 26, 2018 (NRC ADAMS Accession No. ML18222A203), and Columbia per License Amendment No. 251 issued on October 30, 2018 (NRC ADAMS Accession No. ML18255A350).

3.3 Conclusion

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

4.0 Environmental Consideration

Entergy has reviewed the environmental consideration included in the NRC's model safety evaluation for TSTF-425 published in the Federal Register on July 6, 2009 (74 FR 32006). Entergy has concluded that the NRC's findings presented therein are applicable to RBS, Unit 1, and the determination is hereby incorporated by reference for this application.

5.0 References

1 U.S. Nuclear Regulatory Commission (NRC) letter to Entergy Operations, Inc. (Entergy), "River Bend Station, Unit 1 – Issuance of Amendment No. 193 RE: Revision to Technical Specifications to Adopt TSTF-542, Revision 2, 'Reactor Pressure Vessel Water Inventory Control' (EPID L-2017-LLA-0383)" (ML18267A341), dated November 7, 2018

2 NRC letter to Entergy "River Bend Station, Unit 1 – Issuance of Amendment RE: Adoption of Technical Specifications Task Force Traveler TSTF-425, Revision 3 (EPID L-2018-LLA-0056)" (ML19066A008), dated April 29, 2019

3 Entergy letter to NRC, "Supplement to Application for Technical Specification Change Regarding Risk-Informed Justification for the Relocation of Specific Surveillance Frequency Requirements to a Licensee Controlled Program (TSTF-425)" (ML19002A115), dated December 20, 2018

ATTACHMENTS

1. Technical Specification Page Markup
2. Revised Technical Specification Page
3. Technical Specification Bases Pages Markup

Enclosure, Attachment 1

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Technical Specification Page Markup

SURVEILLANCE REQUIREMENTS

----------NOTE----------

Refer to Table 3.3.5.2-1 to determine which SRs apply for each ECCS function.

SURVEILLANCE		FREQUENCY
SR 3.3.5.2.1	Perform CHANNEL CHECK.	~~12 hours~~
SR 3.3.5.2.2	Perform CHANNEL FUNCTIONAL TEST.	~~92 days~~
SR 3.3.5.2.3	Perform LOGIC SYSTEM FUNCTIONAL TEST.	~~24 months~~

In accordance with the Surveillance Frequency Control Program

Enclosure, Attachment 2

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Revised Technical Specification Page

SURVEILLANCE REQUIREMENTS

----------NOTE----------

Refer to Table 3.3.5.2-1 to determine which SRs apply for each ECCS function.

SURVEILLANCE		FREQUENCY
SR 3.3.5.2.1	Perform CHANNEL CHECK.	In accordance with the Surveillance Frequency Control Program
SR 3.3.5.2.2	Perform CHANNEL FUNCTIONAL TEST.	In accordance with the Surveillance Frequency Control Program
SR 3.3.5.2.3	Perform LOGIC SYSTEM FUNCTIONAL TEST.	In accordance with the Surveillance Frequency Control Program

Enclosure, Attachment 3

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Technical Specification Bases Pages Markup

BASES (continued)

SURVEILLANCE REQUIREMENTS

An noted in the beginning of the SRs, the SRs for each RPV Water Inventory Control Instrument Function are found in the SRs column of Table 3.3.5.2-1.

SR 3.3.5.2.1

Performance of the CHANNEL CHECK ensures that a gross failure of instrumentation has not occurred. A CHANNEL CHECK is normally a comparison of the parameter indicated on one channel to a similar parameter on other channels. It is based on the assumption that instrument channels monitoring the same parameter should read approximately the same value. Significant deviations between the instrument channels could be an indication of excessive instrument drift in one of the channels or something even more serious. A CHANNEL CHECK guarantees that undetected outright channel failure is limited; thus, it is key to verifying the instrumentation continues to operate properly between each CHANNEL FUNCTIONAL TEST.

The Surveillance Frequency is controlled under the Surveillance Frequency Control Program

Agreement criteria are determined by the plant staff, based on a combination of the channel instrument uncertainties, including indication and readability. If a channel is outside the criteria, it may be an indication that the instrument has drifted outside its limit.

~~The Frequency of 12 hours is based upon operating experience that demonstrates channel failure is rare.~~

The CHANNEL CHECK supplements less formal, but more frequent, checks of channels during normal operational use of the displays associated with the channels required by the LCO.

SR 3.3.5.2.2

A CHANNEL FUNCTIONAL TEST is performed on each required channel to ensure that the entire channel will perform the intended function. A successful test of the required contact(s) of a channel relay may be performed by the verification of the change of state of a single contact of the relay. This clarifies what is an acceptable CHANNEL FUNCTIONAL TEST of a relay. This is acceptable because all of the other required contacts of the relay are verified by other Technical Specifications and non-Technical Specifications tests.

Any setpoint adjustment shall be consistent with the assumptions of the current plant specific setpoint methodology.

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.3.5.2.2 (continued)

~~The Frequency of 92 days is based upon operating experience that demonstrates channel failure is rare.~~

The Surveillance Frequency is controlled under the Surveillance Frequency Control Program

SR 3.3.5.2.3

The LOGIC SYSTEM FUNCTIONAL TEST demonstrates the OPERABILITY of the required initiation logic for a specific channel. The system functional testing performed in LCO 3.5.2 overlaps this Surveillance to complete testing of the assumed safety function.

~~The 24 month Frequency is based on operating experience that has shown that these components usually pass the Surveillance when performed at the 24 month Frequency.~~

REFERENCES

1. Information Notice 84-81 "Inadvertent Reduction in Primary Coolant Inventory in Boiling Water Reactors During Shutdown and Startup," November 1984.

2. Information Notice 86-74, "Reduction of Reactor Coolant Inventory Because of Misalignment of RHR Valves," August 1986.

3. Generic Letter 92-04, "Resolution of the Issues Related to Reactor Vessel Water Level Instrumentation in BWRs Pursuant to 10 CFR 50.54(F), " August 1992.

4. NRC Bulletin 93-03, "Resolution of Issues Related to Reactor Vessel Water Level Instrumentation in BWRs," May 1993.

5. Information Notice 94-52, "Inadvertent Containment Spray and Reactor Vessel Draindown at Millstone 1," July 1994.