

March 22, 2024

TSTF-24-03
PROJ0753

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

SUBJECT: Correction of TSTF-591, Revision 0, "Revise the Risk Informed Completion Time (RICT) Program."

The NRC issued the final Safety Evaluation for TSTF-591, Revision 0, "Revise the Risk Informed Completion Time (RICT) Program," on December 18, 2023 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML23325A218).

The TSTF has discovered an error in the Technical Specifications (TS) markup included in TSTF-591 (ADAMS Accession No. ML22081A224). The traveler justification, the NRC's Safety Evaluation, and the markup of TS 5.6, "Reporting Requirements," for all of the Standard Technical Specifications NUREGs except NUREG-1431 states, "A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT." (emphasis added). However, the NUREG-1431 markup was not updated from an earlier draft and states, "prior to using those methods to calculate a RICT."

While the wording difference may not be technically significant, it is inconsistent with the traveler justification and approval and we have recommended that licensees use the corrected language in their plant-specific LARs.

An updated copy of the traveler is attached.

Should you have any questions, please do not hesitate to contact us.



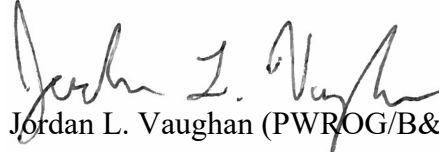
Andrew M. Richards, Jr. (PWROG/W)



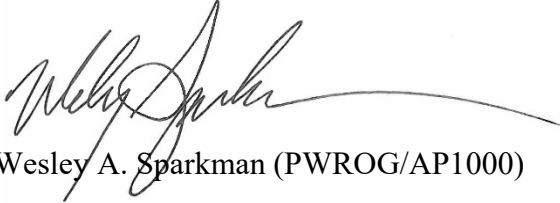
Phil H. Lashley (BWROG)



Kevin Lueshen (PWROG/CE)



Jordan L. Vaughan (PWROG/B&W)



Wesley A. Sparkman (PWROG/AP1000)

Enclosure

cc: Michelle Honcharik, Technical Specifications Branch
Shivani Mehta, Technical Specifications Branch
Victor Cusumano, Technical Specifications Branch

Technical Specifications Task Force Improved Standard Technical Specifications Change Traveler

Revise Risk Informed Completion Time (RICT) Program

NUREGs Affected: ☒ 1430 ☒ 1431 ☒ 1432 ☒ 1433 ☒ 1434 ☐ 2194

Classification: 1) Technical Change

Recommended for CLIIP?: Yes

Correction or Improvement: Improvement

NRC Fee Status: Not Exempt

Benefit: Prevents Unnecessary Actions

Changes Marked on ISTS Rev 5.0

PWROG RISD & PA (if applicable): PA-LSC-1922

See attached.

Revision History

OG Revision 0

Revision Status: Active

Revision Proposed by: TSTF

Revision Description:
Original Issue

Owners Group Review Information

Date Originated by OG: 07-Oct-21

Owners Group Comments
(No Comments)

Owners Group Resolution: Approved Date: 22-Oct-21

TSTF Review Information

TSTF Received Date: 07-Mar-22

Date Distributed for Review 07-Mar-22

TSTF Comments:
(No Comments)

TSTF Resolution: Approved

Date: 22-Mar-22

NRC Review Information

NRC Received Date: 22-Mar-22

NRC Comments:

Date of NRC Letter: 21-Sep-23

The TSTF provided a draft of TSTF-591 to the NRC in November 2021, and the NRC and TSTF held a teleconference on January 26, 2022, to discuss the draft. The NRC had three comments:

1. The NRC was concerned that the term "approaches" in the proposed paragraph e could be confusing as the term is used differently in RG 1.200, Rev. 3. The TSTF worked with industry PRA experts to revise paragraph e. to no longer use that term.

2. The NRC emphasized that newly developed methods with open findings on the method could not be

22-Sep-23

OG Revision 0**Revision Status: Active**

used. The industry stated that is in the committed guidance. However, a new paragraph was added as the penultimate paragraph in Section 3.1 of the traveler justification emphasizing that the endorsed guidance does not permit the use of newly developed methods with open peer review findings without prior NRC approval.

3.The NRC is still considering the time frame for submittal of the report. The industry and NRC agreed that submittal of the traveler did not need to wait on this issue, and it can be resolved during NRC review.

On February 2, 2022, the NRC made public an internal memorandum titled, "Staff Response to Nuclear Energy Institute's Proposed Technical Specification Changes Associated with the Use of Newly Developed Methods for Risk-Informed Completion Times." The memorandum provided recommended wording for the TS Risk Informed Completion Time Program that differed slightly from the 2021 NRC recommendation. To facilitate the NRC's review of the traveler, Appendix A of the traveler was revised to compare the travelers' proposed wording to both the NRC's 2021 and 2022 proposals.

Final Resolution: NRC Approves

Final Resolution Date: 21-Sep-23

Affected Technical Specifications

5.5.20	Risk Informed Completion Time Program	NUREG(s)- 1430 1431 1432 Only
5.6.8	Risk Informed Completion Time (RICT) Program Upgrade Report	NUREG(s)- 1430 1431 1432 Only
5.5.17	Risk Informed Completion Time Program	NUREG(s)- 1433 1434 Only
5.6.6	Risk Informed Completion Time (RICT) Program Upgrade Report	NUREG(s)- 1433 Only
5.6.7	Risk Informed Completion Time (RICT) Program Upgrade Report	NUREG(s)- 1434 Only

22-Sep-23



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

September 21, 2023

Technical Specifications Task Force
11921 Rockville Pike, Suite 100
Rockville, MD 20852

SUBJECT: FINAL SAFETY EVALUATION OF TECHNICAL SPECIFICATIONS TASK
FORCE TRAVELER TSTF-591, REVISION 0, "REVISE RISK-INFORMED
COMPLETION TIME (RICT) PROGRAM" (EPID L-2022-PMP-0003)

Dear Members of the Technical Specifications Task Force:

By letter dated March 22, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22081A224), the Technical Specifications Task Force submitted Traveler TSTF-591, Revision 0, "Revise Risk-Informed Completion Time (RICT) Program," to the U.S. Nuclear Regulatory Commission (NRC). The traveler was submitted as part of the consolidated line item improvement process (CLIIP). Traveler TSTF-591, Revision 0, is approved as a CLIIP traveler. The NRC staff's final traveler safety evaluation is enclosed.

If you have any questions, please contact Michelle Honcharik at 301-415-1774 or via e-mail at Michelle.Honcharik@nrc.gov.

Sincerely,

/RA/

Mahmoud Jardaneh, Acting Chief
Technical Specifications Branch
Division of Safety Systems
Office of Nuclear Reactor Regulation

Project No. 753

Enclosure:
Final Traveler SE

cc: See next page



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

FINAL SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

TECHNICAL SPECIFICATIONS TASK FORCE TRAVELER

TSTF-591, REVISION 0, "REVISE RISK-INFORMED COMPLETION TIME (RICT) PROGRAM"

USING THE CONSOLIDATED LINE ITEM IMPROVEMENT PROCESS

(EPID L-2022-PMP-0003)

1.0 INTRODUCTION

By letter dated March 22, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22081A224), the Technical Specifications Task Force (TSTF) submitted Traveler TSTF-591, Revision 0, "Revise Risk-Informed Completion Time (RICT) Program," to the U.S. Nuclear Regulatory Commission (NRC); hereafter referred to as TSTF-591. TSTF-591 proposes changes to the Standard Technical Specifications (STSs) for pressurized-water reactor (PWR) and boiling-water reactor (BWR) plant designs. Upon approval this traveler will be made available for adoption and the changes will be incorporated into future revisions of:

- NRC NUREG-1430, "Standard Technical Specifications, Babcock and Wilcox Plants," Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21272A363 and ML21272A370, respectively).
- NRC NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21259A155 and ML21259A159, respectively).
- NRC NUREG-1432, "Standard Technical Specifications, Combustion Engineering Plants," Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21258A421 and ML21258A424, respectively).
- NRC NUREG-1433, "Standard Technical Specifications, General Electric BWR/4 Plants" Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21272A357 and ML21272A358, respectively).
- NRC NUREG-1434, "Standard Technical Specifications, General Electric BWR/6 Plants" Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21271A582 and ML21271A596, respectively).

Enclosure

2.0 REGULATORY EVALUATION

2.1 Applicable Regulatory Requirements and Guidance

The regulation under Title 10 of the *Code of Federal Regulations* (10 CFR) 50.36(b) requires that:

Each license authorizing operation of a ... utilization facility ... will include technical specifications. The technical specifications will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to [10 CFR] 50.34 ["Contents of applications; technical information"]. The Commission may include such additional technical specifications as the Commission finds appropriate.

The categories of items required to be in the technical specifications are listed in 10 CFR 50.36(c).

The regulation at 10 CFR 50.36(c)(5), states that administrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner.

NRC Regulatory Guides (RGs) provide one way to ensure that the regulations continue to be met. The NRC staff considered the following guidance, along with industry guidance endorsed by the NRC, during its review of the proposed changes:

- RG 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities," December 2020 (ML20238B871).
- NUREG-0800, Revision 3, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [light-water reactor] Edition" (SRP):
 - Chapter 19, Section 19.2, "Review of Risk Information Used to Support Permanent Plant-Specific Changes to the Licensing Basis: General Guidance," dated June 2007 (ML071700658).
 - Chapter 16, Section 16.0, "Technical Specifications," March 2010 (ML100351425).
 - Chapter 16, Section 16.1, "Risk-Informed Decision Making: Technical Specifications," March 2007 (ML070380228).
- NEI 06-09-A, Revision 0, "Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines" (ML063390639), provides guidance for risk-informed TS. The NRC staff issued a final safety evaluation (SE) approving NEI 06-09 on May 17, 2007 (ML071200238).
- NEI 17-07, Revision 2, "Performance of PRA Peer Reviews Using the ASME/ANS PRA Standard," provides guidance material for conducting and documenting a probabilistic risk assessment (PRA) peer review using the American Society of Mechanical Engineers (ASME)/American Nuclear Society (ANS) PRA Standard, issued August 2019 (ML19231A182).
- PWR Owners' Group (PWROG) topical report PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review," establishes the definitions, processes, and

technical requirements necessary to implement newly developed methods (NDMs), issued July 2020 (ML20213C660). RG 1.200, Revision 3, endorsed only specified portions of PWROG-19027-NP.

2.2 Proposed Changes to Standard Technical Specifications

The proposed change revises the STS Section 5.5 Program, "Risk Informed Completion Time Program," by referencing RG 1.200, Revision 3, instead of Revision 2. It also adds a requirement in STS Section 5.6, "Reporting Requirements" for the licensee to submit a report to the NRC before calculating a RICT using an NDM.

2.2.1 STS 5.5.20¹ Risk Informed Completion Time Program

STS 5.5.20, which describes the RICT program, would be revised as shown below. Existing paragraph e would be replaced with the paragraph e below. Paragraphs f and g would be added.

- e. A RICT calculation must include the following hazard groups: [list specific hazards and the associated PRA models or alternate means of assessing the hazard for each applicable hazard group approved by NRC. For example, internal flood and internal events PRA model, internal fire PRA model, and seismic penalty factor]. Changes to these means of assessing the hazard groups require prior NRC approval.
- f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."
- g. A report shall be submitted in accordance with Specification 5.6.[X] before a newly developed method is used to calculate a RICT.]

2.2.2 STS 5.6.8², Risk Informed Completion Time Program Upgrade Report

The following would be added as STS 5.6.8:

Risk Informed Completion Time (RICT) Program Upgrade Report

A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT. The report shall include:

- a. The PRA models upgraded to include newly developed methods;

¹ STS 5.5.20 is the specification number for NUREGs-1430, -1431, and -1432. The number is STS 5.5.17 in NUREGs-1433 and -1434. STS 5.5.20 is used throughout this SE for simplicity.

² STS 5.6.8 is the specification number for NUREGs-1430, -1431, and -1432. The number is STS 5.6.6 and STS 5.6.7 in NUREGs-1433 and -1434, respectively. STS 5.6.8 is used throughout this SE for simplicity.

- b. A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"
- c. Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and
- d. All changes to key assumptions related to newly developed methods or their implementation.

3.0 TECHNICAL EVALUATION

Historical Background

In the final model SE for traveler TSTF-505 (ML18269A041), the NRC staff found the guidance in NEI 06-09, to be acceptable, with clarification from the NRC staff positions, limitations, and conditions. TSTF-505, Revision 2, incorporates the RICT program into the Administrative Controls section of the STS and modifies selected CTs to permit extension provided risk is assessed and managed as described in NEI 06-09-A.

The NRC staff's SE of TSTF-505, considers determining the acceptability of the licensee's PRA models for use in the RICT program, consistent with the guidance provided in RG 1.200, Revision 2, dated March 1, 2009 (ML090410014).

PRA acceptability considers the peer review history and results of a licensee's PRA model(s). Peer reviews are independent reviews performed by qualified subject matter experts (SMEs) using the requirements established in the ASME/ANS PRA Standards. Office of Management and Budget (OMB), Circular No. A-119 Revised, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities," establishes policies on federal use and development of voluntary consensus standards on conformity assessment activities. Section 6 of the OMB Circular specifically provides direction on the policy for federal use of standards.

The ASME/ANS PRA Standard establishes two primary peer reviews that are performed to assess the technical adequacy of the PRA models: (1) full scope and (2) focused scope. The results of a peer review are considered facts and observations (F&Os). An independent assessment review may be performed by qualified SME(s) to assess the licensee's satisfactory closure of F&Os. PRA models are a snapshot in time and are continually updated to reflect the as-built, as-operated plant using the technical requirements established in the ASME/ANS PRA Standards along with RG 1.200 guidance to ensure configuration and control is maintained. NEI 17-07, as endorsed in RG 1.200, Revision 3, provides industry guidance to perform these peer reviews.

As the NRC moves forward to make greater use of risk information in decision making, the NRC staff identified enhancements to its risk-informed regulatory framework. One enhancement was the need for a streamlined process to facilitate the acceptance by the NRC and PRA community of NDMs to be used in support of risk-informed applications. The industry developed guidance published in PWROG-19027-NP that addresses, amongst other things, the technical adequacy of NDMs. The NRC staff subsequently endorsed specified portions of PWROG-19027-NP in RG 1.200, Revision 3.

Evaluation of TSTF-591

RG 1.200, Revision 3, was issued after the approval of TSTF-505, Revision 2. Traveler TSTF-591 proposes to replace the STS requirement to maintain and upgrade³ the PRA in accordance with RG 1.200, Revision 2, with a requirement to follow RG 1.200, Revision 3. RG 1.200, Revision 3, does not change the factors used to assess PRA technical adequacy and acceptability. Revision 3 of RG 1.200 continues to include guidance to maintain and upgrade the PRA while adding a glossary of key terms, a list of hazards to be considered in the development and use of the PRA, and enhanced guidance related to key assumptions and sources of uncertainty. Furthermore, RG 1.200, Revision 3, does the following:

- Endorses, with NRC staff exceptions and clarifications, the ASME/ANS RA-S Case 1, “Case for ASME/ANS RA-Sb-2013 Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment of Nuclear Power Plant Applications,” dated November 22, 2017.
- Endorses NEI 17-07, Revision 2, “Performance of PRA Peer Reviews Using the ASME/ANS PRA Standard,” issued August 2019.
- Endorses the following portions of PWROG-19027-NP:
 - Process for the peer review of NDMs,
 - Process for determining whether a change to a PRA is classified as PRA maintenance or a PRA upgrade, and
 - Key definitions related to NDMs, PRA maintenance, and PRA upgrade.

The proposed language for paragraph e on STS 5.5.20 incorporates defined terms provided in the glossary of RG 1.200, Revision 3. The NRC staff concludes that the proposed changes using the defined terms provided in RG 1.200, Revision 3, do not introduce any technical discrepancies for the implementation of the RICT program.

The proposed addition paragraph f of STS 5.5.20 incorporates a requirement that PRA models used to calculate a RICT be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of RG 1.200, Revision 3. RG 1.200 Regulatory Position C.2.2.2.2, states, in part:

[a]n acceptable approach to performing a peer review for an NDM is the guidance in NEI 17-07, Revision 2. NEI 17-07, Revision 2, [as endorsed by RG 1.200, Revision 3,] states, in part, that if an NDM is deemed not technically acceptable in the NDM peer review report, or if at least one finding-level F&O on the NDM remain open, a licensee or applicant may not use it in a PRA supporting risk-informed licensing applications.

The report that will be submitted to the NRC staff for NDM use in the RICT program can only be used to describe NDMs that are technically acceptable with all the open F&Os resulting from the technical review of the NDM closed using an NRC-endorsed peer review process. Furthermore,

³ Per RG 1.200, Revision 3, PRA upgrade is defined as: A change in the PRA that results in the applicability of one or more supporting requirements that were not previously included within the PRA (e.g., performing qualitative screening for Part 4 of ASME/ANS Level 1/LERF PRA Standard when the related high-level requirement was previously not applicable, or adding a new hazard model), an implementation of a PRA method in a different context, or the incorporation of a PRA method not previously used.

in response to Request for Additional Information (RAI) 1.c and 1.d, dated February 1, 2023 (ML23032A485), the TSTF confirmed the report cannot be used to satisfy Regulatory Position C.2.2.2.2 and that NDMs with open finding-level F&Os may not be used by a licensee without prior NRC approval. The NRC staff notes that some F&Os may not establish technical inadequacy applicable to the NDM, whereas the F&Os can be plant-specific (e.g., involving implementation). For these open F&Os determined to be plant-specific, consistent with RG 1.200, Revision 3, the licensee can either close the F&O using NRC-endorsed processes or disposition the F&O on a case-by-case basis. The disposition of an F&O involves qualitative or quantitative assessment for impact on the specific risk-informed application. The disposition of F&Os may consider: (1) incorporating appropriate changes into the PRA model prior to use, (2) identifying appropriate sensitivity studies to address the issue identified, or (3) providing adequate justification for the original model, including the applicability of key assumptions to the risk-informed application. The disposition of an F&O does not constitute the F&O to be closed.

The proposed addition paragraph g of STS 5.5.20 incorporates a requirement for a licensee to submit a report before an NDM is used to calculate a RICT. RG 1.200, Revision 3, defines a consensus method/model as follows:

Consensus method/model: In the context of risk-informed regulatory decisions, a method or model approach that the NRC has used or accepted for the specific risk-informed application for which it is proposed. A consensus method or model may also have a publicly available, published basis and may have been peer reviewed and widely adopted by an appropriate stakeholder group.

In response to RAI 2.a, example (c) provided, the TSTF stated, “[t]he appendix can be made available to the NRC to be loaded on ADAMS (no formal request of review or endorsement would be needed).” The use of consensus method(s) by licensees is governed within the guidance of RG 1.200, Revision 3. Consistent with the definition per RG 1.200, Revision 3, and provided above, a consensus method/model is one that has been used or accepted by the NRC for the specific risk-informed application for which it is proposed. Specifically, reporting of an NDM by a licensee under the requirements stipulated in STS 5.6.8 does not justify the NDM to meet the definition of consensus/method/model for future use. Therefore, the NRC staff concludes that for an NDM to be reported to the NRC under the requirements stipulated in STS 5.6.8, it is not a consensus method or model as defined in RG 1.200, Revision 3.

Consistent with RG 1.200, Revision 3, if the NDM has been determined to be acceptable using NRC-endorsed processes, NRC staff action is not needed prior to the licensee’s use of an NDM in a RICT calculation. The NRC staff finds that the proposed changes to STS 5.5.20 and the addition of STS 5.6.8 remains consistent with the guidance in RG 1.200, Revision 3, that also endorses NEI 17-07, Revision 2, and specific portions of PWROG-19027-NP. Section 4, Tables 1-7.2-1 through 1-7.2-7 of PWROG-19027-NP, as endorsed by the NRC staff, stipulates a list of technical supporting requirements that must be met to determine an NDM acceptable.

Furthermore, the RICT program is incorporated as a program into the Administrative Controls section of the STS. As described in 10 CFR 50.36(c)(5), administrative controls are the provisions relating to, among other things, recordkeeping and reporting necessary to assure operation of the facility in a safe manner, and each licensee shall submit any reports to the Commission pursuant to approved technical specifications as specified in 10 CFR 50.4.

4.0 CONCLUSION

The NRC staff concludes the proposed changes to STS 5.5.20 and the addition of STS 5.6.8 continue to ensure the PRA models used to calculate a RICT are maintained and upgraded by the licensee's appropriate use of endorsed guidance (i.e., the ASME/ANS PRA Standard requirements, and specific industry guidance that the NRC staff has determined are sufficient for determining the acceptability of PRA models and NDMs for use in the RICT program). Furthermore, the NRC staff concludes that the addition of STS 5.6.8 that describes the contents of a RICT program upgrade report to the NRC staff does not preclude any staff oversight of PRA changes performed to ensure the PRA model(s) continues to be maintained and upgraded consistent with RG 1.200, Revision 3.

The NRC staff finds that the proposed changes are acceptable because they continue to ensure operation of the facility in a safe manner in accordance with 10 CFR 50.36(c)(5). Accordingly, the NRC staff finds TSTF-591 acceptable. Additionally, the NRC staff determined that the proposed changes are technically clear and consistent with customary terminology and format in STSs.

Principle Contributors: Adrienne Brown
Andrea Russell
Edward Miller

Date: September 21, 2023

cc:

Technical Specifications Task Force
c/o EXCEL Services Corporation
11921 Rockville Pike, Suite 100
Rockville, MD 20852
Attention: Brian D. Mann
Email: brian.mann@excelservices.com

Drew Richards
STP Nuclear Operating Company
12090 FM 521
Mail Code: N5016
Wadsworth, TX 77483
Email: amrichards@stpegs.com

Kevin Lueshen
Constellation Energy Generation
4300 Winfield Road
Warrenville IL 60555
Email: kevin.lueshen@constellation.com

Jordan L. Vaughan
Duke Energy
EC07C / P.O. Box 1006
Charlotte, NC 28202
Email: jordan.vaughan@duke-energy.com

Phil H. Lashley
Energy Harbor
168 E. Market St.
Akron, OH 44308
Email: phlashley@energyharbor.com

Wesley Sparkman
Southern Nuclear Operating Company
3535 Colonnade Parkway / Bin N-226-EC
Birmingham, AL 35242
Email: wasparkm@southernco.com

SUBJECT: FINAL SAFETY EVALUATION OF TECHNICAL SPECIFICATIONS TASK
FORCE TRAVELER TSTF-591, REVISION 0, "REVISE RISK-INFORMED
COMPLETION TIME (RICT) PROGRAM" (EPID L-2022-PMP-0003)
DATED September 21, 2023

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ML23262B230, Final traveler SE

Concurred via email*NRR-106**

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OFFICE	OGC/NLO*	NRR/DSS/STSB/PM*	NRR/DSS/STSB/ABC
NAME	MWoods/DRoth	MHoncharik	MJardaneh
DATE	9/7/2023	9/19/2023	9/21/2023

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 18, 2023

Technical Specifications Task Force
11921 Rockville Pike, Suite 100
Rockville, MD 20852

SUBJECT: FINAL MODEL SAFETY EVALUATION OF TECHNICAL SPECIFICATIONS
TASK FORCE TRAVELER TSTF-591, "REVISE RISK-INFORMED
COMPLETION TIME (RICT) PROGRAM" (EPID L-2022-PMP-0003)

Dear Members of the Technical Specifications Task Force:

By letter dated March 22, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22081A224), the Technical Specifications Task Force submitted Traveler TSTF-591, Revision 0, "Revise Risk-Informed Completion Time (RICT) Program," to the U.S. Nuclear Regulatory Commission (NRC) as part of the consolidated line item improvement process (CLIIP). Traveler TSTF-591, Revision 0, was approved as a CLIIP traveler on September 21, 2023 (ML23262B440). The NRC staff's final model safety evaluation is enclosed.

If you have any questions, please contact Michelle Honcharik at 301-415-1774 or via e-mail at Michelle.Honcharik@nrc.gov.

Sincerely,

R/A

Andrea Russell, Acting Chief
Technical Specifications Branch
Division of Safety Systems
Office of Nuclear Reactor Regulation

Project No. 753

Enclosure:
Final Model SE

cc: See next page

cc:

Technical Specifications Task Force
c/o EXCEL Services Corporation
11921 Rockville Pike, Suite 100
Rockville, MD 20852
Attention: Brian D. Mann
Email: brian.mann@excelservices.com

Drew Richards
STP Nuclear Operating Company
12090 FM 521
Mail Code: N5016
Wadsworth, TX 77483
Email: amrichards@stpegs.com

Kevin Lueshen
Constellation Energy Generation
4300 Winfield Road
Warrenville IL 60555
Email: kevin.lueshen@constellation.com

Jordan L. Vaughan
Duke Energy
EC07C / P.O. Box 1006
Charlotte, NC 28202
Email: jordan.vaughan@duke-energy.com

Phil H. Lashley
Energy Harbor
168 E. Market St.
Akron, OH 44308
Email: phlashley@energyharbor.com

Wesley Sparkman
Southern Nuclear Operating Company
3535 Colonnade Parkway / Bin N-226-EC
Birmingham, AL 35242
Email: wasparkm@southernco.com

SUBJECT: FINAL MODEL SAFETY EVALUATION OF TECHNICAL SPECIFICATIONS
TASK FORCE TRAVELER TSTF-591, "REVISE RISK-INFORMED
COMPLETION TIME (RICT) PROGRAM" (EPID L-2022-PMP-0003)
DATED: December 18, 2023

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MMarkley

ADAMS Accession Nos.:

Package ML23325A218
Cover letter ML23325A213
Final Model SE ML23325A214
Final traveler SE ML23262B229

Concurred via email*NRR-106**

OFFICE	NRR/DRA/	NRR/DORL/LPL2-1/BC	
NAME	RPascerelli	Michael Markley	
DATE	9/1/2023	9/20/2023	
OFFICE	OGC/NLO*	NRR/DSS/STSB/PM*	NRR/DSS/STSB/ABC
NAME	MWoods/DRoth	MHoncharik	ARussell
DATE	9/7/2023	12/18/2023	12/18/22023

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

*General Directions: This model SE provides the format for an SE of LARs to adopt traveler TSTF-591. TSTF-591 was approved as part of the CLIIP. This model SE can also be used as a template for LARs adopting TSTF-591 that have significant variations and are not using the CLIIP. The **[bolded bracketed]** information shows text that should be filled in for the specific amendment. The italicized wording provides guidance on what should be included in each section.*

FINAL MODEL SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR
REGULATION RELATED TO TSTF-591, "REVISE RISK-INFORMED COMPLETION TIME
(RICT) PROGRAM"

AMENDMENT NO. **[XXX]** TO FACILITY OPERATING LICENSE NO. **[XXX-XX]**
AND AMENDMENT NO. **[XXX]** TO FACILITY OPERATING LICENSE NO. **[XXX-XX]**

[NAME OF LICENSEE]

[NAME OF FACILITY]

DOCKET NOS. 50-**[XXX]** AND 50-**[XXX]**

<u>Application (i.e., initial and supplements)</u> <ul style="list-style-type: none">[Date], [ADAMS Accession No.]	<u>Safety Evaluation Date</u> [Date]
	<u>Principal Contributors to Safety Evaluation</u> <ul style="list-style-type: none">[Staff Names]

1.0 PROPOSED CHANGES

[Name of licensee] (the licensee) requested changes to the technical specifications (TSs) for **[name of facility]** by license amendment request (LAR, application). In its application, the licensee requested that the U.S. Nuclear Regulatory Commission (NRC, the Commission) process the proposed amendment under the Consolidated Line Item Improvement Process (CLIIP). The proposed changes would revise the TS based on Technical Specifications Task Force (TSTF) Traveler TSTF-591, Revision 0, "Revise Risk-Informed Completion Time (RICT) Program" (TSTF-591) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22081A224), and the associated NRC staff safety evaluation (SE) of Traveler TSTF-591 (ML23262B230).

The proposed changes would revise the TS 5.5.**[20]**, "Risk Informed Completion Time Program," by referencing RG 1.200, Revision 3, instead of Revision 2. The proposed changes

would also add a requirement in TS Section 5.6, "Reporting Requirements," for the licensee to submit a report to the NRC before calculating a RICT using a newly developed method (NDM).

Description of Risk-Informed Completion Time Program

The TS limiting conditions for operations (LCOs) are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When an LCO is not met, the licensee must shut down the reactor or follow any remedial or required action (e.g., testing, maintenance, or repair activity) permitted by the TSs until the condition can be met. The remedial actions (i.e., ACTIONS) associated with an LCO contain Conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated Condition are Required Action(s) and completion times (CTs). The CTs are referred to as the "front stops" in the context of this SE. For certain Conditions, the TS require exiting the Mode of Applicability of an LCO (i.e., shutdown the reactor).

Topical Report NEI 06-09-A (ML12286A321) provides a methodology for extending existing CTs and thereby delay exiting the operational mode of applicability or taking Required Actions if risk is assessed and managed within the limits and programmatic requirements established by a RICT Program.

1.1 Proposed TS Changes to Adopt TSTF-591

TS 5.5.[20] Risk Informed Completion Time Program

TS 5.5.[20], which describes the RICT program, is revised. Existing paragraph e would be replaced with the paragraph e below. Paragraphs f and g would be added.

- e. A RICT calculation must include the following hazard groups: **[list specific hazards and the associated PRA models or alternate means of assessing the hazard for each applicable hazard group approved by NRC. For example, internal flood and internal events PRA model, internal fire PRA model, and seismic penalty factor]**. Changes to these means of assessing the hazard groups require prior NRC approval.
- f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."
- g. A report shall be submitted in accordance with Specification 5.6.[X] before a newly developed method is used to calculate a RICT.

TS 5.6.[8], Risk Informed Completion Time Program Upgrade Report

A new specification, TS 5.6.[8], would be added as follows:

Risk Informed Completion Time (RICT) Program Upgrade Report

A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated

with newly developed methods and prior to the first use of those methods to calculate a RICT. The report shall include:

- a. The PRA models upgraded to include newly developed methods;
- b. A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"
- c. Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and
- d. All changes to key assumptions related to newly developed methods or their implementation.

1.2 Additional Proposed TS Changes

{NOTE: Use this section if variations are proposed. Add additional subsections if needed. Editorial variations discussed below in section 1.2.1 do not warrant removal from the CLIP and do not require any additional technical branches to be on the review. Variations discussed in section 1.2.2, may remove the LAR from the CLIP and may require additional technical review depending on the significance of the variations.}

In addition to the changes proposed consistent with the traveler discussed in section 1.1, the licensee proposed the variation[s] below.

1.2.1 Editorial Variations

{NOTE: Use this section if the plant has different numbering/nomenclature or modify accordingly for other editorial changes made.}

The licensee noted that **[name of facility]** TSs have different numbering **[and nomenclature]** than standard technical specifications (STs).

1.2.2 Other Variations

{NOTE: Use this section if the plant has variations other than editorial variations discussed in section 1.2.1.}

2.0 REGULATORY EVALUATION

2.1 Applicable Regulatory Requirements and Guidance

The regulation under Title 10 of the *Code of Federal Regulations* (10 CFR) 50.36(b) requires that:

Each license authorizing operation of a ... utilization facility ... will include technical specifications. The technical specifications will be derived from the

analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to [10 CFR] 50.34 ["Contents of applications; technical information"]. The Commission may include such additional technical specifications as the Commission finds appropriate.

The categories of items required to be in the TSs are listed in 10 CFR 50.36(c).

The regulation at 10 CFR 50.36(c)(5), states that administrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner.

NRC Regulatory Guides (RGs) provide one way to ensure that the regulations continue to be met. The NRC staff considered during its review of the proposed changes, along with industry guidance endorsed by the NRC, the guidance in RG 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities," December 2020 (ML20238B871).

- NUREG-0800, Revision 3, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [light-water reactor] Edition" (SRP):
 - Chapter 19, Section 19.2, "Review of Risk Information Used to Support Permanent Plant-Specific Changes to the Licensing Basis: General Guidance," dated June 2007 (ML071700658).
 - Chapter 16, Section 16.0, "Technical Specifications," March 2010 (ML100351425). The NRC staff's review includes consideration of whether the proposed changes are consistent with the **[insert applicable NUREG from list in footnote]¹**.
 - Chapter 16, Section 16.1, "Risk-Informed Decision Making: Technical Specifications," March 2007 (ML070380228).
- NEI 06-09-A, Revision 0, "Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines" (ML063390639), provides guidance for risk-informed TS. The NRC staff issued a final SE approving NEI 06-09 on May 17, 2007 (ML071200238).
- NEI 17-07, Revision 2, "Performance of PRA Peer Reviews Using the ASME/ANS PRA Standard," provides guidance material for conducting and documenting a probabilistic risk assessment (PRA) peer review using the American Society of Mechanical Engineers (ASME)/American Nuclear Society (ANS) PRA Standard, issued August 2019 (ML19231A182).

¹• NRC NUREG-1430, "Standard Technical Specifications, Babcock and Wilcox Plants," Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21272A363 and ML21272A370, respectively).

• NRC NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21259A155 and ML21259A159, respectively).

• NRC NUREG-1432, "Standard Technical Specifications, Combustion Engineering Plants," Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21258A421 and ML21258A424, respectively).

• NRC NUREG-1433, "Standard Technical Specifications, General Electric, BWR/4 Plants" Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21272A357 and ML21272A358, respectively).

• NRC NUREG-1434, "Standard Technical Specifications, General Electric, BWR/6 Plants" Volume 1, "Specifications," and Volume 2, "Bases," Revision 5, September 2021 (ML21271A582 and ML21271A596, respectively).

- PWR Owners' Group (PWROG) topical report PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review," establishes the definitions, processes, and technical requirements necessary to implement newly developed methods, issued July 2020 (ML20213C660). RG 1.200, Revision 3, endorsed specified portions of PWROG-19027-NP.

3.0 TECHNICAL EVALUATION

3.1 Proposed TS Changes to Adopt TSTF-591

The NRC staff compared the licensee's proposed TS changes in section 1.1 of this SE against the changes approved in Traveler TSTF-591. The NRC staff finds that the licensee's proposed changes to the **[name of facility]** TSs in section 1.1 of this SE are consistent with those found acceptable in TSTF-591.

In the final SE for Traveler TSTF-591, the NRC staff concluded that the TSTF-591 proposed changes to STS 5.5.20, "Risk Informed Completion Time Program," and the proposed addition of STS 5.6.8, "Risk Informed Completion Time (RICT) Program Upgrade Report," were acceptable. These modifications were acceptable because, as discussed in that SE, they continued to ensure the PRA models used to calculate a RICT are maintained and upgraded by the licensee's appropriate use of endorsed guidance (i.e., the ASME/ANS PRA Standard requirements, and specific industry guidance that the NRC staff has determined are sufficient for determining the acceptability of PRA models and NDMs for use in the RICT program). Furthermore, as discussed in the traveler SE, the addition of reporting requirements does not preclude any NRC staff oversight of PRA changes performed to ensure the PRA model(s) continue to be maintained and upgraded consistent with RG 1.200, Revision 3. Therefore, the NRC staff found that the proposed changes to the RICT Program and addition of the RICT Program Upgrade Report requirements were acceptable because they continued to meet the requirements of 10 CFR 50.36(c)(5) by providing administrative controls necessary to assure operation of the facility in a safe manner. For these same reasons, the NRC staff concludes that the corresponding proposed changes to the **[name of facility]** TSs in section 1.1 of this SE continue to meet the requirements of 10 CFR 50.36(c)(5).

3.2 Additional Proposed Changes

{NOTE: Use this section if variations are proposed. Add additional subsections if needed. Variations evaluated in section 3.2.2 may remove the LAR from the CLIIP and may require additional technical review depending on the significance of the variations. Additionally, the variations may require additional regulations/guidance being included in the Regulatory Evaluation Section.}

In addition to the changes proposed consistent with the traveler discussed in sections 1.1 and 1.2, the licensee proposed the variation[s] below.

3.2.1 Variations That Do Not Affect the Applicability of the Traveler

{NOTE: Use this section if the plant has different numbering/nomenclature or modify accordingly for other changes described in section 1.2.1 of this SE.}

The LAR noted that the **[name of facility]** TSs have different numbering **[and nomenclature]** than STS. The NRC staff finds that the different TS numbering **[and nomenclature]** changes proposed in the LAR are acceptable because they do not alter TS requirements.

3.2.2 Variations That Do Affect the Applicability of the Traveler

{NOTE: Use this section if the plant has variations other than changes discussed in section 3.2.1 of this SE.}

3.3 TS Change Consistency

The NRC staff reviewed the proposed TS changes for technical clarity and consistency with the existing requirements for customary terminology and formatting. The NRC staff finds that the proposed changes are consistent with chapter 16.0 of the SRP and are therefore acceptable.

4.0 CONCLUSION

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

Principle Contributors: Adrienne Brown
Andrea Russell
Edward Miller

NOTICES AND ENVIRONMENTAL FINDINGS RELATED TO AMENDMENT NO. [XXX] TO FACILITY OPERATING LICENSE NO. [XXX-XX] AND AMENDMENT NO. [XXX] TO FACILITY OPERATING LICENSE NO. [XXX-XX] [NAME OF LICENSEE] [NAME OF FACILITY] DOCKET NOS. 50-[XXX] AND 50-[XXX]

<u>Application (i.e., initial and supplements)</u> • [Date], [ADAMS Accession No.]	<u>Safety Evaluation Date</u> [Date] <div></div>
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1.0 INTRODUCTION

{NOTE: The PM should prepare this section.}

[Name of licensee] (the licensee) requested changes to the technical specifications (TSs) for **[name of facility]** by license amendment request (LAR, application). In its application, the licensee requested that the U.S. Nuclear Regulatory Commission (NRC, the Commission) process the proposed amendment under the Consolidated Line Item Improvement Process (CLIIP). The proposed changes would revise the TS based on Technical Specifications Task Force (TSTF) Traveler TSTF-591, Revision 0, "Revise Risk-Informed Completion Time (RICT) Program" (TSTF-591) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22081A224), and the associated NRC staff safety evaluation (SE) of Traveler TSTF-591 (ML23262B230).

2.0 STATE CONSULTATION

{NOTE: The PM should prepare this section.}

In accordance with the Commission's regulations, the **[Name of State]** State official was notified of the proposed issuance of the amendment on **[insert date]**. The State official had **[no]** comments. **[If comments were provided, they should be addressed here and modify language of section 3.0 below per SE Template for Power Reactors].**

3.0 ENVIRONMENTAL CONSIDERATION

{NOTE: The PM should prepare this required section.}

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that

the amendment involves no significant hazards consideration, and there has been no public comment on such finding **[enter Federal Register citation (XX FR XXXX) and date]**. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

1. SUMMARY DESCRIPTION

The proposed change revises the Technical Specifications (TS) Section 5.5 Program, "Risk Informed Completion Time Program," to reference Regulatory Guide (RG) 1.200, Revision 3, instead of Revision 2, and to make other changes. A new report is added to TS Section 5.6, "Reporting Requirements," to inform the NRC of the use of newly developed probabilistic risk assessment (PRA) methods to calculate a Risk Informed Completion Time (RICT). The proposed change affects the Standard Technical Specifications (STS) in NUREG-1430, NUREG-1431, NUREG-1432, NUREG-1433, and NUREG-1434¹.

2. DETAILED DESCRIPTION

2.1. Current Technical Specifications Requirements

The Risk Informed Completion Time Program (RICT Program) was added by TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times - RITSTF Initiative 4b," (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18183A493), which was approved by the Nuclear Regulatory Commission (NRC) on November 21, 2018 (ADAMS Accession No. ML18269A041).

Paragraph e of the RICT Program, states:

The risk assessment approaches and methods shall be acceptable to the NRC. The plant PRA shall be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at the plant, as specified in Regulatory Guide 1.200, Revision 2. Methods to assess the risk from extending the Completion Times must be PRA methods used to support this license amendment, or other methods approved by the NRC for generic use; and any change in the PRA methods to assess risk that are outside these approval boundaries require prior NRC approval.

2.2. Reason for the Proposed Change

Prior to the approval of TSTF-505, Revision 2, the NRC and the industry agreed that some terms used in Paragraph e of the RICT Program, such as, "approaches," "methods," and "approved by NRC for generic use," were not well defined. As a result, the TS requirements were unclear regarding when prior NRC approval would be needed in order to use a new or different method or approach. However, many licensees were anxious to submit license amendment requests (LARs) based on TSTF-505, Revision 2, and the industry and NRC agreed that the NRC should

¹ NUREG-1430 provides the STS for Babcock & Wilcox plant designs.

NUREG-1431 provides the STS for Westinghouse plant designs.

NUREG-1432 provides the STS for Combustion Engineering plant designs.

NUREG-1433 provides the STS for BWR/4 plant designs, but is also representative of the BWR/2, BWR/3, and, in this case, BWR/5 design.

NUREG-1434 provides the STS for BWR/6 plant designs, and is representative, in some cases, of the BWR/5 plant design.

approve Revision 2 and the industry and NRC would continue to work on clarification of Paragraph e.

The industry and NRC held a series of public meetings and teleconferences in 2019, 2020, and 2021 discussing changes to Paragraph e. In late 2020, the NRC determined that the revised language should reference RG 1.200, Revision 3, which was under development. RG 1.200, Revision 3, was issued in December 2020. In January 2021 the industry proposed wording for Paragraph e that referenced RG 1.200, Revision 3.

In April 2021 the NRC proposed a different TS reference to RG 1.200, Revision 3. The industry responded in May 2021. A teleconference was held with the NRC on June 3, 2021, and the NRC suggested that the industry submit a TSTF traveler with the proposed revisions to the RICT Program and the associated reporting requirement in order to facilitate closure of the issue.

2.3. Description of the Proposed Change

The RICT Program is Specification 5.5.20 in NUREG-1430, NUREG-1431, and NUREG-1432, Revision 5, and Specification 5.5.17 in NUREG-1433 and NUREG-1434, Revision 5. Paragraph e of the RICT Program is replaced with the following:

- e. A RICT calculation must include the following hazard groups: [list specific hazards and the associated PRA models or alternate means of assessing the hazard for each applicable hazard group approved by NRC. For example, internal flood and internal events PRA model, internal fire PRA model, and seismic penalty factor]. Changes to these means of assessing the hazard groups require prior NRC approval.

New paragraphs f and g are added that state:

- f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."
- g. A report shall be submitted in accordance with Specification 5.6.[X] before a newly developed method is used to calculate a RICT.

A new reporting requirement is added to TS Section 5.6, "Reporting Requirements." The new report is Specification 5.6.8 in NUREG-1430, NUREG-1431, and NUREG-1432; Specification 5.6.6 in NUREG-1433; and Specification 5.6.7 in NUREG-1434. It states:

5.6.[8] Risk Informed Completion Time (RICT) Program Upgrade Report

A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT. The report shall include:

- a. The PRA models upgraded to include newly developed methods;

- b. A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"
- c. Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and
- d. All changes to key assumptions related to newly developed methods or their implementation.

Both the RICT Program and the RICT Program Upgrade Report are bracketed in the Standard Technical Specifications (STS), indicating that the specifications only apply to licensees that have adopted TSTF-505 by license amendment.

A model application is attached. The model may be used by licensees desiring to adopt the traveler following NRC approval.

3. TECHNICAL EVALUATION

3.1. Change From Referencing RG 1.200, Revision 2, To Revision 3

The primary change in this traveler is to replace a requirement to maintain and upgrade the PRA in accordance with RG 1.200, Revision 2, with a reference to RG 1.200, Revision 3.

RG 1.200, Revision 3, was issued in December 2020 and addresses new industry guidance and issues identified since Revision 2 was issued. Specifically, Revision 3:

- Endorses, with staff exceptions and clarifications, the requirements in ASME/ANS RA-S Case 1, "Case for ASME/ANS RA-Sb-2013 Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment of Nuclear Power Plant Applications," dated November 22, 2017;
- Endorses Nuclear Energy Institute (NEI) 17-07, Revision 2, "Performance of PRA Peer Reviews Using the ASME/ANS PRA Standard," issued August 2019;
- Endorses the following portions of the Pressurized Water Reactor Owners Group (PWROG) report, PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review," issued July 2020:
 - Requirements for the peer review of newly developed methods;
 - Process for determining whether a change to a PRA is classified as PRA maintenance or a PRA upgrade;
 - Definitions related to newly developed methods, PRA maintenance, and PRA upgrade.
- Enhances guidance related to key assumptions and sources of uncertainty;

- Provides a glossary of key terms; and
- Provides a list of hazards to be considered in the development and use of PRA.

A significant improvement in RG 1.200, Revision 3, is the inclusion of guidance that enables peer-reviewers to evaluate newly developed methods. NEI 17-07, Revision 2, discusses peer review of PRA upgrades that include newly develop methods.

These changes permit licensees to revise their PRA models used to calculate a RICT to incorporate most newly developed methods in accordance with the requirements of the ASME/ANS PRA Standard without prior NRC approval, while giving the NRC oversight capability. The documents endorsed in RG 1.200, Rev. 3, provide clear definitions of what constitutes a PRA method and what is a newly developed method (NDM) (i.e., a method that has been developed separately from a state-of-practice method or that involves a fundamental change to a state-of-practice model). RG 1.200 Regulatory Position C.2.2.2.2, states "An acceptable approach to performing a peer review for an NDM is the guidance in NEI 17-07, Revision 2. In particular, NEI 17-07, Revision 2, states, in part, that, if an NDM is deemed not technically acceptable in the NDM peer review report, or if at least one finding-level F&O [facts and observations] on the NDM remain open, a licensee or applicant may not use it in a PRA supporting risk-informed licensing applications. If open finding-level F&Os from an NDM peer review cannot be successfully closed via an NRC-endorsed peer review process, the NDM could be submitted to the NRC to determine the acceptability of the NDM. Submitted applications that use NDMs with open finding-level F&Os related to the NDM will be subject to review by the NRC to determine acceptability of the NDM, its implementation in the PRA, and its potential impact on the application." Therefore, an NDM with open finding-level F&Os cannot be used by a licensee without prior NRC approval. The licensee's implementation of the NDM may have open finding-level F&Os, but those finding-level F&Os must be dispositioned, as described in Section 3.3.

The proposed TS requirements ensure that changes to the PRA models used in the RICT program, including changes involving newly-developed methods, are properly evaluated. To provide the NRC with oversight, a required report will be submitted to the NRC when a newly developed method is used in the RICT Program.

3.2. RICT Program Changes

The current RICT Program, Paragraph e, begins by stating, "The risk assessment approaches and methods shall be acceptable to the NRC." It also states, "Methods to assess the risk from extending the Completion Times must be PRA methods used to support this license amendment, ... and any change in the PRA methods to assess risk that are outside these approval boundaries require prior NRC approval." These sentences are replaced because the phrases, "risk assessment approaches and methods," "this license amendment," and "outside these approval boundaries," are undefined or unclear when used within a plant's TS.

The proposed Paragraph e states, "A RICT calculation must include the following hazard groups: [list specific hazards and the associated PRA models or alternate means of assessing the hazard for each applicable hazard group approved by NRC. For example, internal flood and internal

events PRA model, internal fire PRA model, and seismic penalty factor]. Changes to these means of assessing the hazard groups require prior NRC approval." The proposed requirement clearly states the types of changes that require prior NRC approval. For example, if a licensee's TSTF-505 submittal described a Seismic Margins Analysis used to calculate a RICT and the licensee desires to use a seismic PRA, prior NRC approval is required. The proposed TS encompass the current Paragraph e requirements that the PRA models must be acceptable to the NRC, that they must be those used to support the TSTF-505 license amendment, and that prior NRC approval is needed to change those models.

The Paragraph e phrase, "other methods approved by the NRC for generic use" is deleted. There is no established regulatory process for the NRC to approve a PRA method for generic use.

The current RICT Program, Paragraph e, states, "The plant PRA shall be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at the plant, as specified in Regulatory Guide 1.200, Revision 2." It is replaced by a new Paragraph f which states, "The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, 'Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities'." The reference to the "as-built, as-operated, and maintained plant," is unnecessary because it is incorporated in RG 1.200, Revision 3. RG 1.200, Revision 3, Staff Regulatory Position C.1, states, "The base PRA serves as the foundational representation of the as-built and as-operated plant necessary to support an application." The term "maintained" does not appear in RG 1.200, Rev. 3, in this context and is not necessary because "maintained" is encompassed within "as-operated." The proposed change refers to the regulatory positions in RG 1.200, Revision 3. RG 1.200, Revision 3, contains other information that does not convey the regulatory positions; which are only contained in Section C of the RG.

Separating the proposed Paragraph f from Paragraph e conveys meaning. The proposed Paragraph e describes when prior NRC approval is required. The proposed Paragraph f describes PRA model maintenance and upgrade in accordance with RG 1.200, Rev. 3, which does not typically require prior NRC approval.

As described in Section 3.1, Revision 3 of RG 1.200 discusses the use of newly developed methods. If a licensee uses a newly developed method in the RICT Program, a report is required to be submitted to the NRC. Paragraph g requires the report and references a new reporting requirement in Section 5.6, of the TS.

3.3. Addition of a TS Reporting Requirement

The proposed change adds a new reporting requirement to Section 5.6 of the TS titled, "Risk Informed Completion Time (RICT) Program Upgrade Report." The report is required to be submitted by the Section 5.5 RICT Program if a newly developed method is to be used. The details of the reporting requirement are in Section 5.6.

The proposed report must be submitted following a PRA upgrade associated with a newly developed method and prior to using that method to calculate a RICT.

The proposed report must include:

- The PRA models upgraded to include newly developed methods;
- A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"
- Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and
- All changes to key assumptions related to newly developed methods or their implementation.

In accordance with Title 10 of the Code of Federal Regulations, Part 50.4, all reports from a licensee to the Nuclear Regulatory Commission must be sent to the Document Control Desk using the specified address.

3.4. Comparison to NRC Proposals

In April 2021 the NRC provided proposed TS wording referencing RG 1.200, Revision 3, for industry comment. In February 2022, the NRC provided an alternate recommendation (ADAMS Accession No. ML19226A207). Appendix A provides a comparison of the NRC's proposals to the proposed traveler.

4. REGULATORY EVALUATION

The regulation at Title 10 of the Code of Federal Regulations (10 CFR) Section 50.36(b) requires:

Each license authorizing operation of a ... utilization facility ... will include technical specifications. The technical specifications will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to [10 CFR] 50.34 ["Contents of applications; technical information"]. The Commission may include such additional technical specifications as the Commission finds appropriate.

Per 10 CFR 50.90, whenever a holder of a license desires to amend the license, application for an amendment must be filed with the Commission, fully describing the changes desired, and following as far as applicable, the form prescribed for original applications.

Per 10 CFR 50.92(a), in determining whether an amendment to a license will be issued to the applicant, the Commission will be guided by the considerations which govern the issuance of initial licenses to the extent applicable and appropriate.

Section IV, "The Commission Policy," of the "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" (58FR39132), dated July 22, 1993, states in part that improved STS have been developed and will be maintained for each NSSS

owners group. The Commission Policy encourages licensees to use the improved STS as the basis for plant-specific Technical Specifications." The industry's proposal of travelers and the NRC's approval of travelers is the method used to maintain the improved STS as described in the Commission's Policy. Following NRC approval, licensees adopt travelers into their plant-specific technical specifications following the requirements of 10 CFR 50.90. Therefore, the traveler process facilitates the Commission's policy while satisfying the requirements of the applicable regulations.

The regulation at 10 CFR 50.36(a)(1) also requires the application to include a "summary statement of the bases or reasons for such specifications, other than those covering administrative controls." The proposed traveler does not affect the Bases and, therefore, does not affect compliance with 10 CFR 50.36(a)(1).

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 approval of the proposed change will not be inimical to the common defense and security or to the health and safety of the public.

5. REFERENCES

1. TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times - RITSTF Initiative 4b," July 2, 2018, NRC ADAMS Accession No. ML18183A493.
2. Final Revised Model Safety Evaluation of Traveler TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b," November 21, 2018, ADAMS Accession No. ML18269A041.
3. Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities," December 2020.

Model Application

[DATE]

10 CFR 50.90

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

DOCKET NO.PLANT NAME

[50]-[xxx]

SUBJECT: Application to Revise Technical Specifications to Adopt
TSTF-591, "Revise Risk Informed Completion Time (RICT)
Program"

Pursuant to 10 CFR 50.90, [LICENSEE] is submitting a request for an amendment to the Technical Specifications (TS) for [PLANT NAME, UNIT NOS.].

[LICENSEE] requests adoption of TSTF-591, "Revise Risk Informed Completion Time (RICT) Program," which is an approved change to the Standard Technical Specifications (STS), into the [PLANT NAME, UNIT NOS] TS. TSTF-591 revises the Technical Specifications (TS) Section 5.5 Program, "Risk Informed Completion Time Program," to reference Regulatory Guide (RG) 1.200, Revision 3, instead of Revision 2, and to make other changes. A new report is added to TS Section 5.6, "Reporting Requirements," to inform the NRC of newly developed methods used to calculate a RICT.

The enclosure provides a description and assessment of the proposed changes. Attachment 1 provides the existing TS pages marked to show the proposed changes. Attachment 2 provides revised (clean) TS pages. The proposed change does not affect the TS Bases.

[LICENSEE] requests that the amendment be reviewed under the Consolidated Line Item Improvement Process (CLIIP). Approval of the proposed amendment is requested within 6 months of completion of the NRC's acceptance review. Once approved, the amendment shall be implemented within [90] days.

There are no regulatory commitments made in this application.

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated [STATE] Official.

If you should have any questions regarding this submittal, please contact [NAME, TELEPHONE NUMBER].

[In accordance with 10 CFR 50.30(b), a license amendment request must be executed in a signed original under oath or affirmation. This can be accomplished by attaching a notarized affidavit confirming the signature authority of the signatory, or by including the following statement in the cover letter: "I declare under penalty of perjury that the foregoing is true and correct.

Executed on (date)." The alternative statement is pursuant to 28 USC 1746. It does not require notarization.]

Sincerely,

[Name, Title]

Enclosure: Description and Assessment

Attachments: 1. Proposed Technical Specification Changes (Mark-Up)
2. Revised Technical Specification Pages

[The attachments are to be provided by the licensee and are not included in the model application.]

cc: NRC Project Manager
NRC Regional Office
NRC Resident Inspector
State Contact

ENCLOSURE

DESCRIPTION AND ASSESSMENT

1.0 DESCRIPTION

[LICENSEE] requests adoption of TSTF-591, "Revise Risk Informed Completion Time (RICT) Program," which is an approved change to the Standard Technical Specifications (STS), into the [PLANT NAME, UNIT NOS] TS. TSTF-591 revises the Technical Specifications (TS) Section 5.5 Program, "Risk Informed Completion Time Program," to reference Regulatory Guide (RG) 1.200, Revision 3, instead of Revision 2, and to make other changes. A new report is added to TS Section 5.6, "Reporting Requirements," to inform the NRC of newly developed methods used to calculate a RICT.

2.0 ASSESSMENT

2.1 Applicability of Safety Evaluation

[LICENSEE] has reviewed the safety evaluation for TSTF-591 provided to the Technical Specifications Task Force in a letter dated [DATE]. This review included the NRC staff's evaluation, as well as the information provided in TSTF-591. [LICENSEE] has concluded that the justifications presented in TSTF-591 and the safety evaluation prepared by the NRC staff are applicable to [PLANT, UNIT NOS.] and justify this amendment for the incorporation of the changes to the [PLANT] TS.

2.2 Variations

[LICENSEE is not proposing any variations from the TS changes described in TSTF-591 or the applicable parts of the NRC staff's safety evaluation.] [LICENSEE is proposing the following variations from the TS changes described in TSTF-591 or the applicable parts of the NRC staff's safety evaluation:]

[The [PLANT] TS utilize different [numbering][and][titles] than the STS on which TSTF-591 was based. Specifically, [describe differences between the plant-specific TS numbering and/or titles and the TSTF-591 numbering and titles.] These differences are administrative and do not affect the applicability of TSTF-591 to the [PLANT] TS.]

[The [PLANT] TS contain requirements that differ from the STS on which TSTF-591 was based but are encompassed in the TSTF-591 justification. [Describe differences and why TSTF-591 is still applicable.]

[The [PLANT] Risk Informed Completion Time Program, Paragraph e, is different from the TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times - RITSTF Initiative 4b," wording used as the starting point in TSTF-591. These differences do not affect the applicability of the proposed change.]

[The [PLANT] license contains a condition that serves the same purpose as Paragraph e in TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times - RITSTF Initiative

4b." [LICENSEE] proposes to remove the license condition and to insert the proposed Paragraph e of the Risk Informed Completion Time Program. [Describe the differences between the license condition and the TSTF-505, Revision 2, Paragraph e and why they do not affect the applicability of TSTF-591.]]

3.0 REGULATORY ANALYSIS

3.1 No Significant Hazards Consideration Analysis

[LICENSEE] requests adoption of TSTF-591, "Revise Risk Informed Completion Time (RICT) Program," which is an approved change to the Standard Technical Specifications (STS), into the [PLANT NAME, UNIT NOS] Technical Specifications (TS). TSTF-591 revises the Technical Specifications (TS) Section 5.5 Program, "Risk Informed Completion Time Program," to reference Regulatory Guide (RG) 1.200, Revision 3, instead of Revision 2, and to make other changes. A new report is added to TS Section 5.6, "Reporting Requirements," to inform the NRC of newly developed methods used to calculate a RICT.

[LICENSEE] has evaluated if a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

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

Response: No

The proposed change updates the standard for maintaining and updating PRA models used to calculate a RICT from NRC-approved Regulatory Guide 1.200, Revision 2, to NRC-approved Regulatory Guide 1.200, Revision 3. A new report is added to inform the NRC when a newly developed method is used.

The proposed change does not involve a significant increase in the probability of an accident previously evaluated because the change involves no change to the plant or its modes of operation. The proposed change does not increase the consequences of an accident because the design-basis mitigation function of the affected systems is not changed and the consequences of an accident during the extended Risk Informed Completion Time are no different from those during the existing Completion Time. The submittal of information-only reports has no effect on the initiators or consequences of any accidents previously evaluated.

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

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

Response: No

The proposed change updates the standard for maintaining and updating PRA models used to calculate a RICT from NRC-approved Regulatory Guide 1.200, Revision 2, to NRC-approved Regulatory Guide 1.200, Revision 3. A new report is added to inform the NRC when a newly developed method is used.

The proposed change does not change a design function or method of operation of the plant. The proposed change does not involve a physical alteration of the plant (no new or different kind of equipment will be installed).

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

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

Response: No

The proposed change updates the standard for maintaining and updating PRA models used to calculate a RICT from NRC-approved Regulatory Guide 1.200, Revision 2, to NRC-approved Regulatory Guide 1.200, Revision 3. A new report is added to inform the NRC when a newly developed method is used.

The proposed change supports the extension of Completion Times provided risk is assessed and managed in accordance with the NRC-approved RICT Program. The proposed change does not alter any design basis or safety limits. The proposed change affects the standard used to maintain the PRA models used in the RICT Program by changing from one NRC-approved standard to a later NRC-approved version and requiring submittal of an information-only report. The RICT Program will continue to assure that adequate margins of safety are maintained.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, [LICENSEE] concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

3.2 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

4.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in

10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or a significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

Appendix A

**Comparison of NRC April 2021 and February 2, 2022, Proposed TS Wording to the
Traveler Proposed Wording**

NRC 4/20/21 Proposal	NRC 2/2/2022 Memorandum	TSTF-591 Proposal	Discussion
5.5.X	5.5.X	5.5.X	
<p>e. A RICT must be calculated using [list specific approaches used (e.g., internal events probabilistic risk assessment (PRA), fire PRA, addition of bounding seismic risk to RICT calculations, etc.)] based on the as-built, as-operated, and as-maintained plant.</p>	<p>e. A risk-informed completion time (RICT) must be calculated using the following techniques [list specific probabilistic risk assessment (PRA) and non-PRA techniques such as FIVE, Seismic Margins] used in the license amendment request. Changes to these PRA and non-PRA techniques require prior U.S. Nuclear Regulatory Commission (NRC) approval.</p>	<p>e. A RICT calculation must include the following hazard groups: [list specific hazards and the associated PRA models or alternate means of assessing the hazard for each applicable hazard group approved by NRC. For example, internal flood and internal events PRA model, internal fire PRA model, and seismic penalty factor]. Changes to these means of assessing the hazard groups require prior NRC approval.</p>	<ul style="list-style-type: none"> • It is not necessary to define RICT in paragraph e as it is defined in the first paragraph of the program. • The NRC's 2022 proposal uses the term "in the license amendment request." This is inappropriate for a TS requirement as there is no indication which license amendment request is being referenced. • In the NRC 2021 proposal, there is no explicit requirement for NRC prior approval. It's implied that a license amendment is required if the parenthetical TS description is changed. • In the NRC 2021 proposal, the first sentence states on how a RICT is calculated and also discusses maintenance (as-built, as-operated, as-maintained plant), which is confusing, and duplicative of RG 1.200, Regulatory Position

NRC 4/20/21 Proposal	NRC 2/2/2022 Memorandum	TSTF-591 Proposal	Discussion
			C.1.
f. PRA models used to calculate a RICT shall be maintained and upgraded in accordance with processes described in Regulatory Positions C.1, C.2, C.3, and C.4 in Regulatory Guide (RG) 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."	f. PRA models used to calculate a RICT shall be maintained and upgraded to reflect the as-built, as-operated, and as-maintained plant in accordance with processes described in Regulatory Positions C.1, C.2, C.3, and C.4 in Regulatory Guide (RG) 1.200, Revision 3, "Acceptability of Probabilistic Assessment Results for Risk-Informed Activities," issued December 2020.	f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."	<ul style="list-style-type: none"> • Reg Guide 1.200, Rev. 3, only has 4 regulatory positions (C.1 - C.4). Therefore, stating Regulatory Positions C.1-C.4 is unnecessary. • It not necessary to state, "to reflect the as-built, as-operated, and as-maintained plant," as that requirement is included in the regulatory positions of RG 1.200, Rev. 3, Regulatory Position C.1. • It is not necessary to state the date of the Reg Guide if the revision is specified.
f. Use of any newly developed methods, as defined in RG 1.200, Revision 3, must meet all applicable review requirements in Tables 1-7.2-2 through 1-7.2-7 of Pressurized-Water Reactor Owners Group (PWROG)-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer	g. Before use by the licensee, NDMs, as defined in RG 1.200, Revision 3, must be subjected to a peer review process. The NDMs used in the licensee's PRA model must meet all applicable review requirements in Tables 1-7.2-2 through 1-7.2-7 of Pressurized-Water Reactor Owners Group (PWROG)-19027-NP,		<ul style="list-style-type: none"> • The details in the NRC's 2021 proposal Paragraph f and 2022 proposal Paragraph g duplicate requirements in RG 1.200, regulatory positions C.1 through C.4. This is unnecessary and repetitive. As a result, there is no need to specifically discuss the review requirements for newly developed methods

NRC 4/20/21 Proposal	NRC 2/2/2022 Memorandum	TSTF-591 Proposal	Discussion
<p>Review," in accordance with the process in NEI 17-07, Revision 2, "Performance of PRA Peer Reviews Using the ASME/ANS PRA Standard." The peer review report described in Section 9.1 of NEI 17-07, Revision 2 for both the acceptability and implementation of the newly developed method must be available to the NRC for oversight and inspection activities.</p>	<p>Revision 2, "Newly Developed Method Requirements and Peer Review," issued July 2020. The licensee must use the peer review process in Nuclear Energy Institute (NEI) 17-07, Revision 2, "Performance of PRA Peer Reviews Using the ASME/ANS PRA Standard," issued August 2019. All peer review findings on NDM must be closed using an NRC-endorsed process prior to use in calculating a RICT. If any applicable requirements in Tables 1- 7.2-2 through 1-7.2-7 of PWROG-19027-NP, Revision 2, are not met, use of the NDM requires prior NRC approval. The peer review report described in Section 9.1 of NEI 17- 07, Revision 2, for both the acceptability and implementation of the NDM must be retained.</p>		<p>in the TS. The correspondence between the NRC's proposal and RG 1.200, Rev. 3, is detailed below.</p> <ul style="list-style-type: none"> • Regulatory Position C.2.2.2.1 states that NEI 17-07, Rev. 2, is endorsed for peer review of a PRA upgrade (which includes newly developed methods). • Regulatory Position C.2.2.2.2 states "An acceptable set of requirements against which the adequacy of a newly developed method can be assessed is provided in PWROG-19027-NP, Revision 2." • PWROG-19027-NP, Revision 2, states, "The generic expectation is that newly developed methods satisfy the set of requirements discussed in this section," which includes Table 1-7.2-2 through 1-7.2-7. • Regulatory position

NRC 4/20/21 Proposal	NRC 2/2/2022 Memorandum	TSTF-591 Proposal	Discussion
			<p>C.2.2.2.2 recognizes that Section 5.2 of PWROG-19027-NP states that the peer review report must be publicly available.</p> <ul style="list-style-type: none"> Regulatory Guide 1.200, Revision 3, Regulatory Position C.2.2.2.2 states that if NDM is deemed not technically acceptable in the NDM peer review report, or if at least one finding-level F&O on the NDM remain open, a licensee or applicant may not use it in a PRA supporting risk-informed licensing applications. It is not necessary to state that if it is desired to not meet a TS requirement, prior NRC approval is required.
<p>g. A summary report describing the newly developed method and its implementation must be submitted in accordance with Section 5.6.x .</p>		<p>g. A report shall be submitted in accordance with Specification 5.6.[X] before a newly developed method is used to calculate a RICT.</p>	<ul style="list-style-type: none"> The term "summary" is confusing. Revised to include the restriction on use until after the report is submitted to avoid it being missed.

NRC 4/20/21 Proposal	NRC 2/2/2022 Memorandum	TSTF-591 Proposal	Discussion
5.6.X		5.6.X	
<p>A summary report describing the newly developed method and its implementation shall be submitted to the NRC following a PRA upgrade unless it has already been submitted to the NRC by a licensee.</p> <p>A summary report shall also be submitted if the licensee uses an already submitted newly developed method with exceptions, deviations, or clarifications from the precedent.</p> <p>A summary report describing a newly developed method and its implementation must be submitted following a PRA upgrade associated with a newly developed method prior to using that method in the RICT program or within 60 days after completing the focused peer review, whichever date occurs sooner. The summary report shall</p>	<p>A summary report describing the NDM and its implementation shall be submitted to the NRC following a PRA upgrade.</p> <p>The summary report must be submitted following a PRA upgrade associated with an NDM before using that method in the RICT program or within 60 days after the licensee completes disposition of all peer review comments, whichever date occurs sooner. The summary report shall describe the scope of the upgrade and shall include the following:</p>	<p>A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT.</p>	<ul style="list-style-type: none"> • The term "summary" is confusing. • The first three paragraphs of the NRC's 2021 proposal appear to be redundant to each other and to the proposed paragraph "g". • A "newly developed method" that has been previously submitted by a licensee no longer satisfies the definition of a "newly developed method" and a report is not required. If a licensee takes an exception or deviation from the already submitted method, it is a "newly developed method." Therefore, it is not required to be stated in the TS. • The proposed schedules for submitting a report, before use in the RICT program or within 60 days after the focused peer review, whichever is sooner, have

NRC 4/20/21 Proposal	NRC 2/2/2022 Memorandum	TSTF-591 Proposal	Discussion
<p>describe the scope of the upgrade and shall include:</p> <ul style="list-style-type: none"> a. The PRA models upgraded, and the newly developed method used; b. A description of the acceptability of the newly developed method consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;" c. All open finding and how those findings from the newly developed method implementation and how those findings were resolved¹ or demonstrated not to have a significant impact on the PRA; 	<ul style="list-style-type: none"> a. the PRA models upgraded, and the NDM used b. a description of the acceptability of the NDM consistent with Section 5.2 of PWROG-19027-NP, Revision 2 c. all open findings and how those findings from the NDM implementation were closed or were demonstrated not to have a significant impact on the PRA 	<p>The report shall include:</p> <ul style="list-style-type: none"> a. The PRA models upgraded to include newly developed methods; b. A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;" c. Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and 	<p>different purposes (before use of the method versus submittal of a "for information" report). The RICT program is not affected by a new method that is not used to calculate a RICT, so the report timing should be based on that purpose.</p> <ul style="list-style-type: none"> • Item c is revised to refer to the impact on the RICT calculation, not the PRA. Only impacts on the RICT calculation are relevant to the report. • The 2022 NRC recommendation to describe how open findings are closed is not included as closed findings do not need to be described. The term "dispositioned" is used

NRC 4/20/21 Proposal	NRC 2/2/2022 Memorandum	TSTF-591 Proposal	Discussion
<p>and</p> <p>d. All changes to key assumptions related to the newly developed method or its implementation.</p> <p>Footnote 1: For PRA peer reviews, the terms "resolving a finding" and "closing a finding" have different meanings. A peer review finding may only be "closed" using a process endorsed by the NRC. All NDM related findings shall be "closed" prior to the use of that NDM in a RICT program.</p>	<p>d. all changes to key assumptions related to the NDM or its implementation</p>	<p>d. All changes to key assumptions related to newly developed methods or their implementation.</p>	<p>which is equivalent to "demonstrated to not have a significant effect" on the RICT.</p> <ul style="list-style-type: none"> Footnotes are not used in the Administrative Controls. Item c was changed from "resolved" to "dispositioned" to address the issue in the footnote.

Technical Specifications Changes

5.5 Programs and Manuals

5.5.20 Risk Informed Completion Time Program (continued)

----- REVIEWER'S NOTE -----

The Risk Informed Completion Time is only applicable in MODES supported by the licensee's PRA. Licensees applying the RICT Program to MODES other than MODES 1 and 2 must demonstrate that they have the capability to calculate a RICT in those MODES or that the risk indicated by their MODE 1 and 2 PRA model is bounding with respect to the lower MODE conditions.

- b. A RICT may only be utilized in MODE 1, 2 [, and 3, and MODE 4 while relying on steam generators for heat removal];
- c. When a RICT is being used, any change to the plant configuration, as defined in NEI 06-09-A, Appendix A, must be considered for the effect on the RICT.
 - 1. For planned changes, the revised RICT must be determined prior to implementation of the change in configuration.
 - 2. For emergent conditions, the revised RICT must be determined within the time limits of the Required Action Completion Time (i.e., not the RICT) or 12 hours after the plant configuration change, whichever is less.
 - 3. Revising the RICT is not required if the plant configuration change would lower plant risk and would result in a longer RICT.
- d. For emergent conditions, if the extent of condition evaluation for inoperable structures, systems, or components (SSCs) is not complete prior to exceeding the Completion Time, the RICT shall account for the increased possibility of common cause failure (CCF) by either:
 - 1. Numerically accounting for the increased possibility of CCF in the RICT calculation; or
 - 2. Risk Management Actions (RMAs) not already credited in the RICT calculation shall be implemented that support redundant or diverse SSCs that perform the function(s) of the inoperable SSCs, and, if practicable, reduce the frequency of initiating events that challenge the function(s) performed by the inoperable SSCs.

5.5 Programs and Manuals

5.5.20 Risk Informed Completion Time Program (continued)

- ~~e. The risk assessment approaches and methods shall be acceptable to the NRC. The plant PRA shall be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at the plant, as specified in Regulatory Guide 1.200, Revision 2. Methods to assess the risk from extending the Completion Times must be PRA methods used to support this license amendment, or other methods approved by the NRC for generic use; and any change in the PRA methods to assess risk that are outside these approval boundaries require prior NRC approval.]~~
- e. A RICT calculation must include the following hazard groups: [list specific hazards and the associated PRA models or alternate means of assessing the hazard for each applicable hazard group approved by NRC. For example, internal flood and internal events PRA model, internal fire PRA model, and seismic penalty factor]. Changes to these means of assessing the hazard groups require prior NRC approval.**
- f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."**
- g. A report shall be submitted in accordance with Specification 5.6.[X] before a newly developed method is used to calculate a RICT.]**

[5.5.21 Spent Fuel Storage Rack Neutron Absorber Monitoring Program

This Program provides controls for monitoring the condition of the neutron absorber used in the spent fuel pool storage racks to verify the Boron-10 areal density is consistent with the assumptions in the spent fuel pool criticality analysis. The program shall be in accordance with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, May 2017 [, with the following exceptions:

1.]

5.6 Reporting Requirements

5.6.7 Steam Generator Tube Inspection Report (continued)

2. The location, orientation (if linear), measured size (if available), and voltage response for each indication. For tube wear at support structures less than 20 percent through-wall, only the total number of indications needs to be reported;
3. A description of the condition monitoring assessment and results, including the margin to the tube integrity performance criteria and comparison with the margin predicted to exist at the inspection by the previous forward-looking tube integrity assessment;
4. The number of tubes plugged [or repaired] during the inspection outage; and
- [5. The repair methods utilized and the number of tubes repaired by each repair method.]
- d. An analysis summary of the tube integrity conditions predicted to exist at the next scheduled inspection (the forward-looking tube integrity assessment) relative to the applicable performance criteria, including the analysis methodology, inputs, and results;
- e. The number and percentage of tubes plugged [or repaired] to date, and the effective plugging percentage in each SG;
- f. The results of any SG secondary side inspections; and
- [g. Insert any plant-specific reporting requirements, if applicable.]

5.6.8 Risk Informed Completion Time (RICT) Program Upgrade Report

A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT. The report shall include:

- a. **The PRA models upgraded to include newly developed methods;**
- b. **A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"**
- c. **Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and**

- d. All changes to key assumptions related to newly developed methods or their implementation.**
-
-

5.5 Programs and Manuals

5.5.20 Risk Informed Completion Time Program (continued)

- a. The RICT may not exceed 30 days;

----- REVIEWER'S NOTE -----

The Risk Informed Completion Time is only applicable in MODES supported by the licensee's PRA. Licensees applying the RICT Program to MODES other than MODES 1 and 2 must demonstrate that they have the capability to calculate a RICT in those MODES or that the risk indicated by their MODE 1 and 2 PRA model is bounding with respect to the lower MODE conditions.

- b. A RICT may only be utilized in MODE 1, 2 [, and 3, and MODE 4 while relying on steam generators for heat removal];
- c. When a RICT is being used, any change to the plant configuration, as defined in NEI 06-09-A, Appendix A, must be considered for the effect on the RICT.
 - 1. For planned changes, the revised RICT must be determined prior to implementation of the change in configuration.
 - 2. For emergent conditions, the revised RICT must be determined within the time limits of the Required Action Completion Time (i.e., not the RICT) or 12 hours after the plant configuration change, whichever is less.
 - 3. Revising the RICT is not required if the plant configuration change would lower plant risk and would result in a longer RICT.
- d. For emergent conditions, if the extent of condition evaluation for inoperable structures, systems, or components (SSCs) is not complete prior to exceeding the Completion Time, the RICT shall account for the increased possibility of common cause failure (CCF) by either:
 - 1. Numerically accounting for the increased possibility of CCF in the RICT calculation; or
 - 2. Risk Management Actions (RMAs) not already credited in the RICT calculation shall be implemented that support redundant or diverse SSCs that perform the function(s) of the inoperable SSCs, and, if practicable, reduce the frequency of initiating events that challenge the function(s) performed by the inoperable SSCs.

5.5 Programs and Manuals

5.5.20 Risk Informed Completion Time Program (continued)

- ~~e. The risk assessment approaches and methods shall be acceptable to the NRC. The plant PRA shall be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at the plant, as specified in Regulatory Guide 1.200, Revision 2. Methods to assess the risk from extending the Completion Times must be PRA methods used to support this license amendment, or other methods approved by the NRC for generic use; and any change in the PRA methods to assess risk that are outside these approval boundaries require prior NRC approval.]~~
- e. A RICT calculation must include the following hazard groups: [list specific hazards and the associated PRA models or alternate means of assessing the hazard for each applicable hazard group approved by NRC. For example, internal flood and internal events PRA model, internal fire PRA model, and seismic penalty factor]. Changes to these means of assessing the hazard groups require prior NRC approval.**
- f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."**
- g. A report shall be submitted in accordance with Specification 5.6.[X] before a newly developed method is used to calculate a RICT.]**

[5.5.21 Spent Fuel Storage Rack Neutron Absorber Monitoring Program

This Program provides controls for monitoring the condition of the neutron absorber used in the spent fuel pool storage racks to verify the Boron-10 areal density is consistent with the assumptions in the spent fuel pool criticality analysis. The program shall be in accordance with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, May 2017 [, with the following exceptions:

1.]

5.6 Reporting Requirements

5.6.7 Steam Generator Tube Inspection Report (continued)

2. The location, orientation (if linear), measured size (if available), and voltage response for each indication. For tube wear at support structures less than 20 percent through-wall, only the total number of indications needs to be reported;
3. A description of the condition monitoring assessment and results, including the margin to the tube integrity performance criteria and comparison with the margin predicted to exist at the inspection by the previous forward-looking tube integrity assessment;
4. The number of tubes plugged [or repaired] during the inspection outage; and
- [5. The repair methods utilized and the number of tubes repaired by each repair method.]
- d. An analysis summary of the tube integrity conditions predicted to exist at the next scheduled inspection (the forward-looking tube integrity assessment) relative to the applicable performance criteria, including the analysis methodology, inputs, and results;
- e. The number and percentage of tubes plugged [or repaired] to date, and the effective plugging percentage in each SG;
- f. The results of any SG secondary side inspections; and
- [g. Insert any plant-specific reporting requirements, if applicable.]

5.6.8 Risk Informed Completion Time (RICT) Program Upgrade Report

A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT. The report shall include:

- a. The PRA models upgraded to include newly developed methods;**
- b. A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"**
- c. Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and**

- d. All changes to key assumptions related to newly developed methods or their implementation.**
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5.5 Programs and Manuals

5.5.20 Risk Informed Completion Time Program (continued)

----- REVIEWER'S NOTE -----

The Risk Informed Completion Time is only applicable in MODES supported by the licensee's PRA. Licensees applying the RICT Program to MODES other than MODES 1 and 2 must demonstrate that they have the capability to calculate a RICT in those MODES or that the risk indicated by their MODE 1 and 2 PRA model is bounding with respect to the lower MODE conditions.

- b. A RICT may only be utilized in MODE 1, 2 [, and 3, and MODE 4 while relying on steam generators for heat removal];
- c. When a RICT is being used, any change to the plant configuration, as defined in NEI 06-09-A, Appendix A, must be considered for the effect on the RICT.
 - 1. For planned changes, the revised RICT must be determined prior to implementation of the change in configuration.
 - 2. For emergent conditions, the revised RICT must be determined within the time limits of the Required Action Completion Time (i.e., not the RICT) or 12 hours after the plant configuration change, whichever is less.
 - 3. Revising the RICT is not required if the plant configuration change would lower plant risk and would result in a longer RICT.
- d. For emergent conditions, if the extent of condition evaluation for inoperable structures, systems, or components (SSCs) is not complete prior to exceeding the Completion Time, the RICT shall account for the increased possibility of common cause failure (CCF) by either:
 - 1. Numerically accounting for the increased possibility of CCF in the RICT calculation; or
 - 2. Risk Management Actions (RMAs) not already credited in the RICT calculation shall be implemented that support redundant or diverse SSCs that perform the function(s) of the inoperable SSCs, and, if practicable, reduce the frequency of initiating events that challenge the function(s) performed by the inoperable SSCs.

5.5 Programs and Manuals

5.5.20 Risk Informed Completion Time Program (continued)

- ~~e. The risk assessment approaches and methods shall be acceptable to the NRC. The plant PRA shall be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at the plant, as specified in Regulatory Guide 1.200, Revision 2. Methods to assess the risk from extending the Completion Times must be PRA methods used to support this license amendment, or other methods approved by the NRC for generic use; and any change in the PRA methods to assess risk that are outside these approval boundaries require prior NRC approval.]~~
- e. A RICT calculation must include the following hazard groups: [list specific hazards and the associated PRA models or alternate means of assessing the hazard for each applicable hazard group approved by NRC. For example, internal flood and internal events PRA model, internal fire PRA model, and seismic penalty factor]. Changes to these means of assessing the hazard groups require prior NRC approval.**
- f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."**
- g. A report shall be submitted in accordance with Specification 5.6.[X] before a newly developed method is used to calculate a RICT.]**

[5.5.21 Spent Fuel Storage Rack Neutron Absorber Monitoring Program

This Program provides controls for monitoring the condition of the neutron absorber used in the spent fuel pool storage racks to verify the Boron-10 areal density is consistent with the assumptions in the spent fuel pool criticality analysis. The program shall be in accordance with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, May 2017 [, with the following exceptions:

1.]

5.6 Reporting Requirements

5.6.7 Steam Generator Tube Inspection Report (continued)

2. The location, orientation (if linear), measured size (if available), and voltage response for each indication. For tube wear at support structures less than 20 percent through-wall, only the total number of indications needs to be reported;
3. A description of the condition monitoring assessment and results, including the margin to the tube integrity performance criteria and comparison with the margin predicted to exist at the inspection by the previous forward-looking tube integrity assessment;
4. The number of tubes plugged [or repaired] during the inspection outage; and
- [5. The repair methods utilized and the number of tubes repaired by each repair method.]
- d. An analysis summary of the tube integrity conditions predicted to exist at the next scheduled inspection (the forward-looking tube integrity assessment) relative to the applicable performance criteria, including the analysis methodology, inputs, and results;
- e. The number and percentage of tubes plugged [or repaired] to date, and the effective plugging percentage in each SG;
- f. The results of any SG secondary side inspections; and
- [g. Insert any plant-specific reporting requirements, if applicable.]

5.6.8 Risk Informed Completion Time (RICT) Program Upgrade Report

A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT. The report shall include:

- a. **The PRA models upgraded to include newly developed methods;**
- b. **A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"**
- c. **Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and**

- d. All changes to key assumptions related to newly developed methods or their implementation.**
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5.5 Programs and Manuals

[5.5.17 Risk Informed Completion Time Program

This program provides controls to calculate a Risk Informed Completion Time (RICT) and must be implemented in accordance with NEI 06-09-A, Revision 0, "Risk-Managed Technical Specifications (RMTS) Guidelines." The program shall include the following:

- a. The RICT may not exceed 30 days;

----- REVIEWER'S NOTE -----

The Risk Informed Completion Time is only applicable in MODES supported by the licensee's PRA. Licensees applying the RICT Program to MODES other than MODES 1 and 2 must demonstrate that they have the capability to calculate a RICT in those MODES or that the risk indicated by their MODE 1 and 2 PRA model is bounding with respect to the lower MODE conditions.

- b. A RICT may only be utilized in MODE 1, 2 [, and 3, and MODE 4 while relying on steam generators for heat removal];
- c. When a RICT is being used, any change to the plant configuration, as defined in NEI 06-09-A, Appendix A, must be considered for the effect on the RICT.
 - 1. For planned changes, the revised RICT must be determined prior to implementation of the change in configuration.
 - 2. For emergent conditions, the revised RICT must be determined within the time limits of the Required Action Completion Time (i.e., not the RICT) or 12 hours after the plant configuration change, whichever is less.
 - 3. Revising the RICT is not required if the plant configuration change would lower plant risk and would result in a longer RICT.
- d. For emergent conditions, if the extent of condition evaluation for inoperable structures, systems, or components (SSCs) is not complete prior to exceeding the Completion Time, the RICT shall account for the increased possibility of common cause failure (CCF) by either:
 - 1. Numerically accounting for the increased possibility of CCF in the RICT calculation; or
 - 2. Risk Management Actions (RMAs) not already credited in the RICT calculation shall be implemented that support redundant or diverse SSCs that perform the function(s) of the inoperable SSCs, and, if practicable, reduce the frequency of initiating events that challenge the function(s) performed by the inoperable SSCs.

5.5 Programs and Manuals

5.5.17 Risk Informed Completion Time Program (continued)

- ~~e. The risk assessment approaches and methods shall be acceptable to the NRC. The plant PRA shall be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at the plant, as specified in Regulatory Guide 1.200, Revision 2. Methods to assess the risk from extending the Completion Times must be PRA methods used to support this license amendment, or other methods approved by the NRC for generic use; and any change in the PRA methods to assess risk that are outside these approval boundaries require prior NRC approval.]~~
- e. A RICT calculation must include the following hazard groups: [list specific hazards and the associated PRA models or alternate means of assessing the hazard for each applicable hazard group approved by NRC. For example, internal flood and internal events PRA model, internal fire PRA model, and seismic penalty factor]. Changes to these means of assessing the hazard groups require prior NRC approval.**
- f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."**
- g. A report shall be submitted in accordance with Specification 5.6.[X] before a newly developed method is used to calculate a RICT.]**

[5.5.18 Spent Fuel Storage Rack Neutron Absorber Monitoring Program

This Program provides controls for monitoring the condition of the neutron absorber used in the spent fuel pool storage racks to verify the Boron-10 areal density is consistent with the assumptions in the spent fuel pool criticality analysis. The program shall be in accordance with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, May 2017 [, with the following exceptions:

1.]

5.6 Reporting Requirements

5.6.4 RCS PRESSURE AND TEMPERATURE LIMITS REPORT (continued)

6. The minimum temperature requirements of Appendix G to 10 CFR Part 50 shall be incorporated into the pressure and temperature limit curves.
7. Licensees who have removed two or more capsules should compare for each surveillance material the measured increase in reference temperature (RT_{NDT}) to the predicted increase in RT_{NDT} ; where the predicted increase in RT_{NDT} is based on the mean shift in RT_{NDT} plus the two standard deviation value ($2\sigma_{\Delta}$) specified in Regulatory Guide 1.99, Revision 2. If the measured value exceeds the predicted value (increase $RT_{NDT} + 2\sigma_{\Delta}$), the licensee should provide a supplement to the PTLR to demonstrate how the results affect the approved methodology.

5.6.5 Post Accident Monitoring Report

When a report is required by Condition B or F of LCO 3.3.[3.1], "Post Accident Monitoring (PAM) Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

-----REVIEWER'S NOTE-----
 These reports may be required covering inspection, test, and maintenance activities. These reports are determined on an individual basis for each unit and their preparation and submittal are designated in the Technical Specifications.

5.6.6 Risk Informed Completion Time (RICT) Program Upgrade Report

A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT. The report shall include:

- a. **The PRA models upgraded to include newly developed methods;**
- b. **A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"**
- c. **Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and**
- d. **All changes to key assumptions related to newly developed methods or their implementation.**

5.5 Programs and Manuals

5.5.17 Risk Informed Completion Time Program (continued)

----- REVIEWER'S NOTE -----

The Risk Informed Completion Time is only applicable in MODES supported by the licensee's PRA. Licensees applying the RICT Program to MODES other than MODES 1 and 2 must demonstrate that they have the capability to calculate a RICT in those MODES or that the risk indicated by their MODE 1 and 2 PRA model is bounding with respect to the lower MODE conditions.

- b. A RICT may only be utilized in MODE 1, 2 [, and 3, and MODE 4 while relying on steam generators for heat removal];
- c. When a RICT is being used, any change to the plant configuration, as defined in NEI 06-09-A, Appendix A, must be considered for the effect on the RICT.
 - 1. For planned changes, the revised RICT must be determined prior to implementation of the change in configuration.
 - 2. For emergent conditions, the revised RICT must be determined within the time limits of the Required Action Completion Time (i.e., not the RICT) or 12 hours after the plant configuration change, whichever is less.
 - 3. Revising the RICT is not required if the plant configuration change would lower plant risk and would result in a longer RICT.
- d. For emergent conditions, if the extent of condition evaluation for inoperable structures, systems, or components (SSCs) is not complete prior to exceeding the Completion Time, the RICT shall account for the increased possibility of common cause failure (CCF) by either:
 - 1. Numerically accounting for the increased possibility of CCF in the RICT calculation; or
 - 2. Risk Management Actions (RMAs) not already credited in the RICT calculation shall be implemented that support redundant or diverse SSCs that perform the function(s) of the inoperable SSCs, and, if practicable, reduce the frequency of initiating events that challenge the function(s) performed by the inoperable SSCs.

5.5 Programs and Manuals

5.5.17 Risk Informed Completion Time Program (continued)

- ~~e. The risk assessment approaches and methods shall be acceptable to the NRC. The plant PRA shall be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at the plant, as specified in Regulatory Guide 1.200, Revision 2. Methods to assess the risk from extending the Completion Times must be PRA methods used to support this license amendment, or other methods approved by the NRC for generic use; and any change in the PRA methods to assess risk that are outside these approval boundaries require prior NRC approval.]~~
- e. A RICT calculation must include the following hazard groups: [list specific hazards and the associated PRA models or alternate means of assessing the hazard for each applicable hazard group approved by NRC. For example, internal flood and internal events PRA model, internal fire PRA model, and seismic penalty factor]. Changes to these means of assessing the hazard groups require prior NRC approval.**
- f. The PRA models used to calculate a RICT shall be maintained and upgraded in accordance with the processes endorsed in the regulatory positions of Regulatory Guide 1.200, Revision 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities."**
- g. A report shall be submitted in accordance with Specification 5.6.[X] before a newly developed method is used to calculate a RICT.]**

[5.5.18 Spent Fuel Storage Rack Neutron Absorber Monitoring Program

This Program provides controls for monitoring the condition of the neutron absorber used in the spent fuel pool storage racks to verify the Boron-10 areal density is consistent with the assumptions in the spent fuel pool criticality analysis. The program shall be in accordance with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, May 2017 [, with the following exceptions:

1.]

5.6 Reporting Requirements

5.6.4 RCS PRESSURE AND TEMPERATURE LIMITS REPORT (continued)

6. The minimum temperature requirements of Appendix G to 10 CFR Part 50 shall be incorporated into the pressure and temperature limit curves.
7. Licensees who have removed two or more capsules should compare for each surveillance material the measured increase in reference temperature (RT_{NDT}) to the predicted increase in RT_{NDT} ; where the predicted increase in RT_{NDT} is based on the mean shift in RT_{NDT} plus the two standard deviation value ($2\sigma_{\Delta}$) specified in Regulatory Guide 1.99, Revision 2. If the measured value exceeds the predicted value (increase in $RT_{NDT} + 2\sigma_{\Delta}$), the licensee should provide a supplement to the PTLR to demonstrate how the results affect the approved methodology.

5.6.5 Post Accident Monitoring Report

When a Special Report is required by Condition B or F of LCO 3.3.[3.1], "Post Accident Monitoring (PAM) Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

5.6.6 [Tendon Surveillance Report

Any abnormal degradation of the containment structure detected during the tests required by the Pre-Stressed Concrete Containment Tendon Surveillance Program shall be reported to the NRC within 30 days. The report shall include a description of the tendon condition, the condition of the concrete (especially at tendon anchorages), the inspection procedures, the tolerances on cracking, and the corrective action taken.]

-----REVIEWER'S NOTE-----
These reports may be required covering inspection, test, and maintenance activities. These reports are determined on an individual basis for each unit and their preparation and submittal are designated in the Technical Specifications.

5.6.7 Risk Informed Completion Time (RICT) Program Upgrade Report

A report describing newly developed methods and their implementation must be submitted following a probabilistic risk assessment (PRA) upgrade associated with newly developed methods and prior to the first use of those methods to calculate a RICT. The report shall include:

- a. **The PRA models upgraded to include newly developed methods;**

- b. **A description of the acceptability of the newly developed methods consistent with Section 5.2 of PWROG-19027-NP, Revision 2, "Newly Developed Method Requirements and Peer Review;"**
 - c. **Any open findings from the peer-review of the implementation of the newly developed methods and how those findings were dispositioned; and**
 - d. **All changes to key assumptions related to newly developed methods or their implementation.**
-