

ENCLOSURE 7

License Amendment Request

**Callaway Unit No. 1
Renewed Facility Operating License NPF-30
NRC Docket No. 50-483**

**Revise Technical Specifications to Adopt Risk Informed Completion Times TSTF-505,
Revision 2, “Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b”**

PRA Model Update Process

1.0 INTRODUCTION

Section 4.0, Item 8 of the NRC Final Safety Evaluation (Reference 1) for NEI 06-09-A, "Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines", Revision 0 (Reference 2), requires that the license amendment request (LAR) provide a discussion of the licensee's programs and procedures which assure the Probabilistic Risk Assessment (PRA) models supporting the RMTS are maintained consistent with the as-built/as-operated plant. Ameren Missouri maintains a process and procedure to maintain and update the PRA models in a manner to ensure these models reflect the as built, as-operated plant. For Ameren Missouri, a single PRA model of record (MOR) including Internal Events, Internal Flood, Fire, Seismic and High Winds will be used to evaluate plant risks for Callaway Plant, Unit No. 1 (Callaway).

This enclosure describes the administrative controls and procedural processes applicable to the configuration control and update of the PRA models used to support the Risk-Informed Completion Time (RICT) Program, which will be in place to ensure that these models reflect the as-built/as-operated plant. Plant changes, including physical modifications and procedure revisions, will be identified and reviewed prior to implementation to determine if they could impact the PRA models per the Maintenance Configuration Control (MC²) Database and the Ameren Missouri PRA procedure for, "PRA Model Updates and Maintenance" (Reference 3). The PRA model update process will ensure these plant changes are incorporated into the PRA models, as appropriate.

Should a plant change or a discovered condition be identified with potential significant impact to the RICT Program calculations as defined by the plant procedure (Reference 3), an unscheduled update of the PRA model will be implemented or administrative controls shall be placed on the usage of RICT for the impacted LCOs/SSCs. Otherwise, the PRA model change is incorporated into a subsequent periodic model update. Such pending changes are considered when evaluating other changes until the changes are fully implemented into PRA models. Periodic updates are performed at least once every two fuel cycles.

2.0 PRA MODEL UPDATE PROCESS

2.1 Internal Events, Internal Flood, High Winds, Fire and Seismic PRA Model Maintenance and Update

The Callaway PRA program and model governance ensures that the applicable PRA MOR and application-specific models used for the RICT Program reflects the as-built, as operated plant for Callaway. The PRA model update process delineates the responsibilities and guidelines for controlling and updating the Internal Events, Internal Flood, Fire, High Winds and Seismic PRA models including both the periodic and unscheduled PRA model updates.

The process includes provisions to track, evaluate and prioritize potential impact areas affecting the technical elements of the PRA models (e.g., due to plant changes, plant/industry operational experience, or errors or limitations identified in the model), assessing the individual and cumulative risk impact of unincorporated changes, and controlling the model and necessary computer files, including those associated with the Configuration Risk Management Program (CRMP) model. Changes that are considered an upgrade per the ASME/ANS PRA standard

(Reference 4) receive a peer review focused on those aspects of the PRA model that represent the upgrade prior to incorporation for use in an approved risk informed program.

2.2 Review of Plant Changes for Incorporation into the PRA Model

1. The Callaway PRA MC² Database is the tool used to identify and track specified PRA model changes including physical modifications to the facility and changes to operating practices and procedures. Changes with potential significant risk impact are tracked using the Callaway PRA MC² tool.
2. Plant changes or discovered conditions captured in the MC² tool are subject to an applicability review for potential impacts to the PRA models including the CRMP model and the subsequent risk calculations which support the RICT Program (NEI 06-09-A, Section 2.3.4, Items 7.2 and 7.3, and Section 2.3.5, Items 9.2 and 9.3).
3. Plant changes are preliminary evaluated and screened based on risk criteria consistent with Callaway procedural requirements (Reference 3) with consideration of the cumulative impact of other pending changes. Changes with potential for significant impact will be incorporated in an unscheduled update and application-specific PRA model(s), consistent with the NEI 06-09-A guidance (Section 2.3.5, Item 9.2).
4. Otherwise, the change is assigned a priority and is incorporated at a subsequent periodic update consistent with Callaway procedural requirements (Reference 3).
5. PRA MOR updates for Callaway changes are performed at least once every two fuel cycles.
6. If a PRA model change is required for the CRMP model, but cannot be immediately implemented for a significant plant change or discovered condition, one of the following is applied:
 - a. Analysis to address the expected risk impact of the change via risk-informed screening criteria will be performed. In such a case, these analyses become part of the RICT Program calculation process until the plant changes are incorporated into the published PRA model and within the appropriate time associated with the priority of the update.
 - b. The application and use of such bounding analyses, as appropriate, may serve as quantitative analyses to support the expected risk impact of the change and is consistent with the guidance of NEI 06-09-A.
 - c. Appropriate administrative restrictions on the use of the RICT program for extended Completion Time are put in place until the model changes are completed, consistent with the guidance of NEI 06-09-A, Section 2.3.5, Item 9.3.

These actions satisfy NEI 06-09-A, Section 2.3.5, Item 9.3.

3.0 REFERENCES

1. Letter from the NRC to NEI, "Final Safety Evaluation for Nuclear Energy Institute (NEI) Topical Report (TR) NEI 06-09, 'Risk-Informed Technical Specifications Initiative 4B, Risk-Managed Technical Specifications (RMTS) Guidelines' (TAC No. MD4995)", dated May 17, 2007 (ADAMS Accession No. ML071200238).
2. NEI Topical Report NEI 06-09-A, "Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines", Revision 0, dated October 2012 (ADAMS Accession No. ML12286A322).
3. Callaway Plant Procedure PRA-ZZ-00001, "PRA Model Updates and Maintenance."
4. ASME/ANS RA-S-2009, Addenda to ASME/ANS RA-S-2008, "Standard for Level 1/ Large Early Release Frequency Probabilistic Risk Assessment for Nuclear Power Plant Applications," February 2009.