

**Waterford Unit 3 License Renewal  
Scoping and Screening Methodology Audit Plan  
6/13/16 – 6/16/16**

**Purpose of the Audit:**

To review the methodology used by the applicant to identify the systems, structures and components (SSC) to be included within the scope of license renewal and subject to an aging management review (AMR) in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21.

**Goals:**

Perform a review of the scoping and screening process as documented in the license renewal application (LRA), implementing procedures, reports and drawings, such that the staff:

- Obtains an understanding of the process used to identify the SSCs within the scope of license renewal and to identify the structures and components subject to an AMR.
- Has sufficient docketed information to allow the staff to reach a conclusion on the adequacy of the scoping and screening methodology as documented and applied.

**Basis for Review:**

The staff's review is performed in accordance with the following regulations and guidance:

- 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants."
- NUREG-1800, Revision 2, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants — Final Report."

**Timeline and Activities:**

**Monday 6/13**

**A.M. Team Arrival (8:00)**

ENCLOSURE 2

**Entrance Meeting (9:00)** - introductions, audit goals and activities.

**Badge team members**

**Applicant presentation on References, Tools, Procedures and Reports** - consists of a general overview of the following topics used to develop and document the information contained in the LRA:

- General approach to scoping and screening methodology developed and applied to meet the requirements of 10 CFR 54.4(a) and 10 CFR 54.21.
- Technical references used for scoping and screening (final safety analysis report (FSAR), equipment database, Maintenance Rule information).
- Program tools used for LRA development (database).
- Implementing procedures and guidance documents.
- Reports.
- Plant Structural Layout.

**NRC staff operating experience review (breakout)**

- Discussion with the applicant on the aging management program (AMP) element no. 10, "operating experience," and the process by which operating experience was reviewed by the applicant.
- Organization and preliminary review of the obtained operating experience based on the keyword search.
- Continues throughout the audit as required to complete the task.

**NRC team document review** – staff initial review of implementing procedures, basis documents and reports related to 10 CFR 54.4(a)(1) and (a)(3) scoping and screening (mechanical).

**P.M. Discussion with the applicant on scoping and screening methodology addressing 10 CFR 54.4, "Scope," Sections (a)(1) and (a)(3), for mechanical systems and components** - detailed review of scoping and screening methodology, applicable to the

mechanical discipline. Including: implementing procedures; source information; electronic databases; definition of safety-related; design bases events consideration; identification of systems, structures and components within scope; identification of intended functions; scoping/screening boundaries; license renewal drawings; identification of structures and components (SCs) subject to an AMR; and scoping and screening reports. Discuss commodities, consumables, insulation, overhead handling systems, abandoned equipment, and staged equipment, as applicable.

**Daily review of audit activities (4:30 p.m.)**

**Tuesday 6/14**

**A.M. NRC team document review** - staff initial review of implementing procedures, basis documents and reports related to 10 CFR 54.4(a)(2) scoping and screening (mechanical).

**Discussion with the applicant on scoping and screening methodology addressing 10 CFR 54.4, "Scope," Section (a)(2) for mechanical systems and components** - detailed review of scoping and screening methodology, applicable to the mechanical discipline. Including: implementing procedures; source information; electronic databases; identification of SSCs within scope; scoping/screening boundaries; license renewal drawings; identification of SCs subject to an AMR; exceptions taken to NEI 95-10, Appendix F; and scoping and screening reports. Discuss commodities, consumables, insulation, overhead handling systems, abandoned equipment, and staged equipment, as applicable.

**Plant equipment database sample review (breakout)** - the staff will perform a verification of a sample of the plant equipment database to verify that the selected components were correctly scoped.

- Continues throughout the audit as required to complete the task.

**P.M Discussion with the applicant on scoping and screening methodology addressing 10 CFR 54.4, “Scope,” Section (a)(2) for mechanical systems and components (cont.)**

**(Walkdown) Onsite observation of examples of mechanical SSCs within the scope of license renewal in accordance with 10 CFR 54.4(a)(2) (breakout)** - staff observes areas, rooms or structures containing a combination of SCs within the scope of license renewal in accordance with 10 CFR 54.4(a)(1) and nonsafety-related SCs within the scope of license renewal in accordance with 10 CFR 54.4(a)(2) (the areas, rooms or structures will be identified by the audit team prior to the audit).

**Daily review of audit activities (4:30 p.m.)**

**Wednesday 6/15**

**A.M. NRC team document review** – staff initial review of implementing procedures, basis documents and reports related to 10 CFR 54.4(a)(1), (a)(2) and (a)(3) scoping and screening (structural and electrical).

**Discussion with the applicant on scoping and screening methodology addressing 10 CFR 54.4, “Scope,” Sections (a)(1), (a)(2) and (a)(3), for structural systems and components (breakout)** - focusing on the differences from the previous discussion on mechanical systems and components, as applicable to the structural discipline. Discuss commodities, consumables, insulation, overhead handling systems, abandoned equipment, and staged equipment, as applicable.

**P.M. (Walkdown) Onsite observation and review of examples of structural SSCs within the scope of license renewal in accordance with 10 CFR 54.4 (a)(1), (a)(2) and (a)(3) (breakout)** – Staff review of system design basis documents, scoping and screening reports and drawings for selected structural SSCs, followed by walk downs of selected portions of the structural SSCs (the areas, rooms or structures will be identified by the audit team prior to the audit).

**Discussion with the applicant on scoping and screening methodology addressing 10 CFR 54.4, “Scope,” Sections (a)(1), (a)(2) and (a)(3), for electrical and I&C systems and components (breakout).** Discuss commodities as applicable.

**(Walkdown) Material/Environment combination sample review (breakout)** - the staff will perform a verification of a sample of component material and environment information contained in the LRA to validate the specified component material and environment information for a sample of components by performing visual verifications by walkdown and through review of plant specific reference materials.

- Continues throughout the audit as required to complete the task.

**Daily review of audit activities (4:30 p.m.)**

**Thursday 6/16**

**A.M. Discussion with the applicant on training activities (breakout)** – as applicable to LRA development.

**Discussion with the applicant on quality assurance activities (breakout)** – as applicable to LRA development.

**P.M. Discussion with the applicant on aging management program quality assurance elements (breakout)** – corrective actions, confirmation process, and administrative controls.

- FSAR supplement.
- Review of individual AMP quality assurance elements – No. 7, “Corrective Actions;” No. 8, “Confirmation Process;” and No. 9. “Administrative Controls.”

**NRC team document review** – staff final review of implementing procedures, basis documents and reports and breakout discussions with the applicant as necessary.

**Final Briefing (4:30 p.m. - tentative)**