

**OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3 (ONS)
SUBSEQUENT LICENSE RENEWAL APPLICATION (SLRA)
REQUESTS FOR ADDITIONAL INFORMATION (RAIs)**

SECOND ROUND RAI B4.1-3

SAFETY REVIEW

RAI B4.1-3

Regulatory Basis:

Title 10 of the *Code of Federal Regulations* (CFR) Section 54.21(a)(3) requires an applicant to demonstrate that the effects of aging for each structure and component identified in 10 CFR 54.21(a)(1) will be adequately managed so that the intended function(s) will be maintained consistent with the current licensing basis for the period of extended operation. One of the findings that the U.S. Nuclear Regulatory Commission (NRC) staff must make to issue a renewed license (10 CFR 54.29(a)) is that actions have been identified and have been or will be taken with respect to managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21, such that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the current licensing basis. In order to complete its review and enable making a finding under 10 CFR 54.29(a), the staff requires additional information in regard to the matters described below.

Background:

In responses to RAIs B4.1-1 and B4.1-2, the applicant revised lift-off testing requirements in Section A5.1, "*Secondary Shield Wall Tendon Surveillance*," in Appendix A of ONS SLRA as follows: "*Lift-off testing is performed on three tendons, one (1) horizontal, one (1) diagonal, and one (1) vertical, every other refueling outage. These three tendons, per unit, will be selected based on the existing lift-off data and practical access limitations. They will be the common tendons for lift-off testing. Prestressing forces will be trended and projected through the next two operating cycles, i.e. every 48 months. Visual inspections will also be performed on both ends of the common tendons on the same frequency as the lift-off tests.*"

Based on review of responses to RAIs B4.1-1 and B4.1-2, staff noted that the applicant will be revising the SLRA from "*lift-off testing on three randomly selected horizontal tendons*," to "*lift-off testing of common tendons of one (1) horizontal, one (1) diagonal, and one (1) vertical*," that included all three SSW tendon groups every other refueling outage.

SRP-SLR Section A.1.2.3.4, "*Detection of Aging Effects*," notes that for a condition monitoring program, when sampling is used to represent a larger population of SCs, applicants provide the basis for the inspection population and sample size.

SRP-SLR Section A.1.2.3.5, "*Monitoring and Trending*," notes that for sampling-based inspections, results are evaluated against acceptance criteria to confirm that the sampling bases (e.g., selection, size, frequency) will maintain the components' intended functions throughout the subsequent period of extended operation based on the projected rate and extent of degradation.

During a March 7, 2022, public meeting, and subsequent email (ADAMS Accession No. ML22074A002), the applicant indicated that the Secondary Shield Wall (SSW) AMP would be revised to perform lift-off testing on the common three (3) horizontal tendons, one (1) diagonal tendon, and one (1) vertical tendon every other refueling outage for the collection of consistent data to trend prestressing tendon losses.

Issue:

Additional technical justification is needed for revising the SSW tendon lift-off testing requirements from *“three randomly selected horizontal tendons,”* to *“common tendons on three (3) horizontal, one (1) diagonal, and one (1) vertical.”*

Requests:

1. Confirm that the sample size (i.e., three (3) horizontal, one (1) diagonal, one (1) vertical) discussed in the email will be the sample size for the SSW AMP and provide a technical justification for the sample size.
2. Provide the technical justification(s) of revising the SSW tendon lift-off testing from randomly selected tendons to “common tendons.”
3. Provide markups to the SLRA, as appropriate.