

**TURKEY POINT NUCLEAR GENERATING UNITS 3 AND 4 (TURKEY POINT)  
SUBSEQUENT LICENSE RENEWAL APPLICATION (SLRA)  
REQUESTS FOR ADDITIONAL INFORMATION (RAIS)  
SAFETY - SET 11**

**1. Concrete Containment Unbonded Tendon Prestress Program, GALL Aging Management Program (AMP) X.S1**

Regulatory Background:

ASME Code, Section XI, Subsection IWL, as incorporated by reference in Title 10 of the Code of Federal Regulations (10 CFR) Section 50.55a requires preservice examination, inservice inspection, and repair/replacement activities of the containment reinforced concrete and the post-tensioning systems. For license renewal, 10 CFR 54.21(a)(3) requires the applicant to demonstrate that the effects of aging for structures and components will be adequately managed so that the intended function will be maintained consistent with the current licensing basis for the period of extended operation. As described in SRP-SLR, an applicant may demonstrate compliance with 10 CFR 54.21(a)(3) by referencing the GALL-SLR Report, when evaluation of the matter in the GALL-SLR Report applies to the plant. SLRA Section B.2.2.3 states that the applicant's Concrete Containment Unbonded Tendon Prestress program is an existing AMP that will be consistent, with enhancements, with the GALL-SLR Report AMP X.S1, "Concrete Containment Unbonded Tendon Prestress."

The GALL-SLR Report states:

If an applicant credits an AMP in the GALL-SLR Report, it is incumbent on the applicant to ensure that the conditions and operating experience (OE) at the plant are bounded by the conditions and OE for which the GALL-SLR Report program was evaluated. If these bounding conditions are not met, it is incumbent on the applicant to address any additional aging effects and augment the AMPs for SLR.

**RAI B.2.2.3-1a**

Background:

In its response to RAI B.2.2.3-1 dated March 1, 2019, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19064A824) Turkey Point stated that Unit 3 common tendons included 3D08 and 51H18 since the 20<sup>th</sup> year tendon surveillance. However, docketed information (ADAMS Accession No. ML19064A824) regarding Unit 3, 20<sup>th</sup> year tendon surveillance shows that dome tendon 3D08 was detensioned for wire removal. In addition, undocketed site information of the 45<sup>th</sup> year tendon surveillance shows horizontal tendon 15H18 in lieu of the reported 51H18 to be the common tendon and the applicant states that these tendons are identified as same.

Issue:

As noted in RAI B.2.2.3-1, in accordance with ASME Code, Section XI, Subsection IWL-2521, "a common tendon shall not be detensioned [as seems to be the case for 3D08] unless required by IWL-3300." If tendon 3D08 was detensioned during the 20<sup>th</sup> year surveillance, it is not clear

on what basis the applicant continues to designate it as a common (control) tendon for the Unit 3 Dome tendon group and plans to continue doing so during the subsequent period of extended operation (SPEO).

In addition, it is not clear what the applicant meant by stating that tendons 15H18 and 51H18 are the same since the staff notes that every tendon is different and should have a unique ID. The staff needs additional information regarding these concerns, because it needs to have reasonable assurance that the data provided by the applicant represents the group's prestress history, characteristically demonstrated by a common tendon for prestress force losses that occur over time as recommended by the GALL-SLR AMPs XI.S2 and X.S1, and required by ASME Code Section XI, Subsection IWL.

Request:

1. Clarify whether Unit 3 tendon 3D08 has been detensioned in the past for wire removal. If so, state what alternate tendon from the 20<sup>th</sup> year surveillance will be used as a common (historical) tendon to demonstrate Unit 3 dome prestress force losses over time and through the SPEO, and basis for selection.
2. Clarify whether Unit 3 tendons 51H18 and 15H18 are the same. If so and for future reference, justify the nomenclature interchange. If tendons 51H18 and 15H18 are different clarify which of them is a common tendon.