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Cc: [Gambrell, Reene](#); [Robison, Greg](#); [Nader, Rounette K](#); [Roberts, Daniel William](#); [Peltola, David W](#); [Saville, Chris](#)
Subject: [External_Sender] Follow-up to 2/17/22 Oconee SLR public meeting
Date: Wednesday, February 23, 2022 9:57:28 AM

Angela,

In response to the NRC staff request during the February 17, 2022 Oconee SLRA - Public Meeting, the following information is provided:

As part of subsequent license renewal (SLR), the High Pressure Injection (HPI) stop valve-to-check valve welds were identified as a Sentinel environmentally-assisted fatigue (EAF) location and were evaluated to the requirements of ASME Code, Section XI, Appendix L. The maximum 10-year Appendix L operating period was evaluated for these welds using a flaw tolerance methodology.

The design transients that contribute to fatigue on these welds are Transient 8E (Manual Actuation of HPI after Reactor Trip (Upset)), Transient 9 (Rapid Depressurization (Upset)), and Transient 22A (High Pressure Injection Test (Normal)). All other transients are negligible from the standpoint of fatigue.

The 60-year design transient allowable cycles are 70 cycles for Transient 8E, 40 cycles for Transient 9, and 40 cycles for Transient 22A. The flaw tolerance evaluation considered these 60-year transients, which are bounding for the projections for 80 years in SLRA Table 4.3.1-1, to evaluate the 10-year operating period. The flaw tolerance evaluation is an iterative analysis that computes projected flaw growth on a yearly basis to ultimately determine the maximum number of years allowed before the flaw reaches the size limitation described in the ASME Code, Section XI criteria. As an input to this analysis, the 60-year design cycles were annualized for each iteration (the design cycles were divided by 60 years).