Oconee SLRA: Breakout Questions

Scoping and Screening: Letdown Cooler

Question Number	SLRA Section	SLRA Page	Background / Issue (As applicable/needed)	Discussion Question / Request
1	2.3.2.3 Drwg. OSLRD-101A-3.1	2-74	The letdown heat exchanger tube side and connected piping has inconsistent classifications. The piping is Duke Design Class B (same as ECCS and containment penetrations), the heat exchanger tube side design classification was ASME B&PV Code, Section III, Class 3 (upgraded to Class 2), and both piping and heat exchanger were subject to dynamic seismic evaluation. These design criteria are normally associated with nuclear safety-related; but the components are not identified as nuclear safety related (Duke QA-1) or augmented quality (Duke QA-5) in Section 3.1.1. of the Oconee UFSAR. These components perform an RCS pressure boundary integrity function because they are separated from the RCS by a single motor-operated valve and are designed to RCS pressure and temperature as Duke Class B (one of a few branch piping connections identified as accepted for single-valve RCS isolation during original licensing in Section 3.2.2 of the Oconee UFSAR that are not classified Duke QA-1 and safety-related). The original LRA treated these components as RCS Class 1 mechanical components based on the original ISI Class A designation (LRA Section 2.4). Attachment 9, “ONS	Discuss the basis for excluding the letdown heat exchanger tubes from the scope of license renewal when they appear to have a passive intended function per 10 CFR 54.4(b) related to preservation of RCS pressure boundary integrity.

			Letdown Cooler Classification Basis," to the Oconee ISI Basis Document (OISI-0169.10) documents a downgrade of the letdown HX tubes to ISI Class B, and then cites IWC-1221(a)(2) to exempt the tube side of the HX from ISI because the tubes do not support the ECCS injection function. The SLRA and associated boundary diagram assign a non-safety (a)(2) intended function of protecting safety related components from leakage to the piping and the letdown HX shell, which is rated for 150 psig and 350F rather than RCS pressure and temp. The tubes are therefore proposed to be not subject to an AMP, despite past OE indicating degradation, and are not designated as within the scope of license renewal with an intended function, although pressure boundary failure combined with credible active failure of the single isolation valve to close would result in a loss of RCS pressure boundary integrity.	