

**St. Lucie Nuclear Plant, Units 1 and 2, Subsequent License Renewal Application (SLRA)**

Breakout Audit Questions

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**TRP 084: Stress Corrosion Cracking and Loss of Material (pitting, crevice) for Stainless Steel, Nickel Alloys, and Aluminum**

#	SLRA Section	SLRA Page	Background/Issue	Discussion Question/Request	Outcome of Discussion
1	3.3 Table 3.3-1	3.3-69	SLRA Table 3.3-1 omits Item 3.3-1, 233, addressing cracking due to stress corrosion cracking for insulated aluminum piping, piping components, and tanks in air or condensation, in auxiliary systems. Item 3.3-1, 233 requires further evaluation according to SLR-SRP Section 3.3.2.2.8.	Please discuss the omission of Item 3.3-1, 233 from SLRA Table 3.3-1 and discuss the evaluation for Item 3.3-1, 233, required by SLR-SRP Section 3.3.2.2.8.	
2	3.4 Table 3.3-1 Table 3.4.2-3	3.4-28 3.4-72	<p>In SLRA Table 3.4-1, the discussion for Item 3.4-1, 074, states there are no stainless steel underground components in the Steam and Power Conversion Systems. However, Chapter 10 of the UFSARs for St. Lucie Units 1 and 2 includes underground stainless steel piping. For Unit 1 (ML20141L657), the piping is listed in Table 10.1-1, page 10.1-10, as "Suction (under ground)" piping. For Unit 2 (ML20268A132), the piping is listed in Table 10.4-1, page T10.4-10, as "Suction (underground)" auxiliary feedwater piping.</p> <p>SLRA Table 3.4.2-3, for Auxiliary Feedwater and Condensate, includes stainless steel piping in contact with soil, aligned to Table 1 Items 3.4-1, 072 and 3.4-1, 047, respectively, for cracking and loss of material. Based on the environment of soil, this appears to</p>	Please clarify whether there are underground stainless steel piping or piping components in the Steam and Power Conversion Systems at St. Lucie Units 1 and 2.	

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			<p>address piping that is “buried” according to the SLR-GALL definitions. Table 3.4.2-3 does not identify whether this piping is associated with Unit 1, Unit 2, or both units.</p> <p>The information described above about piping in the SLRA and the UFSAR makes it unclear whether there are underground stainless steel piping or piping components, as defined by SLR-GALL Table IX.D, “Use of Terms for Environments,” in the Steam and Power Conversion Systems.</p>		