St. Lucie SLRA: Breakout Questions

SLRA Sections 2.3.3.2 & 2.3.3.4 Scoping and Screening:

TRP:

Note: Breakout Questions are provided to the applicant and will be incorporated into the publicly-available audit report.

Technical Reviewer	David Nold	12/27/2021
Acting Technical Branch Chief	Steve Jones	01/11/2022
Breakout Session		

Applicant Staff	**NRC staff**
To be filled out by PM during breakout	

Question Number	**SLRA Section**	**SLRA Page**	**Background / Issue (As applicable/needed)**	**Discussion Question / Request**	**Outcome of Discussion**
1	2.3.3.2 Component Cooling Water System	491 of 1572 (Page 3.3-99)	FSAR Section 9.2.2.3.3 Service Environment reads in part: The component cooling water pumps, heat exchangers and portions of the piping and valves are located outdoors. These components are designed to operate under the following environmental conditions: ambient air temperature from 30°F to 120°F, 100 percent humidity, salt laden atmosphere, torrential rains and hurricane winds. SLR-8770-G-083 Florida Power and Light St. Lucie Nuclear Unit 1 – Flow Diagram Component Cooling System Sheet 1A, Coordinate H-6 displays the	SLRA Table 3.3.2-2 Component Cooling Water – Summary of Aging Management Evaluation for Component Type "Pump Casing (component cooling water)" does not contain an Environment of "Air – outdoor (ext)" for the Unit 1 Component Cooling Water pumps 1A, 1B & 1C. The staff requests additional clarification as to whether Unit 1 Pump 1A, 1B & 1C casings	

			component cooling water pumps, thermowells, heat exchangers and portions of the piping and valves as being in the Component Cooling Area.	are exposed to the harsher outdoor environment as described in FSAR Section 9.2.2.3.3.	
2	2.3.3.4 Diesel Generators and Support Systems	521 & 522 of 1572 (Pages 3.3-129 & 3.3-130)	SLRA Table 3.3.2-4 Diesel Generators and Support Systems – Summary of Aging Management Evaluation contains a Component Type "Tank (Unit 1 diesel oil storage)" for the Material "Coating" with an Environment of "Air – outdoor (int)". In contrast, Table 3.3.2-4 contains two line-items for two different internal tank environments for the Component Type "Tank (Unit 2 diesel oil storage)" pertaining to the Material "Coating." The internal tank environments listed are: "Air – indoor uncontrolled (int)" and "Fuel Oil (int)."	The staff requests information pertaining to the lack of symmetry between the Unit 1 and Unit 2 Diesel Oil Storage tanks' internal environments.	
3	2.3.3.4 Diesel Generators and Support Systems 2.1.4.2 Nonsafety-Related Affecting Safety-Related	500 thru 526 of 1572 (Table 3.3.2-4)	SLRA Section 2.1.4.2 *Nonsafety-Related Affecting Safety-Related – 10 CFR 54.4(a)(2)* reads in part: *In accordance with 10 CFR 54.4(a)(2), the SSCs within the scope of license renewal include:* *All nonsafety-related systems, structures, and components whose failure could prevent satisfactory accomplishment of any of the functions identified in 10 CFR 54.4(a)(1)(i), (ii), or (iii).* *This scoping criterion requires an assessment of NNS SSCs with respect to the following application or configuration categories:*	The subject Vent to Outside Diesel Generator Bldg lines appear to meet the requirements of 10 CFR 54.4(a)(2) (i.e., the first bullet above). The staff request additional information: • to clarify the intended function of the Unit 2 screening components and where these components are reflected in SLRA Table 3.3.2-4; • to clarify whether the Unit 1 Vent to Outside Diesel Generator Bldg lines contain similar screen components but	

			• *NNS SSCs that may have the potential to prevent satisfactory accomplishment of safety functions,* • *NNS SSCs directly connected to SR SSCs that provide structural support for the SR SSCs, and* • *NNS SSCs that are not directly connected to SR SSCs but have the potential to affect SR SSCs through spatial interactions.* SLR-2998-G-096 Florida Power and Light St. Lucie Nuclear Unit 2 – Flow Diagram Emergency Diesel Generator System Diesel Engine 2A1 Sheet 1A, Coordinate A-4 displays Quality Group D pipe 2-DG-237 as a Vent to Outside Diesel Generator Bldg from the Diesel Oil Day Tank 2A1. The last component on the end of this pipe is not defined on the Unit 2 Legend drawing 2998-G-078 contained on the Curtiss Wright e-portal. This last component appears to be a type of screening (e.g., strainer / bird screen) device. In addition, there is no flame arrestor displayed as being contained in this vent line. SLRA Table 3.3.2-4: Diesel Generators and Support Systems – Summary of Aging Management Evaluation does not contain a component type “Screen” and the listings of Component Type “Strainer” do not contain an external environment of “Air – outdoor (ext)” with an internal environment of “Diesel exhaust (int).”	not shown on the respective SLR boundary drawings; and whether the Unit 1 & Unit 2 Vent to Outside Diesel Generator Bldg lines contain flame arrestors subject to AMR with an intended function of fire protection.	

			Nearly similar Unit 2 configurations are displayed on drawings: SLR-2998-G-096, Sheet 2A (for Diesel Oil Day Tank 2A2); SLR-2998-G-096, Sheet 1B (for Diesel Oil Day Tank 2B1); and SLR-2998-G-096, Sheet 2B (for Diesel Oil Day Tank 2B2). In comparison, Unit 1 drawing SLR-8770-G-096, Sheet 1A Florida Power and Light St. Lucie Nuclear Unit 1 – Flow Diagram Emergency Diesel Generator System Diesel Engine 1A1, Coordinate F-3, displays Quality Group D pipe 2-DG-193 as a Vent to Outside Diesel Generator Bldg from the Diesel Oil Day Tank 1A1. Pipe 2-DG-193 does not display a "screen" component at the discharge of the pipe nor does the drawing show flame arrestors within the pipe from Tank 1A1 to the atmosphere. Nearly similar Unit 1 configurations are displayed on drawings: SLR-8770-G-096, Sheet 1B (for Diesel Oil Day Tank 1A2); SLR-8770-G-096, Sheet 2A (for Diesel Oil Day Tank 1B1); and SLR-8770-G-096, Sheet 2B (for Diesel Oil Day Tank 1B2).		