

**TURKEY POINT NUCLEAR GENERATING UNITS 3 AND 4 (TURKEY POINT)
SUBSEQUENT LICENSE RENEWAL APPLICATION (SLRA)**

REQUESTS FOR CONFIRMATION OF INFORMATION

SAFETY

Regulatory Basis:

Part 54 of Title 10 of the *Code of Federal Regulations*, "Requirements for renewal of operating licenses for nuclear power plants," is designed to elicit application information that will enable the NRC staff to perform an adequate safety review and the Commission to make the necessary findings. Reliability of application information is important and advanced by requirements that license applications be submitted in writing under oath or affirmation and that information provided to the NRC by a license renewal applicant or required to be maintained by NRC regulations be complete and accurate in all material respects. Information that must be submitted in writing under oath or affirmation includes the technical information required under 10 CFR 54.21(a) related to assessment of the aging effects on structures, systems, and components subject to an aging management review. Thus, both the general submission requirements for license renewal applications and the specific technical application information requirements require that submission of information material to NRC's safety findings (see 10 CFR 54.29 standards for issuance of a renewed license) be submitted by an applicant as part of the application.

Background:

By letters dated January 30, 2018, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18037A812), as supplemented, Florida Power & Light Company (FPL) submitted an application for subsequent license renewal of Renewed Facility Operating License Nos. DPR-31 and DPR-41 for the Turkey Point Nuclear Generating Unit Nos. 3 and 4 (Turkey Point) to the U.S. Nuclear Regulatory Commission (NRC) pursuant to Section 103 of the Atomic Energy Act of 1954, as amended, and Part 54 of Title 10 of the *Code of Federal Regulations*, "Requirements for renewal of operating licenses for nuclear power plants."

Between June 18 and July 23, 2018, the U.S. Nuclear Regulatory Commission (NRC) staff conducted audits of Florida Power & Light Company records to confirm information submitted in the Turkey Point license renewal application.

Request:

During the audit the staff reviewed several documents that contain information which will likely be used in conclusions documented in the Safety Evaluation Report (SER). To the best of the staff's knowledge, this information is not on the docket. Any information used to reach a conclusion in the SER must be included on the docket by the applicant. We request that you submit confirmation that the information gathered from the documents and listed below is correct or provide the associated corrected information.

Enclosure

Request for Confirmation of Information (RCI)

RCI No.	Description
B.2.3.17-A	The staff reviewed drawing 5610-C-1333 Section B, [no title], and noted that for the demineralized water storage tank, at the tank to concrete interface, there is a spacer ring that elevates that tank bottom above the concrete. In addition, Section E [no title], shows that the tank to concrete interface is above ground elevation and the soil slopes away from the tank.
B.2.3.17-B	The staff reviewed drawing 5610-C-375 Section A [no title] and noted that for the condensate storage tank: (a) there is a 1/8-inch layer of asphalt between the tank bottom and foundation; and (b) the concrete outside of the tank to concrete interface has a 1-inch slope away from the tank.
B.2.3.17-C	The staff reviewed drawing 5610-C-375 Yard Tanks Foundation Schedule, General Plan, and Typical Section, [no title], and noted that for the diesel fuel storage tank (Unit 3), refueling water storage tank, and primary water storage tank, the concrete outside of the tank to concrete interface has a 1-inch slope away from the tank.
B.2.3.5-A	The staff reviewed FPLCORP020-REPT-076, "Aging Management Program Basis Document – Cracking of Nickel-Alloy Components and Loss of Material Due to Boric Acid-Induced Corrosion in Reactor Coolant Pressure Boundary Components and noted that there are no Class 1 and 2 Inconel piping welds in Turkey Point Nuclear Generating Units 3 and 4.
B.2.3.2-A	The staff noted that 0-NCSP-004,, "Schedule for Periodic Tests," Revision 15, listed an item to conduct an "Isotopic Analysis" for the reactor coolant system, which the applicant stated includes an analysis of Cobalt-58, Cobalt-60, Manganese-54, Chromium-51, and Iron-59.
4.3.5-A	Page 3-13 of PWROG-17011-NP, Rev. 0 indicates that Variable 5 (operating cycle for first inservice inspection) is 3. Please confirm that the operating cycle is assumed as one year such that the first inspection is conducted after 3 years of operation.
4.3.5-B	Page 3-13 of PWROG-17011-NP, Rev. 0 indicates that the mean value of Variable 9 (number of transients per operating cycle) is 100. Please confirm that this value is correct because the total cycles for 60 years is about 6000 cycles (WCAP-15666-A) and for 80 years 8000 cycles. In the deterministic fracture mechanics analysis, the total cycles for 80 years are still assumed as 6000 cycles.
4.3.5-C	Page 3-14 of PWROG-17011-NP, Rev. 0 indicates that the outer radius for the Group 2 flywheel is 38.875 inches (equivalent to an outer diameter of 77.75 inches). The corresponding dimension in WCAP-15666-A is 75.75 inches. Please confirm that the value 38.875 inches in PWROG-17011-NP is a typo.
4.3.5-D	Page 3-15 of PWROG-17011-NP, Rev. 0 provides conditional PoF values for 3321 rpm. Please confirm that this speed is treated as a random variable similar to 1500 rpm for Westinghouse plants.
4.3.5-E	SLRA Section 4.3.5, page 4.3-28, third paragraph cites PWROG-17031-NP; this report is not related to the flywheel analysis. Please confirm the citation of PWROG-17031-NP is a typo.
4.3.5-F	SLRA FSAR Supplement Section 17.3.3.5 states that the disposition of this TLAA is 10 CFR 54.21(c)(1)(ii). This is inconsistent with the TLAA disposition in SLRA Section 4.3.5, which is 10 CFR 54.21(c)(1)(i). Please confirm that the FSAR supplement disposition is a typo.
4.7.6-A	Based on the review of document FPLCORP020-REPT-115, Revision 3, the staff noted that the following cranes were designed in accordance with EOCI-61, "Specifications for Electric Overhead Traveling Cranes," dated 1961: <ul style="list-style-type: none"> • Reactor building polar cranes • Spent fuel cask cranes

RCI No.	Description
	<ul style="list-style-type: none"> • Intake structure bridge cranes (also called intake area gantry cranes or intake structure cranes) • Turbine gantry cranes (also called turbine cranes) • Charging pump monorails • Safety injection pump monorails • Main steam platform monorails • Reactor cavity manipulator cranes (also called fuel handling manipulator cranes) • Fuel transfer machines (only the portions that require aging management as determined by the operating experience report) • Fuel pool bulkhead monorails • Intake cooling water (ICW) valve pit rigging beam • Turbine plant cooling water (TPCW) basket strainer monorail
4.7.6-B	<p>Based on the review of document EOCI-61, "Specifications for Electric Overhead Traveling Cranes," dated 1961, the staff noted that all cranes listed in SLRA Section 4.7.6, except for the spent fuel bridge cranes, were designed to meet the following:</p> <ul style="list-style-type: none"> • "Load carrying parts, except girders and hoisting ropes, shall be designed so that the calculated static stress in the material, based on rated load, shall not exceed 20 percent of the assumed average ultimate strength of the material." • Structural steel used for cranes shall conform to ASTM-A7 specifications, and as such has a yield strength of 33 ksi and tensile strength of no less than 60 ksi. • Crane girders allowable stresses: the maximum allowable combined stresses for the crane girders is equal or less than 16 ksi in both tension and compression and shall not exceed 12 ksi in shear.