

March 17, 1999



Mr. T. F. Plunkett **President - Nuclear Division** Florida Power and Light Company P.O. Box 14000 Juno Beach, Florida 33408-0420

REQUEST FOR ADDITIONAL INFORMATION REGARDING SUBJECT: GENERIC LETTER 96-05 PROGRAM AT ST. LUCIE UNITS 1 AND 2 (TAC NOS. M97104 AND M97105)

Dear Mr. Plunkett:

On September 18, 1996, the U.S. Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 96-05, "Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves," to request that nuclear power plant licensees establish a program, or ensure the effectiveness of the current program, to verify on a periodic basis that safetyrelated motor-operated valves (MOVs) continue to be capable of performing their safety functions within the current licensing basis of the facility.

In letters dated October 28, 1996, and March 11, 1997, the licensee of St. Lucie Nuclear Plant, Units 1 and 2, described its response to the recommendations of GL 96-05. January 11 to 13, 1999, the NRC staff conducted an inspection of the GL 96-05 program at St. Lucie. In NRC Inspection Report 50-335 and 389/98-12, the staff identified specific areas of the licensee's MOV program which required further assessment before an NRC safety evaluation accepting the licensee's response to GL 96-05 could be completed.

The questions, enclosed with this letter, should complete the staff's assessment and were discussed with Mr. George Madden of your staff on March 15, 1999. He agreed that Florida Power and Light would provide a formal response to the attached questions within 90 days of receipt. Please contact me at (301) 415-1479 if you have any questions.

Sincerely.

Original signed by: William C. Gleaves, Project Manager **Project Directorate II-3 Division of Licensing Project Management** Office of Nuclear Reactor Regulation

Docket No. 50-335, 50-389

Enclosure: Request for Additional Information

cc w/enclosure: See next page

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UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001 March 17, 1999

Mr. T. F. Plunkett President - Nuclear Division Florida Power and Light Company P.O. Box 14000 Juno Beach, Florida 33408-0420

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REQUEST FOR ADDITIONAL INFORMATION REGARDING

GENERIC LETTER 96-05 PROGRAM AT ST. LUCIE UNITS 1 AND 2

The following three questions come from Nuclear Reactor Regulation/Mechnical Engineering Branch:

- 1. In U.S. Nuclear Regulatory Commission (NRC) Inspection Report (IR) Nos. 50-335 and 389/98-12, the NRC staff discussed its evaluation of the motor-operated valve (MOV) program being established at St. Lucie Nuclear Plant, Units 1 and 2, in response to Generic Letter (GL) 96-05, "Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves." In IR 98-12, the NRC staff identified three areas of the licensee's MOV program which required further assessment before an NRC safety evaluation accepting Florida Power and Light's (FPL's) response to GL 96-05 could be completed. With respect to one area of its MOV program, FPL had not committed to implement the generic industry program developed by the Joint Owners' Group (JOG) in response to GL 96-05 and, therefore, could not rely on the JOG program to establish applicable degradation rates for the potential increase in valve thrust or torque operating requirements for the GL 96-05 MOVs at St. Lucie. The NRC staff found that FPL had not correlated in-plant valve tests with the individual MOV groups at St. Lucie, to ensure that representative dynamic test data were obtained for each MOV in the St. Lucie GL 96-05 program, in order to establish applicable degradation rates for its GL 96-05 MOVs. Further, FPL had not presented the available margins as part of the GL 96-05 program to justify that each MOV would continue to be capable of performing its safety functions despite potential degradation during performance of the dynamic testing program at St, Lucie, In order for the NRC staff to determine whether FPL's planned testing would be sufficient to identify valve age-related degradation for each GL 96-05 MOV or whether the capability margins of each MOV would be sufficient during the period while testing was being performed to establish degradation rates. FPL should provide further details on MOV capability margins, the representative MOVs to be tested for each valve group in the GL 96-05 program, and on the dynamic testing schedule.
- 2. IR 98-12 stated that FPL's guidance for MOV trending and monitoring did not provide details of the monitoring of MOV parameters to verify specific aspects of MOV performance. In particular, the NRC staff found that FPL did not have specific guidance for monitoring MOV motor actuator output and degradation trends. Please describe, in detail, your process for monitoring and evaluating MOV parameters to identify degradation trends.
- 3. IR 98-12 stated that FPL had applied a methodology prepared in 1994 to rank its safety-related MOVs based on their safety significance. Since then, the nuclear industry has developed more advanced generic methodologies for ranking safety-related MOVs according to their safety significance for some nuclear reactor designs. Therefore, FPL should describe in detail the methodology¹ used for risk ranking MOVs at St. Lucie, including the application of an expert panel in evaluating the safety significance of its GL 96-05 MOVs, and preparation of a sample list of high-risk MOVs from other CE nuclear plants.

Enclosure

¹The licensee might apply insights from the guidance provided in the Westinghouse Owners Group (WOG) Engineering Report V-EC-1658-A (Revision 2, dated August 13, 1998), "Risk Ranking Approach for Motor-Operated Valves in Response to Generic Letter 96-05," and the NRC safety evaluation dated April 14, 1998, on the WOG methodology for risk ranking MOVs at Westinghousedesigned pressurized water reactor nuclear plants. The licensee could also obtain insights from an MOV risk-ranking methodology developed by the Boiling Water Reactor Owners Group.

Mr. T. F. Plunkett Florida Power and Light Company

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ST. LUCIE PLANT

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