



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 116 AND 57

TO FACILITY OPERATING LICENSE NO. DPR-67 AND NO. NPF-16

FLORIDA POWER AND LIGHT COMPANY, ET AL.

ST. LUCIE PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-335 AND 50-389

1.0 INTRODUCTION

By letter dated April 21, 1992, Florida Power and Light Company (the licensee) requested changes to Technical Specifications (TS) Section 3/4.11.2.5 for the St. Lucie Plant, Units 1 and 2. The proposed TS changes address the surveillance requirements for radioactive effluents explosive gas mixture. The changes would remove reference to a continuous hydrogen monitor that is not part of the plant design, and add a requirement for determining the concentration of hydrogen in the waste gas tank.

2.0 BACKGROUND

The St. Lucie Units 1 and 2 waste gas systems have two continuous oxygen monitors and use a gas partitioner grab sample to determine the hydrogen concentration of the waste gas decay tanks when the oxygen concentration is elevated above the threshold values. St. Lucie Units 1 and 2 do not have continuous hydrogen monitors in their respective waste gas systems.

The Standard TS for the explosive gas mixture were inappropriately used in the original TS for St. Lucie Unit 2, and added to the St. Lucie Unit 1 TS in Amendment No. 59. However, TS 3.3.3.10, which addresses operability and surveillance requirements for the radioactive gaseous effluent monitoring instrumentation, appropriately identifies the specific design for the radioactive gaseous waste system at the St. Lucie Plant. The proposed TS changes will eliminate this administrative inconsistency.

3.0 EVALUATION

The licensee has identified an inconsistency in the TS for St. Lucie, Units 1 and 2. Currently, TS 3/4.11.2.5 identifies Standard TS requirements addressing continuous hydrogen concentration monitors that are not part of the plant design. Table 3.3-13 of TS 3.3.3.10 already identifies the specific design for the radioactive gaseous waste system at the St. Lucie Plant.

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The licensee has proposed to delete reference to a continuous hydrogen monitor and add a requirement for determining the concentration of hydrogen in the waste gas tank. The licensee considers these changes administrative in nature since the current Updated Final Safety Analysis Report (UFSAR) addresses the features utilized to detect and preclude the formation of potentially explosive mixtures of hydrogen and oxygen (Section 11.3.1.m), and to monitor the oxygen concentrations in various plant components where potentially explosive mixtures could develop (Section 11.3.2).

Acceptability of the licensee's system design for St. Lucie Unit 2 was determined by the staff's original license review and is documented in the Safety Evaluation Report (SER), Revision 0 (Section 11.3), and Revision 3 to the Supplemental SER (Section 11.5). The staff's review for St. Lucie Unit 1 is documented in a Safety Evaluation dated August 18, 1983. The St. Lucie Unit 1 SE supported Amendment No. 59 which added the Radiological Effluent Technical Specifications (RETS). The referenced staff evaluations document the licensee's commitments in maintaining a safe concentration of oxygen in the system with excessive presence of hydrogen. Also, the St. Lucie Unit 1 SE acknowledged that TS Table 3.3-13 does not include a hydrogen monitor. Finally, the current TS 3.11.2.5 and the proposed TS 4.11.2.5 specify the concentration and monitoring of hydrogen gas, respectively, and identify instruments not installed in the plant.

The staff has reviewed the licensee's proposed revisions and the staff findings and has concluded that the proposed TS changes are administrative in nature and are acceptable to the staff.

4.0 STATE CONSULTATION

Based upon the written notice of the proposed amendments, the Florida State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

These amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding (57 FR 22263). Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: F. Rinaldi

Date: July 23, 1992

DATED: July 23, 1992

AMENDMENT NO. 116 TO FACILITY OPERATING LICENSE NO. DPR-67 - ST. LUCIE, UNIT 1
AMENDMENT NO. 57 TO FACILITY OPERATING LICENSE NO. NPF-16 - ST. LUCIE, UNIT 2

Docket File

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