

UNITED STATES NUCLEAR REGULATORY COMMISSIONFLORIDA POWER AND LIGHT COMPANY, ET AL.ST. LUCIE PLANT, UNIT 2DOCKET NO. 50-389NOTICE OF ENVIRONMENTAL ASSESSMENT AND FINDING
OF NO SIGNIFICANT IMPACT

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Operating License No. NPF-16 to Florida Power and Light Company, et al., (the licensee) for St. Lucie Plant, Unit No. 2 located in St. Lucie County, Florida.

Identification of Proposed Action: The amendment would consist of changes to the operating license and Technical Specifications (TS) and would authorize an increase of the storage capacity of the spent fuel pool (SFP) from 675 fuel assemblies to 1076 fuel assemblies with enrichments no greater than 4.5 weight percent U-235.

The amendment to the TS is responsive to the licensee's application dated March 13, 1984. The NRC staff has prepared an Environmental Assessment of the Proposed Action, "Environmental Assessment By the Office of Nuclear Reactor Regulation Relating to the Modification of the Spent Fuel Storage Pool, Operating License No. NPF-16, Florida Power and Light Company, et al., St. Lucie Plant, Unit No. 2, Docket No. 50-389" dated

Summary of Environmental Assessment: The Final Generic Environmental Impact Statement (FGEIS) on Handling and Storage of Spent Light Water Power Reactor Fuel (NUREG-0575) concluded that the environmental impact of interim storage of spent fuel was negligible and the cost of the various alternatives reflects

8410180359 841009
PDR ADDCK 05000389
PDR

the advantage of continued generation of nuclear power with the accompanying spent fuel storage. Because of the differences in SFP designs, the FGEIS recommended licensing SFP expansion on a case-by-case basis.


For St. Lucie 2, the expansion of the storage capacity of the SFP will not create any significant additional radiological effects or measurable non-radiological environmental impacts. The additional whole body dose that might be received by an individual at the site boundary is less than 0.1 millirem per year; the estimated dose to the population within a 50-mile radius is estimated to be less than 0.1 person-rem per year. These doses are small compared to the fluctuations in the annual dose this population receives from exposure to background radiation. Since the spent fuel pool for St. Lucie 2 has never had spent fuel stored in it and is currently dry, clean and uncontaminated, there will be no additional radiation exposure to workers due to this modification. Therefore, the staff concludes that the exposure to workers is as low as is reasonably achievable (ALARA) and is acceptable.

Finding of No Significant Impact: The staff has reviewed this proposed facility modification relative to the requirements set forth in 10 CFR Part 51. Based upon the environmental assessment, the staff concluded that there are no significant radiological or non-radiological impacts associated with the proposed action and that the proposed license amendment will not have a significant effect on the quality of the human environment. Therefore, the Commission had determined, pursuant to 10 CFR 51.31, not to prepare an environmental impact statement for the proposed amendment.

For further details with respect to this action, see (1) the application for amendment to the Technical Specifications dated March 13, 1984, (2) the FGEIS on Handling and Storage of Spent Light Water Power Reactor Fuel (NUREG-0575), (3) the Final Environmental Statement for St. Lucie 2 issued April 1982, and (4) the Environmental Assessment dated April 1982. These documents are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington D.C. 20555 and at the Indian River Junior College Library, 3209 Virginia Avenue, Fort Pierce, Florida 33450.

Dated at Bethesda, Maryland this 9th day of October, 1984.

FOR THE NUCLEAR REGULATORY COMMISSION



Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation