January 22, 2003

Mr. J. A. Stall
Senior Vice President, Nuclear and
Chief Nuclear Officer
Florida Power and Light Company
P.O. Box 14000
Juno Beach, Florida 33408-0420

SUBJECT: NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE, PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING - SAINT LUCIE UNITS 1 AND 2 (TAC NOS. MB6627 AND MB6628)

Dear Mr. Stall:

The Commission has forwarded the enclosed "Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing" to the Office of the Federal Register for publication.

This notice relates to your application for amendment dated November 26, 2002, which would revise the Technical Specifications to include the design of a new cask pit spent fuel storage rack for each unit to increase the allowable spent fuel wet storage capacity at both units and include the description of Boral™ as the neutron absorbing material used in the new cask pit storage racks. The proposal also revises the spent fuel pool (SFP) thermal-hydraulic analyses for core offload times and includes a change in Florida Power & Light's commitments regarding the Unit 2 spent fuel cooling system design basis described in the Updated Final Safety Analysis Report (UFSAR). A current UFSAR commitment regarding the Unit 2 peak SFP temperature limit during full core offloads with minimum SFP cooling would be replaced with a new design basis.

Sincerely,

/RA/

Brendan T. Moroney, Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-335 and 50-389

Enclosure: Notice of Consideration of
Issuance of Amendment

cc w/encl: See next page

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Mr. J. A. Stall
Florida Power and Light Company

ST. LUCIE PLANT

cc:
Senior Resident Inspector
St. Lucie Plant
U.S. Nuclear Regulatory Commission
P.O. Box 6090
Jensen Beach, Florida 34957

Craig Fugate, Director
Division of Emergency Preparedness
Department of Community Affairs
2740 Centerview Drive
Tallahassee, Florida 32399-2100

M. S. Ross, Attorney
Florida Power & Light Company
P.O. Box 14000
Juno Beach, FL 33408-0420

Mr. Douglas Anderson
County Administrator
St. Lucie County
2300 Virginia Avenue
Fort Pierce, Florida 34982

Mr. William A. Passetti, Chief
Department of Health
Bureau of Radiation Control
2020 Capital Circle, SE, Bin #C21
Tallahassee, Florida 32399-1741

Mr. Donald E. Jernigan, Site Vice President
St. Lucie Nuclear Plant
6351 South Ocean Drive
Jensen Beach, Florida 34957

Mr. R. E. Rose
Plant General Manager
St. Lucie Nuclear Plant
6351 South Ocean Drive
Jensen Beach, Florida 34957

Mr. Kelly Korth
Licensing Manager
St. Lucie Nuclear Plant
6351 South Ocean Drive
Jensen Beach, Florida 34957

Mr. William Jefferson
Vice President, Nuclear Operations Support
Florida Power & Light Company
P.O. Box 14000
Juno Beach, FL 33408-0420

Mr. Rajiv S. Kundalkar
Vice President - Nuclear Engineering
Florida Power & Light Company
P.O. Box 14000
Juno Beach, FL 33408-0420

Mr. J. Kammel
Radiological Emergency
Planning Administrator
Department of Public Safety
6000 SE. Tower Drive
Stuart, Florida 34997

7590-01-P

UNITED STATES NUCLEAR REGULATORY COMMISSION

SAINT LUCIE NUCLEAR PLANT

DOCKET NOS. 50-335 AND 389

NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSE, PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of amendments to Facility Operating License Nos. DPR-67 and NPF-16, issued to Florida Power & Light (FPL) for operation of the Saint Lucie Units 1 and 2 located in Saint Lucie County, Florida. The proposed amendments would revise the Technical Specifications (TS) Section 5.6, "Design Features – Fuel Storage," to include the design of a new cask pit spent fuel storage rack for each unit to increase the allowable spent fuel wet storage capacity at both units and include the description of Boral™ as the neutron absorbing material used in the new cask pit storage racks. The proposal also revises the spent fuel pool (SFP) thermal-hydraulic analyses for core offload times of 120 hours after reactor shutdown and for a partial core offload as the normal offload condition. In addition the proposal includes a change in FPL's commitments regarding the Unit 2 spent fuel cooling system design basis described in the Updated Final Safety Analysis Report (UFSAR). A current UFSAR commitment regarding the Unit 2 peak SFP temperature limit during full core offloads with minimum SFP cooling will be replaced with a new design basis.

The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase

in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Would operation of the facility in accordance with the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

   No. The proposed change to increase the spent fuel storage capacity with cask area racks was evaluated for impact on the following previously evaluated events:

   a. A fuel handling accident (FHA)
   b. A heavy load drop into the cask area
   c. A loss of SFP cooling
   d. A stored fuel criticality event
   e. A seismic event

   The probability of a fuel handling accident is not significantly increased by the proposed change, because the same equipment (e.g., the spent fuel handling machine) and procedures will be used to handle fuel assemblies and the frequency of fuel movement will be essentially the same, with or without cask area racks. The FHA radiological consequences are not significantly increased because the source term of a single fuel assembly will remain unchanged, and the cask area racks will be installed at the same water depth as the existing SFP racks, with the same iodine decontamination factors assumed in the FHA analysis. The structural consequences of dropping a fuel assembly on a cask area rack were also found to be no more severe than those in the current FHA analysis.

   The probability and consequences of a heavy load drop of the cask area rack are bounded by the existing cask drop analyses. The consequences are not adversely affected because a fuel transfer cask is much heavier than the empty rack. The probability of such an event is not adversely affected because adding a cask area rack will postpone the need for cask handling operations by extending the spent fuel storage. The cask area rack will be removed prior to any cask handling operations, such that a cask drop scenario onto a cask area rack loaded with fuel is not credible. Therefore, the probability and the consequences of a heavy load drop in the cask area are not significantly increased.

   The probability of a loss of SFP cooling is unaffected and its consequences are not significantly increased with cask area racks installed. The addition of a cask

area rack has an insignificant impact on the total SFP decay heat load. With the cask area rack installed, loss of forced cooling results in a sufficient time-to-boil for the operator to recognize the condition and establish SFP makeup to compensate for water lost due to pool bulk boiling, and thereby maintain a sufficient water blanket over the stored spent fuel.

The probability and consequences of a stored fuel criticality event are not increased by the addition of a cask area rack. The reactivity analysis for the new racks demonstrates the storage configuration remains subcritical for the worst-case fuel mispositioning event, with credit for soluble boron.

The probability of a seismic event is unaffected and its consequences are not significantly increased with cask area racks installed, because the structural analysis of the new racks demonstrates that the fuel storage function of the rack is unimpaired by loading combinations including seismic motion, and there is no adverse seismic-induced interaction between the rack and adjacent structures.

Based on the above, it is concluded that the proposed amendments do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Would operation of the facility in accordance with the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

   No. The proposed change to add a cask area rack to each unit does not alter the equipment credited in the mitigation of design basis accidents, nor does the proposed change affect any of the important parameters required to ensure the safe storage of spent fuel. A new rack material (Boral™) is introduced into the pool under this change, but based on its operating history in SFPs, there are no mechanisms that create a new or different kind of accident.

   The potential for dropping the new rack during installation or removal is bounded by the existing analysis for dropping a spent fuel transfer cask into the cask area. The same equipment (e.g., the spent fuel handling crane) and procedures will be used to handle fuel assemblies for the new cask area racks as are used for existing spent fuel storage. The fuel storage configuration in the new racks will be similar to the configuration in the existing SFP storage racks, and a fuel drop or mispositioning event in the new racks does not represent a new or different kind of accident from fuel handling and mispositioning events previously evaluated. Therefore, the proposed amendments will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Would operation of the facility in accordance with the proposed amendment involve a significant reduction in a margin of safety?

   No. The effect of the proposed change on current margins of safety was evaluated for spent fuel storage functionality and criticality, spent fuel and SFP cooling, and structural integrity of the spent fuel pool. The design of the new

> racks uses proven technology which preserves the proper safety margins for spent fuel storage to provide a coolable and subcritical geometry under both normal and abnormal/accident conditions. The design complies with current regulatory guidelines and the ANSI [American National Standards Institute] standards, including 10 CFR 50 Appendix A General Design Criterion (GDC) 62, NUREG-0800 Section 9.1.2, the OT Position for Review and Acceptance of Spent Fuel Storage and Handling Applications, Regulatory Guide 1.13, and ANSI/ANS [American Nuclear Society] 8.17. Handling the racks in accordance with the defense-in-depth approach of NUREG-0612 with temporary lift items designed to ANSI N14.6 preserves the proper margin of safety to preclude a heavy load drop in the cask area.
>
> The cask area rack criticality analysis demonstrates that the neutron multiplication factor is maintained below 1.0, without credit for soluble boron, and less than or equal to 0.95 when credit is taken for the 650 ppm [parts per million] of soluble boron required for the existing SFP storage racks. The structural analyses for the new racks and adjacent structures show that the rack and surrounding structures are unimpaired by loading combinations during seismic motion, and there is no adverse seismic-induced interaction between the rack and adjacent racks or structures. Based on these evaluations, operating the facility with the proposed amendments do not involve a significant reduction in any margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendments until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendments before the expiration of the 30-day notice period, provided that its final determination is that the amendments involve no significant hazards consideration. The final determination will consider all public and State comments

received. Should the Commission take this action, it will publish in the *Federal Register* a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and should cite the publication date and page number of this *Federal Register* notice. Written comments may also be delivered to Room 6D59, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, Public Fire Area O1-F21, 11555 Rockville Pike (first floor), Rockville, Maryland.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By February 27, 2003, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714,[1] which is available at the Commission's PDR, located at One White Flint North, Public File Area 01-F21, 11555 Rockville Pike, Rockville, Maryland, or electronically on the Internet at the NRC Web site http://www.nrc.gov/reading-rm/doc-collections/cfr/. If there are problems in accessing the

[1] The most recent version of Title 10 of the *Code of Federal Regulations*, published January 1, 2002, inadvertently omitted the last sentence of 10 CFR 2.714(d) and subparagraphs (d)(1) and (2), regarding petitions to intervene and contentions. For the complete, corrected text of 10 CFR 2.714(d), please see 67 FR 20884 (April 29, 2002).

document, contact the PDR Reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr@nrc.gov. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on also provide references to those specific sources and documents of which the petitioner is

aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington DC, 20555-0001, Attention: Rulemakings and Adjudications Staff, or may be delivered to the Commission's PDR, located at One White Flint North, Public File Area 01-F21, 11555 Rockville Pike, Rockville, Maryland, by the above date. Because of the continuing disruptions in delivery

of mail to United States Government offices, it is requested that petitions for leave to intervene and requests for hearing be transmitted to the Secretary of the Commission either by means of facsimile transmission to 301-415-1101 or by e-mail to hearingdocket@nrc.gov. A copy of the petition for leave to intervene and request for hearing should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and because of continuing disruptions in delivery of mail to United States Government offices, it is requested that copies be transmitted either by means of facsimile transmission to 301-415-3725 or by e-mail to OGCMailCenter@nrc.gov. A copy of the request for hearing and petition for leave to intervene should also be sent to M.S. Ross, Attorney, Florida Power & Light, P.O. Box 14000, Juno Beach, Florida 33408-0420, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

The Commission hereby provides notice that this is a proceeding on an application for a license amendment falling within the scope of section 134 of the Nuclear Waste Policy Act of 1982 (NWPA), 42 U.S.C. 10154. Under section 134 of the NWPA, the Commission, at the request of any party to the proceeding, must use hybrid hearing procedures with respect to “any matter which the Commission determines to be in controversy among the parties.”

The hybrid procedures in section 134 provide for oral argument on matters in controversy, preceded by discovery under the Commission’s rules and the designation, following argument of only those factual issues that involve a genuine and substantial dispute, together with any remaining questions of law, to be resolved in an adjudicatory hearing. Actual

adjudicatory hearings are to be held on only those issues found to meet the criteria of section 134 and set for hearing after oral argument.

The Commission's rules implementing section 134 of the NWPA are found in 10 CFR Part 2, Subpart K, "Hybrid Hearing Procedures for Expansion of Spent Fuel Storage Capacity at Civilian Nuclear Power Reactors" (published at 50 FR 41662 dated October 15, 1985). Under those rules, any party to the proceeding may invoke the hybrid hearing procedures by filing with the presiding officer a written request for oral argument under 10 CFR 2.1109. To be timely, the request must be filed within ten (10) days of an order granting a request for hearing or petition to intervene. The presiding officer must grant a timely request for oral argument. The presiding officer may grant an untimely request for oral argument only upon a showing of good cause by the requesting party for the failure to file on time and after providing the other parties an opportunity to respond to the untimely request. If the presiding officer grants a request for oral argument, any hearing held on the application must be conducted in accordance with the hybrid hearing procedures. In essence, those procedures limit the time available for discovery and require that an oral argument be held to determine whether any contentions must be resolved in an adjudicatory hearing. If no party to the proceeding timely requests oral argument, and if all untimely requests for oral argument are denied, then the usual procedures in 10 CFR Part 2, Subpart G apply.

For further details with respect to this action, see the application for amendment dated October 23, 2002, which is available for public inspection at the Commission's PDR, located at One White Flint North, Public File Area 01-F21, 11555 Rockville Pike, Rockville, Maryland. Publicly available records will be accessible from the Agencywide Documents Access and Management System's (ADAMS) Public Electronic Reading Room on the Internet at the NRC Web site, http://www.nrc.gov/reading-rm/adams.html. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should

contact the NRC PDR Reference staff by telephone at 1-800-397-4209, 301-415-4737, or by e-mail to pdr@nrc.gov.

Dated at Rockville, Maryland, this 22nd day of January 2003.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Brendan T. Moroney, Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation