

April 19, 2010

Mr. Richard L. Anderson  
Site Vice President, St. Lucie Plant  
Florida Power & Light Company  
6501 S. Ocean Drive  
Jensen Beach, FL 34957

SUBJECT: REQUEST FOR EXEMPTION TO USE AMENDMENT 1 TO THE  
NUHOMS<sup>®</sup> HD SYSTEM PRIOR TO FINAL APPROVAL (TAC  
NO. L24416)

Dear Mr. Anderson:

This is in response to your letter dated January 12, 2010, requesting an exemption from 10 CFR 72.212(b)(2)(i)(A), 72.2.2(b)(7), and 10 CFR 72.48(c)(1)(ii)(B), pursuant to 10 CFR 72.7. These regulations specifically require storage in casks approved under the provisions of 10 CFR Part 72, and compliance with the conditions set forth in the Certificate of Compliance (CoC) for each dry spent fuel storage cask used by an independent spent fuel storage installation (ISFSI) general licensee.

The Transnuclear, Inc (TN) NUHOMS<sup>®</sup> HD CoC No. 1030 provides requirements, conditions, and operating limits in Attachment A, Technical Specifications (TS). In your January 12, 2010 letter, Florida Power and Light (FPL) requested an exemption from the requirements of 10 CFR 72.212(b)(2)(i)(A), 72.212(b)(7), and 10 CFR 72.48(c)(1)(ii)(B), so that St. Lucie Unit 1 and St. Lucie Unit 2 can load canisters under the proposed Amendment 1 to CoC No. 1030. Under the terms of the general license at St. Lucie Units 1 and 2, FPL is currently using the Transnuclear, Inc. (TN) NUHOMS<sup>®</sup> HD system in accordance with CoC No. 1030. However, the provisions of the existing CoC do not include the necessary provisions for the planned loading campaigns. In November 2007, TN submitted requested approval of an amendment, under the provisions of 10 CFR Part 72 to Certificate of Compliance (CoC) No. 1030, for the NUHOMS<sup>®</sup> HD Horizontal Modular Storage System for Irradiated Nuclear Fuel. One of the major changes to the system included in the request for Amendment 1 is the addition of Combustion Engineering (CE) 16 x 16 fuel assemblies as approved contents. FPL plans to load this type of fuel in the upcoming loading campaigns. Other changes associated with Amendment 1 include the addition of non-fuel assembly hardware as approved contents, and the addition of requirements to qualify metal matrix composite (MMC) neutron absorbers with integral aluminum cladding.

We understand that FPL requested this exemption in order to be able to use the proposed Amendment 1 in its entirety for the St. Lucie Unit 1 and Unit 2 Independent Spent Fuel Storage Installation (ISFSI) fuel loading campaigns, scheduled to begin in July 2010. St. Lucie Unit 2 is currently scheduled to begin a refueling outage (RFO) in January 2011. During the Unit 2 RFO approximately 76 fuel assemblies will be removed from the core for storage in the Unit 2 spent fuel pool. Due to the addition of these 76 assemblies, when Unit 2 is scheduled to restart in March 2011, FPL will no longer have full core offload capability. Similarly, for St. Lucie Unit 1, an RFO is scheduled to begin in August 2011. During the Unit 1 RFO, approximately 88 irradiated fuel assemblies will be removed from the core for storage in the Unit 1 spent fuel pool. When Unit 1 is scheduled to restart in November 2011, FPL will no longer have full core offload capability for Unit 1. In addition, if fuel from the Unit 1 spent fuel pool is not transferred to the ISFSI prior to the Unit 1 RFO, there will not be sufficient room in the pool to pre-stage the 88 new fuel assemblies, complicating the fuel handling evolutions required for core reload during the Unit 1 RFO.

NRC staff completed their technical review of Amendment 1 to CoC No. 1030 in October 2009. The Amendment will be final following completion of the rulemaking process, assuming the NRC does not receive any significant adverse comments in response to the *Federal Register* Notice. The rulemaking package is currently in the concurrence process. The proposed rule is expected to be published for comment in the *Federal Register* in May 2010, and the rule would be effective (and the Amendment approved) in August 2010, following resolution of any public comments.

The U.S. Nuclear Regulatory Commission (NRC) staff performed a safety evaluation of the proposed exemption. The enclosed safety evaluation concludes that the staff has reasonable assurance that allowing FPL to load spent fuel at St. Lucie Unit 1 and St. Lucie Unit 2 in the NUHOMS<sup>®</sup> HD 32PTH dry shielded canister under the provisions of the proposed Amendment 1 to CoC No. 1030 will not pose an increased risk to public health and safety. For this action, an Environmental Assessment and Finding of No Significant Impact has been prepared and published in the *Federal Register* (75 FR 18242, dated April 9, 2010). A copy of the *Federal Register* Notice was provided to you by letter dated March 31, 2010.

Based on the foregoing considerations, the NRC has determined that granting the proposed exemption from the provisions of 10 CFR 72.48(c)(1)(ii)(B), 72.212(b)(2)(i)(A), and 72.212(b)(7), is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest. The NRC has also determined, pursuant to 10 CFR 72.7, to include 10 CFR 72.212(a)(2) and 72.214 within the scope of the exemption request as these provisions would also be implicated in the proposed exemption request. Accordingly, the NRC hereby grants this exemption, effective immediately. This exemption is subject to the following conditions:

- 1) The exemption pertains only to the cask loading campaigns (where spent fuel is transferred from the spent fuel pools to the casks) at the St. Lucie Unit 1 and Unit 2 ISFSI scheduled for the summer 2010, as identified in the FPL January 12, 2010 letter.
- 2) If the NRC receives significant adverse comments (as determined by the NRC) during the public comment period for the direct final rule, and as a result of such comments, changes to the preliminary SER, draft CoC, or draft TS are required, FPL will then be required to address those changes in a manner deemed satisfactory to NRC staff.

R. Anderson

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If you have any questions, please contact me at (301) 492-3305, or Jennifer Davis of my staff, at (301) 492-3371. Any future correspondence related to this action should reference Docket No. 72-1030 and TAC No. L24416.

Sincerely,

**/RA/**

Douglas W. Weaver, Deputy Director  
Division of Spent Fuel Storage and Transportation  
Office of Nuclear Material Safety  
and Safeguards

Docket No. 72-1030 (50-335, 50-389)  
TAC No. L24416

Enclosure: Safety Evaluation Report

cc w/encl: See next page

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\* See previous concurrence

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Florida Power and Light Company

**ST. LUCIE PLANT**

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