



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

June 17, 2014

Mr. Mano Nazar
President and Chief Nuclear Officer
Nuclear Division
NextEra Energy
P. O. Box 14000
700 Universe Boulevard
Juno Beach, FL 33408-0420

SUBJECT: ST. LUCIE PLANT, UNITS 1 AND 2 - REQUEST FOR ADDITIONAL
INFORMATION ON LICENSE AMENDMENT REQUEST TO ADOPT
NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 805,
PERFORMANCE-BASED STANDARD FOR FIRE PROTECTION
(TAC NOS. MF1373 AND MF1374)

Dear Mr. Nazar:

By letter dated March 22, 2013, as supplemented by letters dated June 14, 2013, and February 24, March 25, and April 25, 2014, Florida Power & Light Company (the licensee) submitted a license amendment request for the St. Lucie Plant, Unit Nos. 1 and 2 (St. Lucie). The proposed amendment requested approval to transition the fire protection licensing basis from Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.48(b) to 10 CFR 50.48(c), National Fire Protection Association Standard 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants."

The U.S. Nuclear Regulatory Commission (NRC) staff reviewed the information provided by the licensee and participated in an audit at St. Lucie the week of November 18, 2013. By correspondence dated June 7 and December 26, 2013, the NRC staff requested additional information. By letters dated June 14, 2013, and February 24, March 25, and April 25, 2014, the licensee responded to those requests.

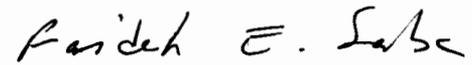
The NRC staff determined that it needs additional information to complete the review. The enclosure to this letter contains the NRC staff's request for additional information (RAI). By an electronic mail dated June 3, 2014, Mr. Eric Katzman of your staff agreed to respond to the RAI by July 18, 2014.

M. Nazar

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If you have any questions, please contact me at (301) 415-1447.

Sincerely,

A handwritten signature in black ink that reads "Farideh E. Saba". The signature is written in a cursive style with a large, stylized 'F' and 'S'.

Farideh E. Saba, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Enclosure:
Request for Additional Information

Docket Nos. 50-335 and 50-389

cc w/encl.: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION
LICENSE AMENDMENT REQUEST TO ADOPT
NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 805
PERFORMANCE-BASED STANDARD FOR FIRE PROTECTION
FOR LIGHT-WATER REACTOR ELECTRIC GENERATING PLANTS
FLORIDA POWER & LIGHT COMPANY
ST. LUCIE PLANT UNITS 1 AND 2
DOCKET NOS. 50-335 AND 50-389

By letter dated March 22, 2013 (Agencywide Documents and Management System (ADAMS) Accession No. ML13088A173), as supplemented by letters dated June 14, 2013, and February 24, March 25, and April 25, 2014 (ADAMS Accession Nos. ML13170A156, ML14070A097, ML14114A458, and ML14135A395, respectively), Florida Power & Light Company (the licensee) submitted a license amendment request (LAR) for the St. Lucie Plant, Unit Nos. 1 and 2 (St. Lucie). The proposed amendment requested approval to transition the fire protection licensing basis from Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.48(b) to 10 CFR 50.48(c), National Fire Protection Association Standard 805 (NFPA 805), "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants."

The U.S. Nuclear Regulatory Commission (NRC) staff reviewed the information provided by the licensee and participated in an audit at St. Lucie the week of November 18, 2013. By correspondence dated June 7 and December 26, 2013 (ADAMS Accession Nos. ML13178A010 and ML13353A578, respectively), the NRC staff requested additional information. By letters dated June 14, 2013, and February 24, March 25, and April 25, 2014, the licensee responded to those requests.

REQUEST FOR ADDITIONAL INFORMATION (RAI)

Safe Shutdown Analysis (SSA) RAI 01.01

In its letter dated February 24, 2014, the licensee responded to SSA RAI 01 and indicated that there are a diverse number of operator actions defined as Primary Control Station (PCS) actions for alternate shutdown. The licensee stated that its analysis regarding PCS actions was done in accordance with Revision 1 of NRC Regulatory Guide (RG) 1.205, "Risk-Informed Performance-Based Fire Protection for Existing Light Water Nuclear Power Plants" (ADAMS Accession No. ML092730314) and Frequently Asked Question (FAQ) 07-0030 (ADAMS Accession No. ML103090602).

Based on its review, the NRC staff could not determine whether all the actions the licensee defined as PCS enabling actions for alternate shutdown meet the feasibility criteria described in FAQ 07-0030, "Establishing Recovery Actions" (ADAMS Accession No. ML110070485), which

Enclosure

states that the actions must be feasible and take place in sufficient time to allow the PCS(s) to be used to perform the intended function.

Because of the total number of required actions and the numerous locations of those actions, provide the following information:

- a) A detailed description of the process used to enable the PCSs, including the Hot Shutdown Control Panel;
- b) The number of qualified operators per shift that will be available to perform these actions, and the timeline for each operator and the transit process for each; and
- c) A justification for high confidence that all required actions can be completed within the required time. In particular, provide details of the fire protection program (for example training, component labeling, etc.) that support this conclusion.

In addition:

- d) Identify any components that are controlled locally (that is, not at the Hot Shutdown Control Panel) after the "transfer" is completed, including actions related to diesel generators, actions taken in the electrical penetration rooms, and actions taken in the auxiliary feedwater rooms, which appear to fall in this category based on the initial RAI response.
- e) In accordance with the definition of PCS actions provided in Revision 1 of RG 1.205, one criterion for a PCS location is that "more than one component should be controlled from this location (a local control station provided to allow an individual component to be locally controlled, as in local handwheel on a motor-operated valve, does not meet this definition)." For the actions identified in d) above, it is the staff's position that these actions do not meet the definition of PCS actions and that they should be analyzed as recovery actions. In light of this position, provide updated LAR information (for example, Attachments G, W, etc.) regarding these actions, as appropriate.

Fire Protection Engineering (FPE) RAI 12

In the supplemented response to Generic Letter 2006-03, "Potentially Nonconforming Hemyc and MT Fire Barrier Configurations" (ADAMS Accession No. ML063630038), the licensee proposed to resolve the issues related to the use of Hemyc in the St. Lucie Unit 2 containment during its transition to NFPA 805. Specifically, the licensee committed to "examine any required corrective actions associated with the Hemyc installation in the St. Lucie Unit 2 containment as part of the St. Lucie transition to NFPA 805."

Provide the following information regarding the resolution of the Hemyc installations at St. Lucie:

- a) A summary of the resolution of the Hemyc-related deficiencies.

- b) If a performance-based method was used, provide sufficient information to conclude that the performance-based method was acceptable for this application at this particular plant, including a discussion of safety margin and defense-in-depth.
- c) Identify and briefly describe any related plant modifications, including an update to Attachment S of the license amendment request, as necessary.

M. Nazar

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If you have any questions, please contact me at (301) 415-1447.

Sincerely,

/RA/

Farideh E. Saba, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Enclosure:
Request for Additional Information

Docket Nos. 50-335 and 50-389

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ADAMS Accession No.: ML14140A624

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NAME	FSaba	BClayton	AKlein (PLain for)	LRegner (AKlett for)	FSaba
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