

August 16, 2007

MEMORANDUM TO: Robert A. Nelson, Acting Deputy Director
Licensing and Inspection Directorate
Division of Spent Fuel Storage and Transportation, NMSS

FROM: James R. Hall, Senior Project Manager /RA/
Licensing Branch
Licensing and Inspection Directorate
Division of Spent Fuel Storage and Transportation, NMSS

SUBJECT: SUMMARY OF JULY 18, 2007, MEETING WITH FLORIDA POWER
AND LIGHT COMPANY REGARDING INDEPENDENT SPENT FUEL
STORAGE INSTALLATIONS AT THE ST. LUCIE, SEABROOK,
TURKEY POINT AND DUANE ARNOLD SITES (TAC NO. L24107)

On July 18, 2007, Nuclear Regulatory Commission (NRC) staff from the Division of Spent Fuel Storage and Transportation (SFST) met with representatives of Florida Power and Light Company (FPL), at NRC headquarters in Rockville, Maryland. The meeting was held to discuss FPL's plans regarding Independent Spent Fuel Storage Installations (ISFSIs) at several FPL operating reactor sites. The objective of the meeting was for NRC to understand FPL's plans and schedules, proposed dry cask storage system designs, any unique site features, and any NRC licensing actions anticipated for the FPL ISFSIs. The meeting was noticed on July 3, 2007. Enclosure 1 is a list of attendees and Enclosure 2 contains the FPL presentation slides.

FPL presented the status of its dry cask storage projects at four sites. At all of these sites, FPL will use NRC-approved dry cask storage systems under the general license provisions of 10 CFR Part 72. The ISFSI at the Duane Arnold Energy Center is already in operation. FPL is using the Transnuclear (TN) Standardized NUHOMS system there, and 12 dry shielded canisters are currently loaded into horizontal storage modules on the concrete pad. Construction work has begun on ISFSIs for the St. Lucie and Seabrook sites, with initial loading at both sites scheduled for 2008. Work on the planned ISFSI at the Turkey Point site is scheduled to begin in 2009, with initial loading anticipated for 2011. FPL plans to use the TN NUHOMS-HD storage system (which is similar to the Standardized NUHOMS system), at St. Lucie, Seabrook, and Turkey Point.

FPL described its philosophy and approach in developing its dry cask storage facilities. All sites will have single failure-proof cranes to conduct spent fuel loading and preparation activities, and each ISFSI will be constructed above that site's design flood level. FPL's additional goals include maintaining full core offload capability at each unit, emphasizing personnel safety, minimizing the need for NRC licensing actions, incorporating dry cask storage operating experience from other utilities and from within FPL, and conducting public meetings and outreach activities.

FPL provided further details of its progress at each site and of the issues requiring further work. The concrete pads have been poured for both the St. Lucie and Seabrook ISFSIs. The St. Lucie pad is roughly 4 feet thick, built on engineered fill, whereas the Seabrook pad is roughly 2 feet thick, since it sits above bedrock and no soil remediation is needed. Crane upgrades are planned for each site, as needed to meet the load capacities (minimum of 125 tons) and single failure-proof design requirements. The modifications to the St. Lucie crane to support dry cask storage activities are complete, and similar modifications to the Seabrook crane are nearly complete. FPL has completed, or will complete, 10 CFR 50.59 evaluations to confirm that the modifications are acceptable, and that prior NRC review and approval are not needed. For Turkey Point, the scope of crane upgrades is greater, and FPL plans to submit a license amendment request in early 2008 for NRC review.

FPL plans to use the same work crew for the initial cask loadings at St. Lucie and Seabrook next year, and also wants to perform a common demonstration of welding proficiency, as part of the dry run requirements, since the cask design will be identical for both sites. NRC staff pointed out that FPL should communicate their intentions to both NRC regional offices responsible for such inspections, to allow for proper coordination.

FPL and TN have completed or will complete a number of evaluations under 10 CFR 72.48 to determine whether certain planned modifications to the approved dry cask storage system (the NUHOMS-HD) require prior NRC review and approval. The changes include extending the NUHOMS-HD canister and transfer cask by approximately 7 inches to accommodate longer St. Lucie fuel assemblies; the addition of handrails on the horizontal storage modules; and the adoption of certain site-specific loading processes and procedures, due to the fact that certain cask preparation activities will need to be performed outside of the fuel handling building. At this time, FPL does not believe that any of the contemplated changes will require NRC approval.

Based on these evaluations, FPL believes that it can conduct the initial loading at St. Lucie without additional NRC approvals. However, FPL plans to request an amendment to the existing NUHOMS-HD Certificate of Compliance (through the certificate holder, TN), in order to support future loadings at all its ISFSIs. The proposed changes to the certificate for which TN will submit an amendment request include the addition of different fuel types and fuel characteristics, as well as startup source assemblies, to the list of approved contents for storage. Also, TN will pursue a change in the NUHOMS-HD surveillance requirements to allow temperature monitoring of the modules in lieu of visual inspection. In addition, the amendment request will revise the low ambient temperature limit from -20°F to -40°F, to be consistent with the limit approved for the Standardized NUHOMS design. On this last issue, FPL may submit an exemption request, if NRC approval of the amendment request is still pending, to allow the initial loading of NUHOMS-HD system at the Seabrook ISFSI, where the site licensing basis is a low ambient temperature of -21°F.

The NRC staff encouraged FPL to submit any requested licensing actions as soon as possible, to avoid any impact on their proposed loading schedules. Further, the staff encouraged FPL and TN to promptly identify any challenging or unique technical issues in the development of their 72.48 evaluations and amendment requests, and to pursue additional meetings with the staff to address any such issues early in the process. The NRC staff indicated its appreciation for FPL's presentation, and FPL thanked the staff for the opportunity to meet. No regulatory decisions were made by the NRC during the meeting.

Docket Nos.: 72-32, 72-61, 72-62, 72-63
TAC No. L24107

Enclosures:

1. Attendance List
2. FPL Presentation Slides

The NRC staff encouraged FPL to submit any requested licensing actions as soon as possible, to avoid any impact on their proposed loading schedules. Further, the staff encouraged FPL and TN to promptly identify any challenging or unique technical issues in the development of their 72.48 evaluations and amendment requests, and to pursue additional meetings with the staff to address any such issues early in the process. The NRC staff indicated its appreciation for FPL's presentation, and FPL thanked the staff for the opportunity to meet. No regulatory decisions were made by the NRC during the meeting.

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OFC	SFST	E	SFST		SFST		SFST		SFST		SFST	
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DATE	08/13/2007		08/14 /2007		08/14/2007		08/16/2007		08/16/2007		08/16/2007	

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**NRC Meeting with FPL
July 18, 2007**

ATTENDANCE LIST

<u>Name</u>	<u>Affiliation</u>
Bill Brach	NRC/NMSS/SFST
Ed Hackett	NRC/NMSS/SFST
James R. Hall	NRC/NMSS/SFST
Larry L. Campbell	NRC/NMSS/SFST
Jerry Chuang	NRC/NMSS/SFST
Bob Tripathi	NRC/NMSS/SFST
Mathew Panicker	NRC/NMSS/SFST
Nate Jordan	NRC/NMSS/SFST
Alan Fata	FPL
George Bieberbach	FPL
Glenn Adams	FPL
Bob Grubb	TransNuclear
Jayant Bondre	TransNuclear
Thomas Hoppe	TransNuclear
Brian Gutherman	ACI Nuclear Energy Solutions
Maureen Conley	Platts/McGraw Hill

Enclosure 2

FPL Presentation Slides