



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

September 4, 2009

LICENSEE: Florida Power & Light Company  
FACILITY: St. Lucie Plant, Unit 1  
SUBJECT: SUMMARY OF AUGUST 25, 2009, MEETING WITH FLORIDA POWER &  
LIGHT COMPANY, ON UPCOMING EXTENDED POWER UPRATE  
SUBMITTAL

On August 25, 2009, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Florida Power & Light Company (FPL) at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of the meeting was to discuss FPL's upcoming extended power uprate (EPU) submittal for St. Lucie, Unit 1. A list of attendees is provided as an enclosure and the licensee's presentation slides are available in the Agencywide Document Management System at Accession No. ML092440256.

The licensee provided an overview of their EPU submittal for St. Lucie, Unit 1. The EPU will be a 12-percent uprate, including a 1.7-percent measurement uncertainty recapture uprate. The original licensed thermal power was 2560 MW, and after a 5.5-percent stretch power uprate in 1981, the current licensed thermal power is 2700. The uprate licensed thermal power would then be 3020 MW. The NRC staff requested that the licensee provide original licensed thermal power plant parameters when providing tables comparing current to EPU plant parameters. The NRC staff also requested that a summary of the grid stability study be included with the EPU submittal if the actual report will be submitted separately.

St. Lucie, Unit 1, is a Combustion Engineering (now Westinghouse) 2-loop pressurized-water reactor licensed in 1976. Its steam generators were replaced in 1991 and its license was renewed in 2003. Most of the increased power will be from increased flow rate on the secondary side with a slight change in delta T. The fuel will be changed to a slightly higher enrichment and M5™ cladding material.

Most plant modifications required for the uprate will be performed pursuant to Title 10 of the *Code of Federal Regulations*, Section 50.59 and the plant engineering group is concentrating on maintaining or increasing design margins. As part of the EPU submittal, the licensee plans to request license amendments related to Leading Edge Flow Meter installation, upgrades to the containment purge system, and safety injection tank design pressure increase.

For reactor protection system and engineered safety features, the licensee will not change the setpoints and will continue to use the current AREVA methodology. The CENTS model has been benchmarked against actual startup and operating event data to model the response of the plant during startup and power ascension to the uprate level. The licensee plans to perform individual component and system testing vice an integrated plant test. The NRC staff asked that the licensee provide justification for those transient tests that would not be performed.

The licensee provided details on how they will address the information required in Review Standard RS-001, "Review Standard for Extended Power Uprates." The NRC staff cautioned the licensee to provide designs and analyses requiring NRC review at the time of the submittal instead of committing to provide them at a later date as other licensees had attempted. Additionally, the NRC staff asked the licensee to provide information on environmental justice when providing information for an environmental assessment.

The St. Lucie, Unit 1, submittal is forecast for fall 2009 with implementation in fall 2011, pending approval.

Members of the public were not in attendance, and no Public Meeting Feedback forms were received.

Please direct any inquiries to me at 301-415-2788, or [Tracy.Orf@nrc.gov](mailto:Tracy.Orf@nrc.gov).



Tracy J. Orf, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-335

Enclosure:  
List of Attendees

cc w/encl: Distribution via Listserv

LIST OF ATTENDEES

AUGUST 25, 2009, MEETING WITH FLORIDA POWER & LIGHT COMPANY

UPCOMING EXTENDED POWER UPRATE SUBMITTAL FOR ST. LUCIE, UNIT 1

**NRC**

Tom Boyce, NRR  
Richard Bulavinetz, NRR  
DyLanne Davigneaud, NRR  
Scott Elkins, RES  
Hukam Garg, NRR  
John Huang, NRR  
Nageswara R. Karipineni, NRR  
Stephen Klementowicz, NRR  
Aron Lewin, NRR  
G. Singh Matharu, NRR  
Jason Paige, NRR  
Mathew M. Panicker, NRR  
Bo Pham, NRR  
Sheila Ray, NRR  
Andrea Russell, NRR  
Summer B. Sun, NRR  
Alexander Tsirigotis, NRR

**FLORIDA POWER & LIGHT COMPANY**

Liz Abbott  
Dave Brown  
Jeff Brown  
Steve Cornell  
Ken Garner, WEC  
Dale Graves, Shaw Stone & Webster  
Jack Hoffman  
Jay Kabadi  
Eric Katzman  
Chris Wasik

Enclosure

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**ADAMS Accession No.** Meeting Summary ML092430038 Slides ML092440256  
Notice ML092260029

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