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SUBJECT: Responds to issues raised in 870213 safety evaluation re station blackout. Issue 1 re dc battery capability discussed in encl. Issue 2 re balckout procedures & training addressed in util 820907 ltr. Procedures available for review.

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FPL
FLORIDA POWER & LIGHT COMPANY

APRIL 22 1987

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U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Gentlemen:

Re: St. Lucie Unit 1
Docket No. 50-335
<u>Station Blackout</u>

By letter dated February 13, 1987 (E. G. Tourigny to C. O. Woody) the NRC forwarded to Florida Power & Light Company (FPL) a draft Safety Evaluation (SE) which addressed station blackout for St. Lucie Unit 1. The draft SE highlighted three issues which must be resolved before the NRC can issue an SE on this topic for St. Lucie Unit 1. Issue 1, DC battery capability, is discussed in the Attachment. Issue 2, blackout procedures and training, was addressed in FPL letter L-82-400, dated September 7, 1982. The procedures and training are available for NRC review. Issue 3, approval by NRC of revised loss of all non-emergency AC power event calculation, was completed by the NRC and documented by SE forwarded to FPL on March 16, 1987 (E. G. Tourigny to C. O. Woody).

Please contact us if there are additional questions regarding this submittal.

Very truly yours,

COWoody

C. O. Woody
Group Vice President
Nuclear Energy

COW/EJW/gp

Attachment

cc: Dr. J. Nelson Grace, Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, St. Lucie Plant

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ATTACHMENT

The NRC is reviewing the station blackout concerns for St. Lucie Unit I. FPL's submittal of an analysis that showed that the Unit 2 requirements of ALAB-603 are appropriate for Unit I was accepted with a request for a description of Unit I DC capability.

NRC QUESTION:

FPL should describe its DC Battery Power Capability and address any reduced capability at Unit No. I compared to Unit No. 2.

FPL RESPONSE:

Both St. Lucie Units I and 2 utilize identical safety batteries (C&D LC-33), each rated at 2160 ampere hours at an 8-hour discharge rate. Each battery has been sized to provide power for all required loads upon a loss of AC battery chargers for four hours. Latest load profiles and calculations confirm that each battery can accommodate its load profile. This capability is available after taking into consideration an aging factor of 1.25 which ensures that the battery can still deliver sufficient ampere hours to supply the load profile at the end of its calculated life. It also considers a temperature correction factor which requires a larger battery to accommodate supplying load when the battery is operated in an environment with temperature less than the battery's design temperature of 77°F.

In conclusion, both St. Lucie Unit I and 2 DC batteries have capabilities which are sufficient to provide required power to their respective unit during a station blackout of four hours.