FLORIDA POWER & LIGHT COMPANY

JAN 31 1986
L-86-40

LER-84-06

Dr. J. Nelson Grace
Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street NW, Suite 2900
Atlanta, GA 30323

Dear Dr. Grace:

Re: Turkey Point Unit 3 and 4
Docket Nos. 50-250 and 50-251
Auxillary Power Upgrade

This letter provides a brief history and status of the Auxillary Power Upgrade being implemented by the Turkey Point Plants.

Turkey Point Plant experienced a series of events on February 12 and February 16, 1984, which included reactor trips, unscheduled shutdowns, and loss of offsite power to Unit 3. These events were described in License Event Reports 250-84-06 & 250-84-07, respectively. By Confirmation of Action Letter (L-84-36) dated February 21, 1984 Florida Power and Light Company (FPL) identified interim actions which were completed prior to restart and long term actions which included a review of the offsite and onsite electrical power systems. FPL provided the results of their review and proposed design modification for the NRC to review and approve prior to completing the proposed changes. The above commitments were confirmed by NRC letter dated February 29, 1984.

By letters L-84-157 dated June 22, 1984 and L-84-180 dated July 25, 1984, FPL provided design details and analysis in support of the auxillary power upgrade. NRC issued an SER on September 17, 1984 with the conclusion that the design of the proposed auxillary power upgrade results in an overall improvement in the electrical system design and safety of the plant, and is therefore, acceptable.

The modified item 2 of FPL Confirmation of Action Letter (L-85-163) dated April 17, 1985, stated:

> "Pending long term design changes and modifications, Units 3 & 4 will not be operated at greater than 50% rated feedwater flow unless the associated unit's "C" bus is being powered from the opposite unit's "C" transformer. The feeder breaker from each unit's "C" transformer to its' respective bus will be maintained in a racked out configuration whenever the respective unit is operating at greater than 50% rated feedwater flow."

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The basis for this change was provided and confirmed by NRC letter dated April 24, 1985.

In early February, 1986, FPL plans to complete the modifications described in letters L-84-157 and L-84-180. The final implementation will be conducted in two phases:

> Phase 1 will accomplish separating the power supply of the Unit 3 start up (S/U) transformer and the Unit 3 "C" bus transformer. At the completion of this phase, the Unit 3 "C" bus and S/U transformers will be in the final configuration.
>
> Phase 2 will accomplish separating the power supply of the Unit 4 S/U transformer and the Unit 4 "C" bus transformer. At the completion of Phase 2 Unit 4 "C" bus and S/U transformer will be in the final configuration.

Phase 1 will require de-energizing the Unit 3 start up transformer and the Unit 3 "C" bus transformer for approximately 72 hours. During this period Unit 3 will reduce power to less than 50% rated feed flow and Unit 4 will be in a refueling outage.

Phase 2 will require de-energizing the Unit 4 start up transformer and the Unit 4 "C" bus transformer for approximately 10 days. During this period Unit 4 will be in the refueling outage. Since the Unit 3 "C" bus transformer and start up transformer are in the final confirguration with separate feeds from the switch yard, Unit 3 can remain at 100% power.

Completion of Phase 1 above, completes item 2 of the Confirmation of Action Letter as modified on April 17, 1985, and the long term design changes and modifications will be complete for Unit 3. Unit 3 may then operate at greater than 50% rated feed flow with the Unit 3 "C" bus powered from the Unit 3 "C" bus transformer. In addition, after completion of Phase 2 above Unit 4 may operate at greater than 50% rated feed flow with the Unit 4 "C" bus powered from the Unit 4 "C" bus transformer.

FPL engineering has reviewed the proposed implementation plan and determined that as long as the Unit 3 "C" transformer modification is completed first and Unit 4 is in a refueling outage, the Unit 3 "C" transformer can be used to power both "C" buses during the Unit 4 "C" transformer modification with Unit 3 at 100% feedwater flow.

Should you have any questions please contact us.

Very truly yours,

C. O. Woody
Group Vice President
Nuclear Energy

COW/GRM:dh

cc: H. L. Thompson, Jr., NRR, USNRC
Harold Reis, Esquire
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