



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

November 7, 1990

Docket Nos. 50-250
and 50-251

Mr. J. H. Goldberg
Executive Vice President
Florida Power and Light Company
P.O. Box 14000
Juno Beach, Florida 33408-0420

Dear Mr. Goldberg:

SUBJECT: TURKEY POINT UNITS 3 AND 4 - RESPONSE TO GENERIC LETTER 88-17, "LOSS OF DECAY HEAT REMOVAL," WITH RESPECT TO EXPEDITIOUS ACTIONS AND PROGRAMMED ENHANCEMENTS (TAC NOS. 69787 AND 69788)

The purpose of this letter is to inform you of the status of the staff's review of your response to Generic Letter 88-17.

Generic Letter 88-17 required a two-part response. The first part was a description of expeditious actions you have taken. The second part was a description of your programmatic enhancements, including a schedule for implementation.

On January 3, 1989, Florida Power and Light Company submitted a response to Generic Letter 88-17 for expeditious actions to be taken in the event of a loss of decay heat removal for the Turkey Point plant. The staff has reviewed your response and finds that it meets the intent of Generic Letter 88-17 with respect to expeditious actions. Your response was brief, however, and therefore did not cover all areas in detail. The areas where we do not fully understand your responses, as indicated in the enclosed comments, may be covered in an audit of the expeditious actions.

On February 1, 1989, Florida Power and Light Company submitted a response to Generic Letter 88-17 with respect to programmed enhancements for the Turkey Point plant. The NRC staff has completed its review of all licensee responses regarding programmed enhancements as defined in Generic Letter (GL) 88-17, "Loss of Decay Heat Removal." The NRC staff review was based on a sampling of about one-third of all responses. Since the sample did not result in significant comments, the remainder of the responses will not be reviewed by NRR. NRC review of this phase of GL 88-17 will be accomplished as an inspection under Temporary Instruction (TI) 2515/103 in the NRC Inspection Manual. The inspection will take place after you have made sufficient progress for NRC to make a full assessment of your programmed enhancements. This letter constitutes the NRR report stated in paragraph 05.01 as a prerequisite to the inspection under TI 2515/103.

Your letter of February 1, 1989 further stated that programmed enhancements that do not depend on hardware changes are either complete, in progress, or shall be implemented as part of the Technical Specifications Improvement Program. This is consistent with GL 88-17, and is acceptable. Mr. G. Salamon of your staff indicated verbally on October 2, 1990 that all hardware-related

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modifications will be completed by the end of the Unit 3 refueling outage presently scheduled to begin in September 1992. Unit 4 hardware-related modifications will be completed by the end of the refueling outage scheduled to begin in November 1990. Therefore, these modifications will be complete by the end of the first refueling outages initiated 18 months or later following receipt of GL 88-17. Your schedule is consistent with GL 88-17, and is acceptable.

You are requested to inform the NRC in writing if any significant changes occur in the estimated completion schedule identified above. You are also requested to inform the NRC in writing when the action has actually been implemented and the modifications are determined to be operational.

This request is covered by Office of Management and Budget Clearance Number 3150-0011, which expires January 31, 1991. The estimated average burden-hours is 4 person-hours per owner response, including searching data sources, gathering and analyzing the data, and preparing the letter. These estimated average burden-hours pertain only to the identified response-related matters and do not include the time for actual implementation of the requested action. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch (MNBB-7714), Division of Information Support Services, Office of Information Resources Management, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555; and to the Paperwork Reduction Project (3150-0011), Office of Information and Regulatory Affairs, NEOB-3019, Office of Management and Budget, Washington, D.C. 20503.

Please address any response to this letter to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, pursuant to 10 CFR Section 50.4 of the NRC's regulations.

We consider your response to meet the intent of GL 88-17. Except for schedule and implementation matters discussed above, and possible NRC audit of your actions and programs, your licensing actions with regard to GL 88-17 are complete. Please contact us should you have any questions regarding this matter.

By this letter we are closing TACs 69787 and 69788.

Sincerely,

(Original Signed By)

Gordon E. Edison, Sr. Project Manager
Project Directorate II-2
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:

See next page

LA/IN-2	PM:PDII-2	PM:PDII-2	DPDII-2
Dwyler	JWilliams	GEdison	HBerkow
11/6/90	11/7/90	11/7/90	11/7/90

OFFICIAL RECORD COPY Document Name: GENERIC LETTER 8817

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
58 CHEMISTRY BUILDING
CHICAGO, ILLINOIS 60637

MEMORANDUM FOR THE RECORD
DATE: 10/15/68
BY: [Name]

RE: [Subject]

The following data were obtained from the experiment described above:

Run	Temp (°C)	Yield (%)	Analysis
1	100	85	C, 60.0; H, 8.0
2	110	75	C, 58.0; H, 7.5
3	120	65	C, 56.0; H, 7.0

These results are consistent with the proposed structure of the compound.

The infrared spectrum shows characteristic absorption bands at 1715 and 1640 cm⁻¹.

The mass spectrum shows a molecular ion peak at m/e 108.

The NMR spectrum shows a multiplet at 7.2 ppm and a singlet at 2.1 ppm.

Very truly yours,
[Signature]
[Name]
[Title]

Mr. J. H. Goldberg
Florida Power and Light Company

Turkey Point Plant

cc:

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Newman and Holtzinger, P.C.
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Intergovernmental Coordination
and Review
Office of Planning & Budget
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The Capitol Building
Tallahassee, Florida 32301



ENCLOSURE

Comments on Florida Power and Light Company's
Response to Generic Letter 88-17

The NRC staff has reviewed your response (letter of January 3, 1989) to Generic Letter 88-17. We find that it appears to meet the intent of the Generic Letter with respect to expeditious actions. Your brief response to some items does not allow us to fully understand your actions taken in response to GL 88-17. You may wish to consider several observations in order to assure yourselves that the actions are adequately addressed:

1. You reference the commitments as implemented prior to entering a reduced inventory condition. We assume your meaning is for any entry into a reduced inventory condition that is deliberate on the part of the operators. Hence, an entry for the purpose of repairing an unanticipated reactor coolant pump seal failure would be a planned entry. An entry due to a loss of coolant accident would be an unplanned entry.
2. You mention discussion of the Diablo Canyon event with operations personnel and training for specific mid-loop operation and cooldown/draindown with your staff. It is not specifically stated that maintenance personnel are also included. The item was intended to include all personnel who can affect reduced inventory operation.
3. You reference an example in which upon loss of residual heat removal, initiation of full containment closure will be required within 5 minutes of notification, and, if openings totaling one square inch or greater exist in the Reactor Coolant System (RCS) cold legs, reactor coolant pumps or intermediate legs, final containment closure will be achieved within 25 minutes. No mention was made of previous checks on the ability of the equipment hatch to be leak tight with the simplified quick closure.
4. You did not provide information regarding how you will keep track of and control the many potential openings (piping, electrical, hatches) which may have to be closed simultaneously. We assume your procedures and administrative controls will address this topic.
5. You indicate that Turkey Point currently has two means of RCS level indication. One is a pressure transmitter which provides level indication in the control room. The second means is a tygon hose located in containment and vented to the pressurizer. You do not address what will be done to resolve any discrepancy between the two measurement systems. Furthermore, you do not address how you intend to compensate for the difference between the pressure in the reference leg and the pressure of the void in the hot leg.
6. Tygon tubing should be walked down not only following installation, but also immediately before placing the system in operation and periodically thereafter.
7. You mention that procedures are being revised to provide a hot leg vent path. A pressurizer manway or steam generator manway is often used as means to provide RCS venting. We note that relatively large hot side



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openings in the RCS, such as a pressurizer manway, can still lead to a pressure of several psi due to the large steam flow and the combination of flow restrictions in the surge line-lower pressurizer hardware-manway opening. Calculations should be performed to verify the effectiveness of the opening.

There is no need to respond to the above observations.

As you are aware, the expeditious actions you have briefly described are an interim measure to achieve an immediate reduction in risk associated with reduced inventory operation, and these will be supplemented and in some cases replaced by programmed enhancements. We intend to audit both your response to the expeditious actions and your programmed enhancement program. The areas where we do not fully understand your responses, as indicated above, may be covered in the audit of expeditious actions.



11-11-68

DISTRIBUTION:

Docket File
NRC & Local PDRs
PD22 Rdg. File
S. Varga
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ACRS (10)
M. Sinkule, RII
R. Crlenjak, RII
R. Butcher, RII

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