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Dockets Nos. 50-250
and 50-251

Florida Power & Light Company
ATTN: Dr. Robert E. Uhrig
Vice President
P. O. Box 013100
Miami, Florida 33101

Gentlemen:

RE: TURKEY POINT NUCLEAR GENERATING UNITS NOS. 3 AND 4

We have completed a preliminary review of your submittal of December 10, 1976, in which you describe a "Reference Mitigating System" and discuss your plans regarding long term design modifications to provide protection against reactor vessel overpressurization. As indicated in our letter of January 12, 1977, the design criteria that should be applied to your long term design modifications are those identified in our November 4, 1976 meeting. The enclosure to this letter identifies specific design features of the "Reference Mitigating System" which do not meet these criteria and also identifies additional information we will require to continue our review of your submittal.

Please respond to this request for additional information within 45 days of receipt of this letter.

Sincerely,

George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Enclosure:
Request for Additional
Information

cc: Mr. Jack R. Newman , Esquire
Lowenstein, Newman, Reis & Axelrad
1025 Connecticut Avenue, N. W.
Suite 1214
Washington, D. C. 20036

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DATE		2/ /77	2/ /77	2/ /77

REQUEST FOR ADDITIONAL INFORMATION

With reference to the acceptance criteria required for your overpressure protection system as contained in our January 1977 letter that also discussed interim measures and installation schedule, this request for additional information identifies those aspects of the Westinghouse proposed Reference Mitigating System (RMS) that are not acceptable.

The specific design features of the RMS are listed in your submittal as paragraphs headed alphabetically a. through i. Those design features that do not meet the acceptance criteria are as follows:

Paragraph a.: The RMS uses a single pressure transmitter thus not providing a system that can accept a single failure and still function. If no acceptable alternate protection is available, two power operated relief valve systems are required, that are separate and independent throughout the system from pressure sensor to relief valve.

Paragraph b.: The single failure criteria requires a separate air accumulator for each relief valve operator.

Paragraph c.: Provide the basis for any deviations from IEEE279 requirements for electrical components.

Paragraph d.: An annunciator must be provided to insure that the keylock switch is in the proper position when shutdown.

Paragraph e.: Provide the basis for any deviations from Seismic Category I design requirements for system components.

Paragraph f.: The accumulators should also be seismically qualified.

Paragraph g.: Loss of air supply to the relief valve accumulators should be alarmed during shutdown.

In addition to providing a resolution to each of the above items, the following additional information is requested:

1. Provide schematic piping and instrumentation diagrams of all systems which are utilized during plant shutdown and startup operations, indicate primary and alternate flow paths, fluid and heat sources, pressure and flow controllers, RCS pressure protection systems, ECCS and make up systems.

2. Provide the failure modes and effects analysis of the overpressure protection system for startup, shutdown, and testing operations which defines the limiting combination of initiating event and additional single failure or operator error subsequent to initiation of the pressure transient.

3. Discuss the basis for determining the most limiting initial conditions for analysis of the pressure transient. Items that must be considered include but should not be limited to: RCS pressure, reactor coolant temperature, pressurizer temperature, pressurizer level and accumulator level.

4. Were approved systems computer codes used to model the overpressure transients as presented in the generic report? If so, were any major modifications required? If the methods utilized have not been previously approved for system transient analyses, provide model descriptions, flow charts, program listing, and sensitivity studies to verify the performance of the codes.

5. Provide the value of the backpressures assumed in the relief valve discharge pipes when calculating relief capacity. Discuss relief capacity sensitivity to this parameter.

6. Provide the degree of relief capacity installed in the RHR system that could provide additional protection in the event of an overpressure transient. Provide the water relief capacity of the valve. Is the RHR system automatically isolated on RCS high pressure? Provide the pressure setpoints for the RHR system relief valve opening and its automatic isolation.

7. Describe the instrumentation and alarms available to enable the operator to detect and quickly terminate an overpressure transient. Describe the indication of pressurizer relief valve or RHR system relief valve operation.

8. When power is removed from valve motor operators under administrative control provisions, describe the status lights and indicators available to verify their proper alignment. When administrative controls call for removing power from a valve motor operator or a pump, is this accomplished from the control room or from a motor control center?