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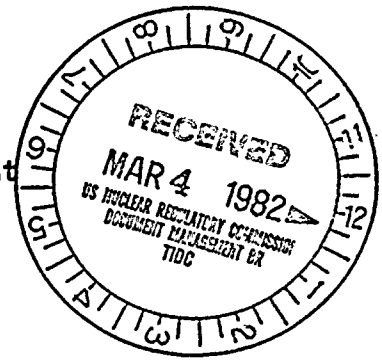


Dr. Robert E. Uhrig, Vice President
Advanced Systems and Technology
Florida Power and Light Company
Post Office Box 529100
Miami, Florida 33152

Dear Dr. Uhrig:

SUBJECT: REACTOR COOLANT SYSTEM VENTS, (ITEM II.B.1)
REQUEST FOR ADDITIONAL INFORMATION

We have completed a preliminary review of your submittal regarding TMI Action Plan Item II.B.1, RCS High Point Vents. The additional information identified in the enclosure is required to complete our review for your facilities.

We are currently in the process of reviewing the technical merit of the proposed operating guidelines for RCS Vent Usage. We recommend that the questions in this area be resolved generically through the Owners Groups. Specific plant procedures will be reviewed against the approved guidelines as needed in the future, but not necessarily prior to design approval.

Please supply the requested information within 60 days of the date of this letter.

The reporting and/or recordkeeping requirements contained in this letter are approved under OMB clearance #3150-0065 which expires May 31, 1983.

Sincerely,
Original signed by:
S. A. Varga

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Enclosure:
Request for Additional
Information

cc w/enclosure:
See next page

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Robert E. Uhrig
Florida Power and Light Company

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

Environmental and Urban Affairs Library
Florida International University
Miami, Florida 33199

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Regional Administrator - Region II
U. S. Nuclear Regulatory Commission
101 Marietta Street - Suite 3100
Atlanta, Georgia 30303

REQUEST FOR ADDITIONAL INFORMATION
FOR
TURKEY POINT 3 & 4

1. Verify that the reactor coolant gas vent system (RCGVS) flow restriction orifices are smaller than the size corresponding to the definition of a loss-of-coolant accident (10 CFR part 50, Appendix A) by providing the pertinent design parameters of the reactor coolant makeup system and a calculation of the maximum rate of loss of reactor coolant through the RCGVS orifices (reference NUREG-0737 Item II.B.1 Clarification A.(4)).

2. The following items apply to the portions of the RCGVS that form a part of the reactor coolant pressure boundary, up to and including the second normally closed valve (reference NUREG-0737 Item II.B.1 Clarification A.(7)).

   a. Verify that the materials of construction will be fabricated and tested in accordance with SRP Section 5.2.3, "Reactor Coolant Pressure Boundary Materials."

   b. Demonstrate that internal missiles and the dynamic effects associated with the postulated rupture of piping will not prevent the essential operation of the RCGVS (i.e., at least one vent path remains functional) (reference Appendix A to 10 CFR part 50, General Design Criterion 4).

3. Since your submittal of July 16, 1981 was based on the Combustion Engineering generic RCGVS design, verify that your final piping configurations have been "reviewed or analyzed to assure their capability in maintaining the integrity of the piping system" (reference p. 23 of your submittal).

4. Verify that the following RCGVS failures have been analyzed and found not to prevent the essential operation of safety-related systems required for safe reactor shutdown or mitigation of the consequences of a design basis accident:

   a. Seismic failure of RCGVS components that are not designed to withstand the safe shutdown earthquake.

   b. Postulated missiles generated by failure of RCGVS components.

   c. Fluid sprays from RCGVS component failures. Sprays from normally unpressurized portions of the RCGVS that are Seismic Category I and Safety Class 1, 2, or 3 and have instrumentation for detection of leakage from upstream isolation valves need not be considered.

5. Describe the design features or administrative procedures, such as key locked closed valves or removal of power during operation, that will be employed to prevent inadvertent actuation of the RCGVS (reference NUREG-0737 Item II.B.1 Clarification A.(7)).

6. Demonstrate, using engineering drawings (including isometrics) and design descriptions as appropriate, that the RCGVS paths to the containment atmosphere (both direct and via the quench tank rupture disc) discharge into areas:

   a. That provide good mixing with containment air to prevent the accumulation or pocketing of high concentrations of hydrogen, and

   b. In which any nearby structures, systems, and components essential to safe shutdown of the reactor or mitigation of a design basis accident are capable of withstanding the effects of the anticipated mixtures of steam, liquid, and noncondensible gas discharging from the RCGVS (reference NUREG-0737 Item II.B.1 Clarification A.(9)).

7. Submit operating guidelines for use of the RCGVS including the following:

   a. Guidelines to determine when the operator should and should not manually initiate venting, and information and instrumentation required for this determination (reference NUREG-0737 Item II.B.1 Clarification A.(2)). The guidelines to determine whether or not to vent should cover a variety of reactor coolant system conditions (e.g., pressures and temperatures). The effect of the containment hydrogen concentration on the decision to vent or to continue venting should also be addressed considering the balance between the need for increased core cooling and decreased containment integrity due to elevated hydrogen levels.

   b. Methods for determining the size and location of a noncondensible gas bubble (reference Position (2) and Clarification A.(2)).

   c. Guidelines for operator use of the vents, including information and instrumentation available to the operator for initiating or terminating vent usage (reference Position (2)).

   d. Required operator actions in the event of inadvertent opening, or failure to close after opening, of the vents including a description of the provisions and instrumentation necessary to detect and correct these fault conditions (reference Position (2) and Clarification A.(2)).

   e. Methods which in lieu of venting will assure that sufficient liquid or steam will flow through the steam generator U-tube region so that decay heat can be effectively removed from the reactor coolant system (reference Clarification C.(2)).

8. Verify that all displays (including alarms) and controls, added to the control room as a result of the TMI Action Plan requirement for reactor coolant system vents, have been or will be considered in the human factors analysis required by NUREG-0737 Item I.D.1, "Control-Room Design Reviews."