DOCKET FILE 50-250

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OCTOBER 31 1980

Docket Nos. 50-250
and 50-251

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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: INFORMATION REQUEST REGARDING CONTAINMENT SUMPS AND INSULATION FOR OPERATING REACTORS, TAP A-43

During our reviews of license applications we have identified concerns related to the containment sump design and its effect on long term cooling following a Loss of Coolant Accident (LOCA).

These concerns are related to: (1) creation of debris which would potentially block the sump screens and flow passages in the ECCS and the core, (2) inadequate NPSH of the pumps taking suction from the containment sump, (3) air entrainment from streams of water or steam which can cause loss of adequate NPSH, (4) formation of vortices which can cause loss of adequate NPSH, air entrainment and suction of floating debris into the ECCS and (5) inadequate emergency procedures and operator training to enable a correct response to these problems. Preoperational recirculation tests performed by utilities have consistently identified the need for plant modifications. The NRC has, therefore, begun a generic program to resolve these concerns.

As part of the Unresolved Safety Issue (USI) effort to evaluate the performance of containment sumps for operating reactors (TAP A-43, Containment Emergency Sump Reliability), a series of sump tests covering typical designs will be performed under contract by the Alden Research Laboratory. The test facility has been constructed and shakedown testing is underway. Information from operating reactor licensees is required to assist us in developing the appropriate range of test parameters and to evaluate the potential significance of debris formation from insulation materials within containment.

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DATE ▶						

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In order for the information from operating plants to be used as input to this series of sump tests, which were to commence in October 1980, we request that you provide the data requested in the enclosure to this letter within 90 days of its receipt. If you have any questions on this subject, please contact us.

Sincerely,

Original signed by:
S. A. Varga
Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Enclosure:
As Stated

cc: w/enclosure
See next page

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

October 31, 1980

Docket Nos. 50-250
and 50-251

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Advanced Systems and Technology
Florida Power and Light Company
Post Office Box 529100
Miami, Florida 33152

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Sincerely,

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

Enclosure:
As Stated

cc: w/enclosure
See next page

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

Mr. Norman A. Coll, Esquire
Steel, Hector and Davis
1400 Southeast First National
Bank Building
Miami, Florida 33131

Mr. Henry Yaeger, Plant Manager
Turkey Point Plant
Florida Power and Light Company
P. O. Box 013100
Miami, Florida 33101

Mr. Jack Shreve
Office of the Public Counsel
Room 4, Holland Building
Tallahassee, Florida 32304

Administrator
Department of Environmental Regulation
Power Plant Siting Section
State of Florida
2600 Blair Stone Road
Tallahassee, Florida 32301

Resident Inspector
Turkey Point Nuclear Generating Station
U. S. Nuclear Regulatory Commission
Post Office Box 971277
Quail Heights Station
Miami, Florida 33197

Information Request From Operating PWR Licensees

1. Provide a drawing of the containment sump showing important design features (e.g., debris screening, divider plates, etc.) and dimensions. Provide a drawing showing location in the containment building and the location relative to the reactor primary system. The location and configuration of the suction lines for recirculation, relative to the containment sump should also be shown. For facilities which have performed successful sump flow tests, reference to the docketed results of those tests will fulfill this request.

2. For each type of thermal insulation used in the containment (particularly within the crane wall envelop), provide the following information:

   a) type of material including composition and density;

   b) manufacturer and brand name;

   c) method of attachment;

   d) location and quantity in containment of each type.

NOV 7 1980