

ENCLOSURE 1

NOTICE OF VIOLATION

Florida Power and Light Co.
Turkey Point, Units 3 and 4

Docket Nos. 50-250 and 50-251
License Nos. DPR-31 and DPR-41

As a result of the NRC Design Validation Inspection conducted at the Turkey Point Nuclear Power Plant, Units 3 and 4, during the period September 11 through 15, September 25 through 29, and October 12 and 13, 1989, and in accordance with 10 CFR 2, Appendix C, the following violations were identified.

1. 10 CFR 50, Appendix B, Criterion V, Instructions, Procedures and Drawings, requires that activities affecting quality shall be prescribed by appropriate procedures and shall be accomplished in accordance with those procedures.

Contrary to the above, the following procedural errors were identified:

- a. Procedure 4-OP-30 step 7.5.2.7 failed to direct that valve 4-737C be opened to achieve makeup flow.
- b. Procedures 3 and 4-OP-30 step 7.6.2.15 erroneously specified valve 4-711B be left open and step 7.6.2.5 specified in error that valves 3-711A and 4-711A be left open. The proper valve lineups were determined to be the closed position.
- c. Procedure 3-OP-30, Attachment 2 and 3 specified that valves 3-10-681, 3-10-682, and 3-10-683 were normally open when the valves should be normally closed.
- d. Procedures 3 and 4-OP-30, Attachments 2 and 3 failed to include valves 3-10-749, 4-10-692, 4-10-1009, 4-10-1010, 4-1181, 4-1182, and 4-769D that were depicted on drawing 5610-T-E-4512.
- e. Procedures 3 and 4 ONOP-30 step 5.6.3 could not be implemented as a set of hoses had not been provided for Unit 4 and the hoses provided in Unit 3 were of insufficient length to be coupled in the required configurations.

For items a through d, the errors in the valve lineup lists could have placed the system in a condition where a loss of system inventory could occur due to mispositioned valves. For item e, emergency equipment to accomplish actions based upon a loss of component cooling water was not properly staged in the plant.

This is a Severity Level IV Violation (Supplement 1).

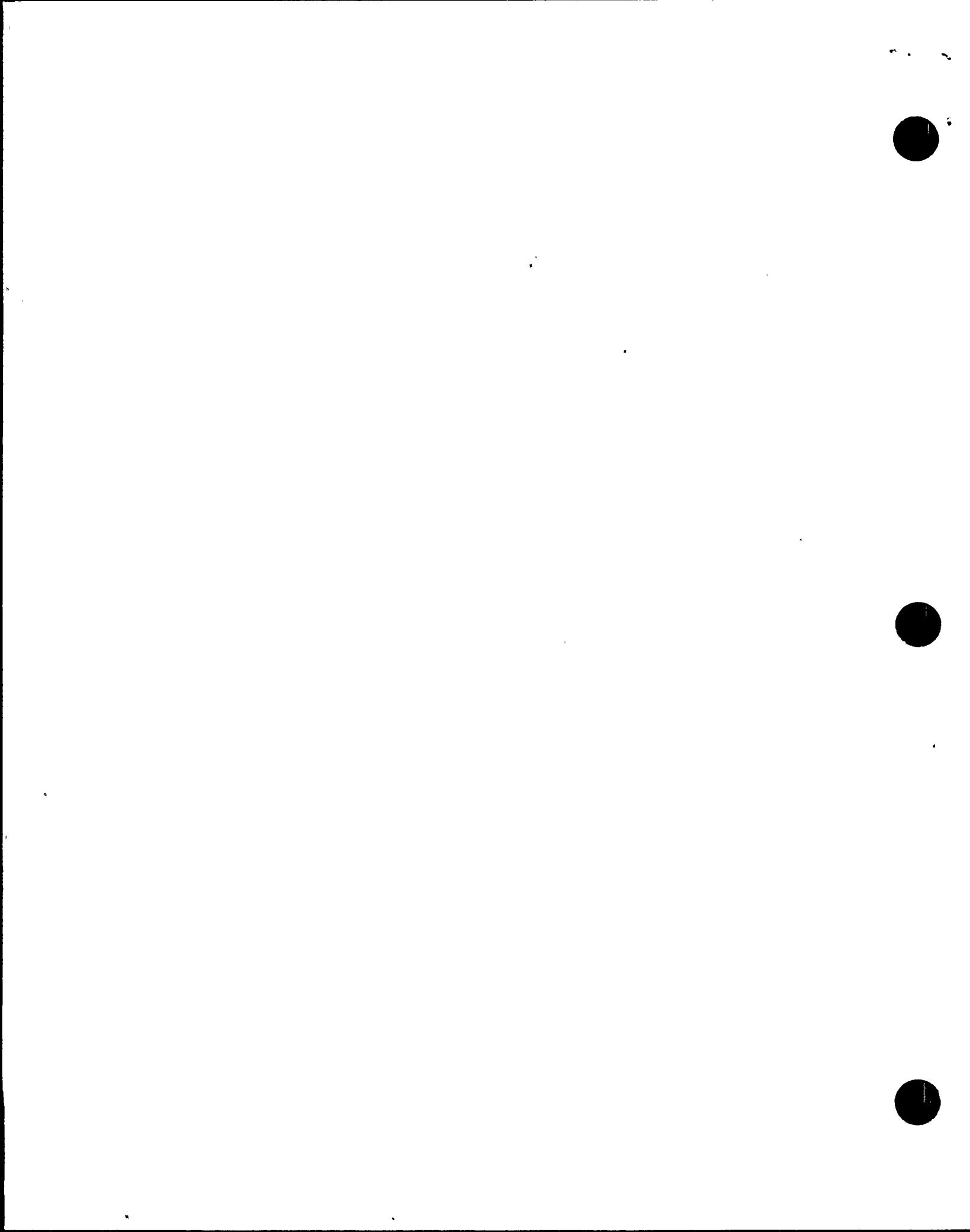
2. 10 CFR 50, Appendix B, Criterion XVIII, Audits, states that comprehensive audits shall be performed to verify proper implementation of all aspects of the quality assurance program.

Contrary to the above, the following calculational errors were identified within various design documents with respect to the guiding design requirements which had not been detected due to the less than adequate scope or depth of the licensee technical audit overview of the design control program.

- a. Bechtel Specification 5177-M900, Qualification of Seismic Category 1 Equipment, states that the flexibility of supports shall be considered for the seismic analysis of equipment. Contrary to the specification requirements, Bechtel calculation C-SJ-183-02 did not account for the transverse flexibility of the component cooling water heat exchanger support pedestals. This resulted in the erroneous qualification of the heat exchanger with decreased seismic loads.
- b. Teledyne technical report TR-5322-1, Project Procedures and Criteria/USNRC I&E Bulletin 79-14 Analysis/Turkey Point, requires that safety-related piping be qualified to the appropriate loading combinations and stress limits. Contrary to the technical report requirements, Teledyne calculation 6548-1 failed to account for the effects of valve thrust, did not address the need for a tie back support for the branch line associated with valve RV-3-1431, and did not perform a stress check at the root of the branch lines for the combined effects of pressure, deadload, valve thrust, and seismic loads.
- c. Teledyne technical report TR-5322-1, Project Procedures and Criteria/USNRC I&E Bulletin 79-14 Analysis/Turkey Point, defined the pipe support calculational methodology. Contrary to the technical report requirements, the anchor bolt tension and shear loads for support SR-703 were not computed correctly as the edge distance amplification factor was not used and the shear loads were distributed to all rather than half of the anchor bolt. Additionally, the tension for support 4-ACH-211 exceeded the allowable bolt tension of the technical report and pipe support 4-ACH-267 was qualified to resist uplift loads which was not addressed by the technical report.

This is a Severity Level IV Violation (Supplement 1).

Pursuant to the provisions of 10 CFR 2.201, Florida Power and Light Company is hereby required to submit a written statement or explanation to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555, with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector, Turkey Point, within 30 days of the date of the letter transmitting this Notice. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) admission or denial of the violation,



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(2) the reason for the violation if admitted, (3) the corrective steps which have been taken and the results achieved, (4) the corrective steps which will be taken to avoid further violations, and (5) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time. If an adequate reply is not received within the time specified in this Notice, an order may be issued to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken.

FOR THE NUCLEAR REGULATORY COMMISSION



Thomas A. Peebles, Chief
Operations Branch
Division of Reactor Safety

Dated at Atlanta, Georgia
this 27th day of February 1990

