



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

Report Nos. 50-335/82-27 and 50-389/82-32

Licensee: Florida Power and Light Company
9250 West Flagler Street
Miami, FL 33152

Facility Name: St. Lucie Unit 1 and 2

Docket Nos. 50-335 and 50-389

License Nos. DPR-67 and CPPR-144

Inspection at St. Lucie site near Ft. Pierce, Florida

Inspectors: C. Julian for 8/3/82
S. A. Elrod Date Signed

C. Julian for 8/3/82
H. E. Bibb Date Signed

Approved by: C. Julian 8/3/82
C. A. Julian, Section Chief, Division of Date Signed
Project and Resident Programs

SUMMARY

Inspection on June 11 - July 10, 1982

Areas Inspected

This routine inspection involved 125 resident inspector-hours on site in the areas of Maintenance observation; surveillance observation; safety verification, licensee action on previous inspection findings; IE Bulletins, Circulars and Information Notices; and Licensee Event Reports.

Results

Of the six areas inspected, no violations or deviations were identified.

DETAILS

1. Persons Contacted

Licensee Employees

- *C. M. Wethy, Plant Manager
- *J. H. Barrow, Operations Superintendent
- *J. E. Bowers, Maintenance Superintendent
- *D. A. Sager, Operations Supervisor
- *N. G. Roos, Quality Control Supervisor
- R. J. Frechette, Chemistry Supervisor
- C. F. Leppla, Instrument and Control Supervisor
- *R. R. Jennings, Technical Department Supervisor
- J. Barrow, Fire Prevention Coordinator
- O. D. Hayes, Nuclear Plant Supervisor
- N. D. West, Nuclear Plant Supervisor
- T. A. Dillard, Assistant Plant Superintendent - Mechanical
- A. W. Bailey, Quality Assurance Supervisor

Other licensee employees contacted included construction craftsmen, technicians, operators, security force members, and office personnel.

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on July 19, 1982, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

- a. (Closed-Unit 1) Violation 50-335/81-35-01 - Failure to set pressurizer code safety properly. Review of recent revisions to maintenance procedure M-0017 and personal observation of maintenance activities have indicated that the problem has been resolved.
- b. (Closed-Unit 1) Unresolved Item 50-335/81-35-02 - Interchanging of certain pressurizer code safety parts. Vendor/licensee discussions have indicated that interchange of certain parts did not have a deleterious effect on operation of the valves.
- c. (Closed-Unit 1) Violation 50-335/82-04-01 - Failure to implement procedure. Subsequent night orders and revisions to appropriate operating procedures have provided adequate corrective action for the violation cited.
- d. (Closed-Unit 1) Violation 50-335/82-15-01 - Equipment clearance order procedure does not require operators to confirm "locked" valve positions. Subsequent revision of operating procedure 0010122,

Equipment Clearance Orders, has resolved the problem with identification/confirmation of "locked" valves upon release of a clearance order as indicated by the inspectors' personal followup of several clearances by the inspector.

- e. (Closed-Unit 1) Violation 50-335/81-22-01 - Failure to follow procedures, three examples. The inspector's observations over the past several months since this violation was written have indicated an increased awareness on the part of plant personnel to procedural compliance.

4. Maintenance Observation

Station maintenance activities of safety-related systems and components listed below were observed/reviewed to ascertain that they were conducted in accordance with requirements. The following items were considered during this review: that the limiting conditions for operation were met; that activities were accomplished using approved procedures; that functional testing and/or calibrations were performed prior to returning components or systems to service; that quality control records were maintained; that activities were accomplished by qualified personnel; that parts and materials used were properly certified; and that radiological controls were implemented as required. Work requests were reviewed to determine status of outstanding jobs and to assure that priority is assigned to safety-related equipment maintenance which may affect system performance. The following maintenance activities were observed/reviewed:

- a. PWO-2775 - "B" Diesel Generator Repairs. On June 16, 1982, the turbocharger on the 16 cylinder "B" diesel failed (cracked housing) during an attempted surveillance run. The resident inspector followed this job closely during the next 48 hours, confirming compliance with technical specification surveillance requirements, return to service in less than 72 hours, and proper material and procedure compliance.
- b. PWO-2739 - "1A" Waste Gas Compressor. The compressor was disassembled, repaired and reassembled. Post-repair operational testing was satisfactory, and area cleanup was completed.
- c. PWO-2753 - Safety Injection Piping Restraint. Restraint SI-676-343 was adjusted to restore proper "S" dimension to provide for axial growth of pipe I-4"-SI-415.
- d. The inspector observed work in progress on rebuilding Unit 2 reactor coolant pump seal. General Maintenance Procedure M-0011, Rev. 4, Reactor Coolant Pump Seal Rebuilding was being used. It was also noted that television was being used to record the disassembly and reassembly processes to later be used for training classes.

No violations or deviations were identified in this area.

5. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the report period. The inspector verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of the reactor, auxiliary and turbine buildings were conducted to observe plant equipment conditions, including potential fire hazards; fluid leaks and excessive vibrations and to verify that maintenance requests had been initiated for equipment in need of maintenance. The inspector by observation and direct interview verified that the physical security plan was being implemented in accordance with the station security plan.

The inspector observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. The inspector walked down the accessible portions of the auxiliary feedwater system to verify operability. The inspector also witnessed portions of the radioactive waste system controls associated with radwaste shipments.

No violations or deviations were identified in this area.

6. Surveillance Observation

During the inspection period, the inspector verified plant operations in compliance with at least sixteen different technical specification (TS) requirements. Typical of these were confirmation of compliance with the TS for reactor coolant chemistry, refueling water tank, containment pressure, control room ventilation and AC and DC electrical sources. The inspector verified that testing was performed in accordance with adequate procedures, test instrumentation was calibrated, limiting conditions for operation were met, removal and restoration of the affected components were accomplished, tests results met requirements and were reviewed by personnel other than the individual directing the test, and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

No violations or deviations were identified in this area.

7. IE Bulletins

The following IE Bulletins were reviewed to determine whether they had been received and reviewed by appropriate management, responses, where necessary, were accurate and complete, and that action if required, was complete.

- a. (Closed - Unit 2) IE Bulletin 78-02 Terminal Block Qualification. This report updates inspection report 389/78-06. Such terminal blocks are covered in the applicants environmental qualification of equipment program, NUREG 0588, which was reviewed on-site by NRC July 12-16, 1982.

- b. (Closed - Unit 2) IE Bulletin 78-04 Environmental Qualification of Certain Stem Mounted Limit Switches Inside Reactor Containment. This report updates inspection report 389/78-06. Such limit switches would be covered by the applicants environmental qualification of equipment program, NUREG 0588. NRC review of July 12-16, 1982 shows that there are none of these in the St. Lucie 2 containment.
- c. (Closed - Unit 2) IE Bulletin 78-14 Deterioration of BUNA-N components in ASCO solenoids. This IEB is closed based on information obtained during the Environmental Qualification of Safety-Related Equipment review conducted by NRC July 12-16, 1982. The applicant shows that no BUNA-N elastomer material is used on St. Lucie 2 solenoids. Ethelene-Propolene is used exclusively. The inspector had no further questions.
- d. (Closed - Unit 2) IE Bulletin 79-06, 79-06a, 79-06b, and 79-06c. Review of operational errors and system misalignments identified during the Three Mile Island Incident. This IE Bulletin and its revision are administratively closed because the subject matter has been included in other, more current, publications such as NUREG 0737.
- e. (Reopened - Unit 2) IE Bulletin 79-09 Failures of GE Type AK-2 Circuit Breakers in Safety-Related Systems. These circuit breakers are used as reactor trip breakers. This IEB is reopened pending NRC inspection of the present test, maintenance and surveillance programs.
- f. (Closed - Unit 2) IE Bulletin 80-21 - Valve yokes supplied by Malcolm Foundry. The licensee contacted vendors and received negative responses except from Anchor Darling. Malcolm Foundry material is used in the gear boxes of several non-safety class valves. The material is not a pressure boundary part. The inspector reviewed the responses and memo-to-file L-310.4.1 PSL2-82-277 (E. W. Dotson). The inspector had no further questions.

8. IE Circulars and Information Notices

The following IE Circulars and Information Notices were reviewed to determine whether they had been received by station management, reviewed for applicability, and appropriate action had been taken or planned:

- a. (Closed - Unit 2) IE Circular 78-08 Environmental Qualification of Safety-Related Equipment at Nuclear Power Plants. Administratively closed based on supercession by IE Bulletin 79-01B and, for St. Lucie Unit 2, NUREG 0588.
- b. (Closed - Unit 2) IE Circular 78-19 - Manual Override (Bypass) of Safety Actuation Signals - Closed based on review of Ebasco letter SL-2-80-5-28, File 310.4.2, Memo PSL-2-82-298 and Safety Evaluation Report NUREG-0843, section 7.7.5 - Bypassed and inoperable status indication. A field review showed bypass of the control room emergency filtration fans to be annunciated contrary to Ebasco letter

SL-2-80-5-28 which is two years old. This was identified to the applicant. The inspector had no further questions.

- c. (Closed - Unit 2) IE Circular 79-05 Moisture Leakage in Stranded Wire Conductors. This IEC required licensees to evaluate components and seal cables as necessary. The inspector reviewed Ebasco Letter SL-2-82-543 of June 22, 1982 and a portion of the St. Lucie 2 Environmental Qualification Program. This review concluded that although installation is not totally complete, the IEC is satisfied because of a viable program for review and the normal construction program for tracking incomplete item.
- d. (Closed - Unit 2) IE Information Notice 81-29 Equipment Qualification Testing Experience. The Equipment Qualification Review conducted by NRC on July 12-16 sampled items included in this IE Notice. The applicant appears to have addressed these issues. The inspector had no further questions.
- e. (Closed - Unit 2) IE Information Notice 82-03 Environmental Tests of Electrical Terminal Blocks. Closed based on NRC environmental review of equipment that shows that there are no terminal blocks of this type in a St. Lucie 2 accident environment.

9. Licensee Event Reports Review

The following LER's were reviewed to verify that reporting requirements had been met, causes had been identified, corrective actions appeared appropriate, generic applicability had been considered, and the LER forms were complete. Additionally, for those reports identified by asterisk, a more detailed review was performed to verify that the licensee had reviewed the events, corrective action had been taken, no unreviewed safety questions were involved, and violations of regulations or Technical Specification conditions had been identified.

<u>LER No.</u>	<u>Subject</u>
*82-01	Area radiation monitor inoperable and missed surveillance
*82-02	Subcooled margin monitor
*82-03	Control room air intake monitor
*82-04	Wide range nuclear instrumentation
*82-05	Control room air conditioning
*82-06	Mechanical snubbers
*82-07	Shield building ventilation system

*82-08	PORV block valve
*82-09	Missed Surveillance
*82-10	Steam Generator level indication
*82-11	Diesel generator starting failure
*82-12	"C" Charging pump
*82-13	Containment radiation channel setpoint
*82-14	Reactor coolant system leakage
*82-15	Containment isolation signal
*82-16	Low level resin disposal
*82-17	Dose equivalent I-131
*82-18	Steam generator level channel
*82-19	Shield building integrity
*82-20	Dose equivalent I-131
*82-21	Mechanical snubbers
*82-22	Subcooling margin monitor

Additionally, the following LER's are closed for their respective reasons:

*LER - 81-46 - Steam generator tube Eddy Current Testing. Review of results of retesting during outage in May 1982 showed no further tube degradation.

*LER - 81-42 - Station Blackout Test Deficiencies. Subsequent adjustments, repairs and retesting have amended the deficiencies.

*LER - 81-56 - Pressurizer Code Safety. The latest revision (Rev. 7) to General Maintenance Procedure, M-0017, Pressurizer Code Safety Maintenance, has resolved the problems which led to the improper operation of the code safety valve.

10. Local Leak Rate Testing - Unit 2

The inspector observed portions of the testing for test package 1327, the leak rate test of containment penetration valve V6792. Activities observed included open performance test, procedure adequacy and calibration of test devices. The valve failed its test and is scheduled for required retest. The inspector had no further questions at this time.

No violations or deviations were identified in this area.