

UNITED STATES NUCLEAR REGULATORY COMMISSION **REGION II** 101 MARIETTA ST., N.W., SUITE 3100 ATLANTA, GEORGIA 30303

Report No. 50-389/82-28

Licensee: Florida Power and Light Company 9250 West Flagler Street Miami, FL 33101

Facility Name: St. Lucie 2

Docket No. 50-389

License No. CPPR-144

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

Inspector:

Approved by:

conomo N. Economos, Acting Section Chief Engineering Inspection Branch Division of Engineering and Technical Programs

7-97- P) Date Signed

1-27-82 Date Signed

SUMMARY

Inspection on June 21-25, 1982

Areas Inspected

This routine, unannounced inspection involved 33 inspector-hours on site in the areas of safety-related hangers/restraints; seismic analysis for as-built safety-related piping systems (IE Bulletin 79-14); and previous inspection findings.

Results

Of the three areas inspected, two violations were found; one in each of two areas (Violation - Inadequate Measures to Control Welding, paragraph 3; and Violation - Failure to Follow Procedures, Drawings, and Instructions for Hanger/Support Inspections, paragraph 5).

## REPORT DETAILS

## 1. Persons Contacted

- Licensee Employees
- \*B. J. Escue, Site Manager
- \*W. F. Jackson, Welding Superintendent
- \*P. Carier, Power Plant Engineering
- C. Carlo, Area Plant Mechanical Supervisor
- \*G. Crowell, Engineering-Site
- \*R. A. Symes, Supervising QA Engineer
- \*E. W. Sherman, QA Engineer

Other licensee employees contacted included construction craftsmen, technicians, and office personnel.

Other Organizations

- \*G. H. Krauss, ESSE Project Engineer, EBASCO
- R. Martin, Lead Applied Mechanics Engineer, EBASCO
- J. Majumder, Lead Support Restraint Engineer, EBASCO
- J. Nolan, QC Supervisor, U. S. Testing
- J. Melo, QC Field Supervisor, U. S. Testing

\*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on June 25, 1982, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection findings listed below. No dissenting comments were received from the licensee.

(Open) Violation 389/82-28-01, Inadequate Measures to Control Welding, paragraph 3.

(Open) Violation 389/82-28-02, Failure to Follow Procedures, Drawings and Instructions For Hanger/Support Inspections, paragraph 5.

(Open) Inspector Followup Item 389/82-28-03, Gouge Marks on Accumulator CH1-10061, paragraph 5.

3. Licensee Action on Previous Inspection Findings (92702)

(Open) Violation 389/81-16-01, Inadequate Procedures to Control Welding. During an inspection at St. Lucie 2 during the period August 18-20, 1981, the inspectors found seven conditions that indicated inadequate measures were being used to control welding. One of the seven conditions was the finding of a quantity of unused uncontrolled Type E-7018 electrodes. In a letter of response dated October 13, 1981, the licensee stated that the following steps and/or corrective actions for this one condition of the violation had been taken to avoid further violations.

- Signs have been posted at each of the depositories located in each of the buildings for the collection of all unused E-7018 electrodes stating that all electrodes must be bent before depositing.
- All personnel, both supervision and craftsmen, were instructed to comply with this requirement of SQP-8 with regard to the disposition of unused electrodes.

During an inspection of hangers and piping systems, a number of unused and partially used welding electrodes were found which were not properly dispositioned in accordance with procedure SQP-8. The areas and the welding material found are as follows:

- Reactor Auxilary Building, Column RAF, Elevation 19.5 ft., found 26 unused Type E-7018 electrodes
- b. Pipe chase in the Reactor Auxilary Building, found partially used and unbent Type 309L electrodes and some TIG wire
- c. Floor of Turbine Building, found 14 unused Type E-7018 electrodes
- d. Table in Turbine Building, found an undetermined number of unattended, cold, unused Type E-7018 electrodes

The same procedure is used for control of welding material in the Turbine Building as is used for other parts of the site.

This condition is a violation of 10 CFR 50, Appendix B, Criterion IX. This item will be violation 389/82-28-01, Inadequate Measures to Control Welding. This is a repeat violation.

Within the areas inspected, one violation was identified.

4. Unresolved Items

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Unresolved items were not identified during this inspection.

5. Safety-Related Pipe Support and Restraint Systems (50090)

The inspector performed or observed the following: (a) the complete reinspection of three completed and final inspected hangers/supports, (b) visual inspection of seven dynamic hangers/supports and (c) visual inspection of seven fixed pipe hangers/supports. The hangers/supports inspected are as follows:

- a. Reinspected Finished Hangers/Supports
  - (1) Hanger No. CH-2081-11 in the Condensate System
  - (2) Hanger No. SI-2408~18 in the Safety Injection System
  - (3) Hanger No. CC-2062-183 in the Chemical and Volume Control System
- b. Dynamic Pipe Hangers/Supports
  - Hanger No. CH-2081-1001 had a size ½ mechanical snubber and was in the Condensate System
  - (2) Hanger No. RC-4300-126 had a size 10 mechanical snubber and was in the Reactor Coolant System
  - (3) Hanger No. RC-4300-125 had a size 1 mechanical snubber and was in the Reactor Coolant System
  - (4) Hanger No. RC-4300-121 had a size 3 mechanical snubber and was in the Reactor Coolant System
  - (5) Hanger No. MS-4102-158 had a size 10 mechanical snubber and was in the Main Steam System
  - (6) Hanger No. MS~3023-26B had a size 1 mechanical snubber and was in the Main Steam System
  - (7) Hanger No. SI-2407-143C had a size 10 mechanical snubber and was in the Safety Injection System

## c. Fixed Pipe Hangers/Supports

- Hanger No. SI-2407-136 had a size 9 spring can and was in the Safety Injection System
- (2) Hanger No. CC-2062-6274 had a size 13 spring can and was in the Chemical and Volume Control System
- (3) Hanger No. CC-2061-6034 had a size 11 spring can and was in the Chemical and Volume Control System
- (4) Hanger No. CC-2062-6228 had a size 2 spring can and was in the Chemical and Volume Control System
- (5) Hanger No. SI-41-R1 had a size 5 spring can and was in the Safety Injection System
- (6) Hanger No. CH-109-R5 had a size 4 spring can and was in the Condensate System

(7) Hanger No. RC-69-R6 had a size 2 spring can and was in the Reactor Coolant System

As a result of hanger/support reinspections performed at the inspector's request, the following deficient conditions were noted:

- Hanger No. MS-4102-158 had a loose locking nut.
- Hanger No. CC-2062-6274 had a loose nut and insufficient thread engagement on another nut.
- Hanger No. SI-41-R1 had insufficient thread engagement on one of the nuts.
- Hanger No. CH-2081-54 (not previously listed) had the pipe clamp rotated and exceeded the allowable angular tolerances.
- Hanger No. CC-2061-6034 had a size 11 spring can and Rev. 9 of the drawing called for a size 12 spring can.

On Hanger No. CC-2061-6034 revision 8 of the drawing allowed a size 11 spring can, but revision 9 of the drawing changed the spring can size to 12. The load range setting for a size 12 spring can is higher and does not overlap the range for a size 11 spring can. Therefore the hanger spring could not be set at the design values. The QC inspector failed to use the proper revision of the drawing for his inspection on May 4, 1982 even though Revision 9 of the particular drawing had been on site since December 1981.

The inspection procedure that defines the acceptance criteria for hanger inspections is Florida Power and Light QI 10.18, "Piping System Configuration Inspection." All of the hangers with deviations were considered in the "FINAL" Phase I stage of inspection. Procedure QI 10.18 states that the "FINAL" Phase I inspection, when performed, will assure the support is completely acceptable or will document identified deficient conditions. Since the 5 hangers did not have the deficient conditions documented this is a failure to follow procedure. This is a violation of 10 CFR 50, Appendix B, Criterion V. This item will be identified as violation 389/ 82-28-02, Failure to Follow Procedure For Hanger/Support Inspection.

Within the areas inspected, one violation was identified.

 (Open) IE Bulletin 79-14 - Seismic Analysis For As-Built Safety-Related Piping Systems (25529)

The licensee stated the following about the IE Bulletin 79-14 program.

The inspection process includes verification of:

- a. Pipe run geometry and clearances
- b. Valve and valve operator locations, weights and orientation
- c. Support/Restraint (S/R) location and functions

Verification will be done by physical measurements. Field measurements will be recorded on piping isometrics with black flair pens and all forms in the inspection package will be filled in. All mark-ups will be signed and dated by each member of the team. Each inspection team will be made up of two Support/Restraint Engineers/Designers or one S/R Engineer/Designer and one Mechanical Nuclear Designer.

This program is being conducted for the licensee by an EBASCO group consisting of 16 people. The program is being conducted in two inspection phases (two walkdowns). Phase I which has 520 inspection packages is 59 percent complete and total completion for this phase is expected by July 15, 1982. Phase II or the second walkdown is expected to be completed by August 31, 1982.

Within the areas inspected, no violations or deviations were indentified.