P.O. BOX 529100, MIAMI, FL 33152

FLORIDA POWER & LIGHT COMPANY

January 29, 1981
L-81-28

Mr. J. P. O'Reilly, Director, Region II
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

Re: RII:JJP
St. Lucie Unit 2
Docket No. 50-389/80-15

Florida Power & Light Company has reviewed the subject inspection report and our response is attached. There is no proprietary information contained in the report.

Very truly yours,

J. A. DeMosty
for

Robert E. Uhrig
Vice President
Advanced Systems & Technology

REU/TCG/ah

Attachments

cc: C. R. McFarland
Harold F. Reis, Esquire

Response To RII:JJB 50-389/80-15

Finding

A. As required by 10 CFR 50, Appendix B, Criterion IX and as implemented by the Florida Power & Light Company Topical Report (FPL TQARI-76A) Section 9, "Measures shall be established to assure that special processes, including welding, heat treating and nondestructive testing are controlled and accomplished by qualified personnel using qualified procedures in accordance with applicable codes, standards, specifications, criteria, and other special requirements." SNT-TC-1A, paragraph 8.6.4 and procedure QI 2.7 requires the examinee to identify 90% of the known indications.

Contrary to the above, the following examples of noncompliance with applicable code or procedural requirements were noted in training and qualification test specimens for the certification of magnetic particle (MT), liquid penetrant (PT) and visual (VT) examiners.

1. MT test specimen #6 which is one of two currently used MT test plates used of certify examinees has chisel marks as defects which can be seen visually. In addition to not typifying weld defects which an examiner will encounter, the disposition sheet for the test specimen does not indicate how many indications are present, so establishing if the examinee has in fact identified 90% of the known indications is opinion in lieu of established fact.

2. Test specimen #10 which is used exclusively for testing PT examinee's does not typify actual PT evaluations encountered by a PT examiner. In addition, the disposition sheet for this test specimen also does not identify how many known indications are present to determine whether an examinee has in fact identified 90% of the known indication as required by the criteria above, most of which would be rejected visually and does not test the examinee's ability.

3. (a) Test specimens for visual certification are not formally in the training program.

   (b) Test specimens do not adequately test examinee's ability to use measuring devices or evaluate welds/fitups in accordance with the licensee's written Procedure QI 9.1 or Paragraph NB-5521 of Section III to the ASME Code.

   (c) Several defect/surface conditions are not included in hardware samples; i.e., burn thru, cracks, blow holes, 3-1 tapes and weld prep surfaces.

Response

Immediate corrective action was taken in that sixteen of nineteen test coupons that could not be located at the time of inspection were found. Additional test coupons are being made to meet the recommendations of the NRC Inspector. Records indicate that three QC examiners were certified using the coupons which

were considered unacceptable. These three individuals will be retested without additional training by the FPL corporate Level III Examiner. These corrective measures will be completed by February 15, 1981.

Finding

B. As required by 10 CFR 50, Appendix B, Criterion IX and as implemented by the Florida Power & Light Company Topical Report (FPL TQARI -76A)Section 9, "Measures shall be established to assure that special processes, including welding, heat treating and nondestructive testing are controlled and accomplished by qualified personnel using qualified procedures in accordance with applicable codes, standards, specifications, criteria, and other requirements." Licensee procedures QI 9.1, 9.4 and 9.5 establish the visual magnetic particles and liquid inspection requirements respectively.

Contrary to the above, on October 27-31, 1980, the following examples of noncompliance with applicable code or procedural requirements were noted in nondestructive testing and visual inspection.

1. A level I liquid penetrant (PT) examiner accepted nine linear indications on weld joint #2F-2-P0E7003 that should have been rejected.

2. A level II PT examiner failed to mark/identify two linear indications on the base material within ½" of weld joint #2F-2-P-0E6-003.

3. Two level I magnetic particle (MT) examiners were observed performing a MT examination on weld joint #2F-2-STL-G803-015 in which the application of the MT powder was extremely heavy, the removal of the particles were accomplished by vigorously blowing with MT blow bulb at close range, and the color of the MT powder used for the inspection did not adequately contrast with the examination of the as-welded surface condition.

4. Weld joint #MS-0029-007 which had been visually accepted, was noted to have a sharp transition between the weld metal and the adjacent Tee fitting.

Response

B.1. The certification of the individual was retracted the day of the inspection. The inspections that were performed during this initial certification are in the process of being reinspected. The reinspection will be completed by March 15, 1981. In addition, the examiner has received further training and indoctrination and was recertified on December 15, 1980. Discrepancies found in the training folder of the Level I Examiner have been corrected. Further indoctrination in clerical functions has been given.

B.2. This inspection was interrupted to obtain a mirror that was required to complete the inspection. At the time the NRC inspector arrived at the area, the examiner was in the process of obtaining the proper inspection equipment. No corrective steps are necessary.

B.3. Personnel have been reinstructed to avoid mistakes of this type.

B.4. The weld in question is MS-0002-007 (weld MS-0029-007 is in the Reactor Containment Building). WRR 2012 was issued the day of the inspection to correct the 3:1 taper in MS-0002-007. The QC examiner has been given additional training and this training will be continued on a periodic basis with all examiners.

Finding

C. As required by Paragraph (a)(1) of 10 CFR 50.55(a), "...Systems... shall be ... fabricated.... and inspected to qualify standards commensurate with the importance of the safety function to be performed". For safety related piping weld radiography this requirement is implemented by Florida Power & Light Company Topical Report (FPL TQARI-76A) Appendix C, which required nondesructive examination to be accomplished in accordance with Section V of the ASME B and PV Code.

Contrary to the above, the radiographic examination of safety-related piping welds was not performed in accordance with ASME Code Section V or licensee procedure in that:

1. Penetrameters and lead letter "F" were positioned on the weld, when it was possible to place same on adjacent base metal.

2. Radiographic films were not dated.

3. Location markers were not used to identify area of weld to be reviewed.

4. Base metal defects were not evaluated or dispositioned on the film reader's record.

5. The film reader's record contains erroneous information regarding radiographic technique and required radiographic sensitivity.

Response

C.1. Piping penetration #26 was re-radiographed with the penetrameter placed on the base material.

C.2. The radiographic films were corrected

C.3. The films have been corrected by identifying the location marks on the films. To avoid future nonconformances such as C1, C2, or C3, personnel have been reinstructed to avoid mistakes of this type.

C.4. The radiographic report has been corrected to reflect the base material blemishes. The blemishes have been evaluated and found acceptable. The examiner has received additional training. The QI will be revised by February 15, 1981 to provide clarification in this area.

C.5. This discrepancy was due to a clerical error. The reader sheet has been revised to reflect the correct technique. Continuous training is being given to individuals performing radiographic examinations. Such training is documented in their personnel training folder.

With respect to items 6 and 7 on Page 10 of the Inspection Report, the reader sheet for penetration No. 24 was revised to reflect the correct sensitivity. WRR 2019 was issued and the repairs completed and accepted at exposure (0-8). The indication at station marker 7 has been re-radiographed and re-evaluated and is acceptable per the ASME Code requirements.

Finding

D. As required by 10 CFR 50, Appendix B, Criterion VIII and implemented by the Florida Power & Light Company Topical Report (FPL TQARI-76A) Section 8, "Measures shall be established to assure that material, parts, and components ... shall be identified and controlled as required throughout fabrication, storage, construction, etc."

Contrary to the above, the inspector noted that weld travelers at fitup inspection did not indicate where temporary attachments were installed, nor was the areas where the attachments were welded marked. A review of the licensee's visual inspection procedure did not have procedural requirements that will adequately control the use and inspection of temporary attachments.

Response

Site Quality Procedure 65 was revised to include provisions for the addition and removal of temporary attachments. The procedure was distributed December 9, 1980. The area directors and supervisors have been advised of the procedure change. Quality Instruction 9.1 was also revised to adequately address the requirements. The QC examiners were informed of the procedure change. Corrective action was completed on January 19, 1981.

Finding

E. As required by 10 CFR 50, Appendix B, Criterion XVI and implemented by FPL Topical Report (FPL TQARI-76) Section 16, "Corrective Action" which states in part that measures shall be established to assure that conditions adverse to quality, such as ..., deficiencies, deviations, ... and nonconformances are promptly identified and corrected. ANSI 45.2.3-1973 establishes the requirements for housekeeping during the construction phase of nuclear power plants.

Contrary to the above, during the week of October 27, 1980, it was found that construction debris and garbage which included highly inflammable liquids, were found in many areas of the containment, and auxiliary buildings where safety-related materials were being or had been installed.

Response

Housekeeping zones have been established in the Reactor Containment Building. Special crews have been assigned to patrol chronic problem areas and to maintain housekeeping requirements in other designated areas. Responsible supervisors are making periodic tours to review housekeeping.

Paints and thinners have been stored in paint lockers and work crews have been instructed as to housekeeping requirements.

QC has had sheet metal boxes built to store liquid penetrant and other materials used for inspections when not in use.

In addition, clean up crew sizes have been increased and Quality Assurance personnel will continue to perform periodic surveillance of housekeeping.