U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION IV

Report No. 50-382/79-17 Category A2

Docket No. 50-382

Licensee: Louisiana Power and Light Company
142 Delaronde Street
New Orleans, Louisiana 70174

Facility Name: Waterford Steam Electric Station, Unit No. 3

Inspection at: Waterford Site, Taft, Louisiana

Inspection Conducted: November 27-30, 1979

Inspectors: for _____ 1/4/80
R. C. Stewart, Reactor Inspector Date
Projects Section (Paragraphs 1, 2, 3, 8 and 9)

_____ 1/4/80
J. I. Tapia, Reactor Inspector Date
Engineering Support Section
(Paragraph 7)

_____ 1-04-80
D. P. Tomlinson, Reactor Inspector Date
Engineering Support Section
(Paragraph 4)

_____ 1/4/80
L. D. Gilbert, Reactor Inspector Date
Engineering Support Section
(Paragraphs 5 and 6)

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Approved: W. A. Crossman, Chief, Projects Section — 1/4/80 Date

R. E. Hall, Chief, Engineering Support Section — 1/4/80 Date

Inspection Summary:

Inspection on November 27-30, 1979 (Report No. 50-382/79-17)
Areas Inspected: Routine, unannounced inspection of construction activities related to a follow-up review and observation of pipe welding material control; procedure and record review of reactor coolant loop pipe welding activities; seal welding on control element drive mechanism; procedural review and observation of work involving concrete repair on containment shell dome; and a review of implementing QC inspection procedures being utilized in the inspection of HVAC steel support hangers. The inspection involved ninty-six inspector-hours by four NRC inspectors.
Results: No items of noncompliance or deviations were identified.

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DETAILS

1. Persons Contacted

Principal Licensee Employees

*T. Gerrets, QA Manager
*D. Lester, Plant Manager
*C. Chatelain, QA Engineer
*J. Woods, QA Engineer
*B. Toups, QA Engineer Technician

Other Personnel

*L. Stinson, Site QA Manager, Ebasco
R. Hartnett, QA Site Supervisor, Ebasco
*J. Wills, Construction Superintendent, Ebasco
J. Freshour, Welding Engineer, Ebasco
H. Anderson, Rod Issue Attendant, Ebasco
C. Dominick, Rod Issue Attendant, Ebasco
J. Moskwa, QA Manager, Nuclear Installation Services Company (NISCO)
J. Ransom, Project Superintendent, Fegles Power Service Corporation
G. Warren, QA Engineer, Ebasco

The IE inspectors also interviewed other licensee and contractor personnel including members of the engineering and QA/QC staffs.

*denotes those attending the exit interview.

2. Site Tour

The IE inspectors walked through various construction and storage areas to observe construction activities in progress and to inspect the general state of cleanliness and adherence to housekeeping requirements.

No items of noncompliance or deviations were identified.

3. Containment Steel Structures & Supports

During this inspection, the IE inspector conducted a follow-on review of the Ebasco QC procedures relative to the installation inspection of the containment HVAC steel structural support hangers being installed

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by Ebasco. The principal QC Procedure, "Structural Support Hanger Fabrication and Installation Inspection," WQC-80, Dated October 18, 1979, was reviewed in conjunction with the Ebasco Nuclear Quality Assurance Program Manual. The review included a review of the Ebasco implementing "Structural Support Hanger Fabrication/Installation Inspection Checklist," Form WQC-80, dated January 10, 1979.

No items or noncompliance or deviations were identified.

4. Welding Material Control

The IE inspector reviewed Tompkins-Beckwith Procedure TBP-3 (Revision 1) for weld material control. The requirements of the procedure were compared to actual site practices for receiving/storage and distribution by observation of activities at the warehouse and at various on-site weld material issue rooms. An inspection was made of approximately twenty-five rod storage and rebake ovens to assure that only filler materials of the same heat number were stored in a particular oven. Daily records of temperature checks were reviewed to verify that the procedurally defined ranges were not violated and a check was made of each oven for present temperatures and currentness of calibration stickers.

The IE inspector also observed the rod issue process and verified the qualifications of the welders to whom the rod was issued. The disposition of unused filler material and rod stubs was observed and found to be in agreement with the procedure.

No items of noncompliance or deviations were identified.

5. Reactor Coolant Loop Piping

The IE inspector selectively sampled and reviewed Ebasco's welding material purchasing and receiving records for welding electrodes used by NISCO to install the reactor coolant loop piping. The three samples selected were:

Heat Number	MRR Number	MRIR Number
462341	805470	78-04134
431X1681	700659	77-01505
411E8481	808467	78-05578

The receiving records reviewed were consistent with the material purchasing requirements, including Sections II and III of the ASME B&PV Code.

No items of noncompliance or deviations were identified.

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6. Reactor Control Element Drive Mechanism

The IE inspector reviewed the NISCO welding procedures and supporting procedure qualification reports for making the canopy seal welds on the Control Element Drive Mechanism (CEDM) for compliance with the ASME B&PV Code, Sections III and IX. The documents reviewed included:

Document	Title
ES-132, Revision B	Control Element Drive Mechanism Installation Procedure
WPS 43.5.1, Revision A	Welding Procedure Specification for Automatic Gas Tungsten-Arc Welding (Dimetrics) of Inconel Lower Canopy Seal Welds
PQR 431	Supporting Procedure Qualification Report for WPS 43.5.1
PQR 432	Supporting Procedure Qualification Report for WPS 43.5.1
WPS 43.5.2, Revision A	Welding Procedure Specification for Automatic Gas Tunsten-Arc Welding (Dimetrics) of Inconel Upper Canopy Seal Welds
PQR 430	Supporting Procedure Qualification Report for WPS 43.5.2

No items of noncompliance or deviations were identified.

7. Reactor Building Dome

A review was conducted of the actions taken to correct the construction deficiency related to improper placement of concrete in the Reactor Containment Shield Building parapet. The results of the microseismic evaluation along with cores taken were used by Ebasco Engineering in developing the repair procedures used to restore the structural integrity of the wall.

Ongoing epoxying and shotcreting of areas chipped out to sound concrete were observed by the IE inspector. The observed application of shotcrete conformed to ACI Standard 506-66, "Recommended Practice for Shotcreting, Chapter 6 - Work Requirements." Discussions with the licensee and the Ebasco QA engineers indicated that test cores will be taken from the completed repair areas to insure the strength of the materials.

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The QC inspection of Cadwelds No. 151 and 152 was witnessed by the IE inspector. The horizontal reinforcing steel bar was spliced as a result of having been cut for the purpose of horizontal core drilling. The cores taken throughout the investigation of the shield wall were subsequently viewed in the storage warehouse. Documentation of core hole locations and findings was contained on the Fegles Power Service Corp. drawing entitled "Map of Shield Wall 521-B." This drawing was reviewed by the IE inspector.

Vertical core holes No. 6V, 8V, 9V and 10V were identified as having cut reinforcing steel during the drilling. The disposition of Non-conformance Report NCR W3-1576 requires that all horizontal reinforcing steel bars which were cut be repaired using the Cadwelding process.

From the review of the drawing, it could not be determined as to which of the cut bars were vertical and which were horizontal. Subsequent review of the QA documentation did not disclose the information. Discussions with the licensee representatives indicated that the Ebasco home office Engineering Department had the information and would transmit it to the plant site for subsequent review by the IE inspector.

During the observation of the repair work, one horizontal reinforcing steel bar, which had been cut for the purpose of horizontal core drilling, was identified by the IE inspector as not having been addressed in the engineering disposition of the construction deficiency.

This apparent oversite, together with the definition of bar types in the "Map of Shield Wall 521-B," will be considered an unresolved item which will be reviewed during a subsequent inspection.

8. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. An unresolved item disclosed during the inspection is discussed paragraph 7.

9. Exit Interview

The IE inspectors met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on November 30, 1979. The IE inspector summarized the purpose and the scope of the inspection and the findings.

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