

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION  
REGION IV

NRC Inspection Report: 50-382/82-17

Docket: 50-382

License CPPR-103

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

Facility Name: Waterford Steam Electric Station, Unit 3

Inspection At: New Orleans and Taft, Louisiana

Inspection Conducted: July 12-15 and 26-30, 1982

Inspector: *L. D. Gilbert* 8/16/82  
L. D. Gilbert, Reactor Inspector, Engineering Section Date

Reviewed: *W. A. Crossman* 8/18/82  
W. A. Crossman, Chief, Reactor Project Section B Date

Approved: *D. M. Hunnicutt* 8/18/82  
D. M. Hunnicutt, Chief, Engineering Section Date

Inspection Summary:

Inspection on July 12-15 and 26-30, 1982 (Report 50-382/82-17)

Areas Inspected: Routine, announced inspection of licensee action on previous inspection findings and review of preservice inspection program, procedures, activities, and records. The inspection involved 52 inspector-hours by one NRC inspector.

Results: In the areas inspected, no violations or deviations were identified.

DETAILS

1. Persons Contacted

Principal Licensee Employees

T. F. Gerrets, QA Manager  
\*R. A. Hartnett, QA Consulting Engineer  
\*A. Jones, General Office Engineer - Nuclear  
\*\*J. J. Dore, PSI Coordinator  
\*\*J. B. Perez, QA Engineer  
\*\*W. F. Axtman, QA Engineer  
\*\*H. G. Domschke, QA Engineer  
\*\*M. S. Green, QA Engineer  
W. M. Morgan, Operations QA Supervisor

Other Personnel

\*\*D. Jensen, Field Supervisor - NDE, Virginia Corporation of Richmond  
\*\*D. Payne, Authorized Nuclear Inservice Inspector (ANII), Factory Mutual  
W. Pieren, PSI Construction Coordinator, Ebasco  
J. B. Gore, Site QA Manager, Tompkins-Beckwith (TB)  
L. Richardson, QA Supervisor, TB

The NRC inspector also interviewed other contractor QA/QC personnel.

\*Denotes those attending the exit interview on July 15, 1982.

\*\*Denotes those attending the exit interview on July 30, 1982.

2. Followup on Previous Inspection Findings

(Closed) Unresolved Item (50-382/81-31): Repair Program for the Reactor Containment Vessel

The licensee submitted letter W3K82-0062 Q-3-T33, dated February 3, 1982, to clarify that the repair program for the reactor containment vessel was being accomplished in accordance with the 1977 National Board Inspection Code due to the fact that repair activities for Class MC vessels are not delineated in ASME B&PV Code Section XI. The National Board Inspection Code provides rules for repair to components after N-stamping and in Chapter III under Section R-1101.3 allows repairs with jurisdictional authorization in lieu of a valid ASME certificate of authorization. Jurisdictional authorization was obtained from the Louisiana Department of Labor.

This item is considered closed.

### 3. Preservice Inspection

#### a. Review of Program

The NRC inspector reviewed the LP&L preservice inspection program for volumetric and surface examinations of ASME Classes 1 and 2 systems and components performed by Virginia Corporation of Richmond (VCR). The following documents were reviewed and found to be consistent with Regulatory requirements of 10 CFR 50.55a and FSAR commitments for preservice inspection:

- . LP&L Plant Operating Manual, PE-1-002, Revision 0, "Control of Preservice Inspection"
- . EBASCO Procedure No. ASP-IV-81, Issue A, "Preservice Inspection of Piping System Welds"
- . VCR Procedure No. VC-QA-100, Revision 4, "Quality Assurance Manual"
- . VCR Preservice Inspection Program Plan, Revision 2

#### b. Review of Procedures

The NRC inspector selectively reviewed the following nondestructive examination procedures used by VCR for performing preservice inspections:

- . Procedure ISI-2.2, Revision 0, "Manual Ultrasonic Examination of Full Penetration Circumferential and Longitudinal Ferritic Butt Welds"
- . Procedure ISI-2.3, Revision 0, "Manual Ultrasonic Examination of Circumferential and Longitudinal Butt Welds in Ferritic Vessels and Class I Loop Piping"
- . Procedure ISI-2.8, Revision 1, "Manual Ultrasonic Examination of Circumferential Butt Welds Between Clad Ferritic Piping and Austenitic Safe Ends"
- . Procedure ISI-3.1, Revision 0, "Liquid Penetrant Examination Using the Color Contrast Solvent Removable Technique"
- . Procedure ISI-4.3, Revision 0, "Magnetic Particle Examination of Welds Utilizing the Dry Continuous Method"

In the areas reviewed, the above procedures were consistent with requirements of ASME B&PV Code Section XI, 1977 edition including Summer 1978 Addenda.

No violations or deviations were identified.

4. Observation of Work

a. Liquid Penetrant Examination

The NRC inspector observed the liquid penetrant examination of two welds in the shutdown cooling system. The welds were identified as Welds 53-088 and 53-089 on Isometric Drawing Zone 53, Revision 2, Field Change No. 2. The examination was performed and evaluated by VCR personnel consistent with requirements of Liquid Penetrant Procedure ISI-3.1 and the preservice inspection plan. The materials used in performing the examination were identified with the following batch numbers:

- . Penetrant Dubl-Chek DP-51, Batch 47L-015
- . Remover Dubl-Chek DR-60, Batch 225B4
- . Developer Dubl-Chek D-100, Batch 129-F6

b. Ultrasonic Examination

The NRC inspector observed the ultrasonic examination of a pipe weld in the safety injection system. The weld was identified as 20-072 on Isometric Drawing Zone 20, Revision 2, Field Change No. 5. The examination was performed by VCR personnel consistent with requirements of Ultrasonic Examination Procedure ISI-2.7 and the preservice inspection program plan including preexamination calibration using Calibration Block UT-108. The couplant used during the examination was identified as couplant from Batch 8124.

c. Magnetic Particle Examination

The NRC inspector observed the magnetic particle examination of a pipe weld in the main steam system. The weld was identified as 43-082 on Isometric Drawing Zone 43, Revision 2, Field Change No. 4. The examination was performed by VCR personnel consistent with requirements of Magnetic Particle Procedure ISI-4.3 and the preservice inspection program plan.

In the areas inspected for the three examination methods observed above, the examination personnel were certified as qualified consistent with requirements of Procedure NDE-4.1 and the examination materials were certified as meeting the procedural requirements for maximum content of contaminants.

No violations or deviations were identified.

5. Review of Records

The NRC inspector reviewed the examination reports for 18 shutdown cooling system welds from Isometric Drawing Zone 22 and 9 reactor coolant system welds from Isometric Drawings Zone 6 and Zone 16. The records reviewed for the 18 welds in Zone 22 reported that a liquid penetrant examination had been performed in accordance with Procedure ISI-3.1 as required in the preservice inspection plan. The records reviewed for the two welds in Zone 6 reported that a magnetic particle (MT) examination and an ultrasonic (UT) examination had been performed in accordance with Procedure ISI-4.3 for MT and Procedure ISI-2.3 for UT as required in the preservice inspection plan. The records reviewed for the seven welds in Zone 16 reported that a liquid penetrant (PT) examination and an ultrasonic examination had been performed in accordance with Procedure ISI-3.1 for PT and Procedure ISI-2.7 for UT as required in the preservice inspection plan.

The NRC inspector noted that, on the report for the 45<sup>0</sup> UT examination of the welds in Zone 16, Procedure ISI-2.7 had been corrected from Procedure ISI-2.8, but the calibration block had not been corrected from UT-16 to UT-23. Since the examiner that performed the UT examination was temporarily offsite, this item is considered unresolved pending resolution of the discrepancy. (8217-01)

6. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations, or deviations. An unresolved item related to ultrasonic examination records is discussed in paragraph 5.

7. Exit Interview

The NRC inspector met with licensee representatives (denoted in paragraph 1) on July 15 and July 30, 1982, and summarized the purpose and findings of the inspection.