

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-382/84-32

Docket: 50-382

Construction Permit: CPPR-103

Licensee: Louisiana Power & Light Company (LP&L)
142 Delaronde Street
New Orleans, Louisiana 70174

Facility: Waterford Steam Electric Station, Unit 3

Inspection At: Taft, Louisiana

Inspection Conducted: May 1 through June 30, 1984

Inspectors:	<u>S. H. Johnson</u>	<u>8/20/84</u>
	<u>FDR</u> G. L. Constable, Senior Resident Inspector	Date
	<u>J. A. Flippo</u>	<u>8-14-84</u>
	T. A. Flippo, Resident Inspector	Date
	<u>S. H. Johnson</u>	<u>8/20/84</u>
	K. A. Whittlesey, Reactor Inspector	Date

Assisting NRC

Personnel: T. Westerman, Enforcement Officer
L. Martin, Chief, Reactor Project Section A
L. Bell, Nuclear Training Instructor

Assisting
Personnel:

T. L. Cook Senior Engineer, EG&G
R. L. Persons, Operations Specialist, EG&G
H. C. Rockhold, Senior Engineer, EG&G
D. Monnie, Senior Engineer, EG&G
D. Graves, Operations Specialist, EG&G

Approved:	<u>S. H. Johnson</u>	<u>8/20/84</u>
	<u>FDR</u> W. A. Crossman, Chief Reactor Project Section B	Date

8409210021 840831
PDR ADOCK 05000382
Q PDR

Inspection Summary

Inspection Conducted May 1 through June 30, 1984 (Report 50-382/84-32)

Areas Inspected: Routine, announced inspection of: (1) Human Engineering Walkdown; (2) Operational Readiness Meeting; (3) Test Results Evaluation; (4) Emergency Operating Procedures Training; (5) Startup Test Procedure Review; (6) Surveillance and Maintenance Procedure Reviews; (7) Review of IE Bulletins, Circulars, and Generic Letters; (8) System Oper Items Review; (9) Open Issues Review; (10) Three Mile Island Open Items; (11) Followup on Previous NRC Inspection Findings; (12) Followup on 50.55(e) Items; and (13) Safety Review Committee Activity. This inspection involved 1675 inspector-hours onsite by six NRC inspectors and five consultants.

Results: Within the thirteen areas inspected, one violation was identified (Failure to Follow Procedure in Reporting Nonconforming Conditions, Paragraph 13c).

DETAILS

1. Persons Contacted

Principal Licensee Employees

- *R. S. Leddick, Senior Vice President, Nuclear Operations
- *R. P. Barkhurst, Plant Manager
- *T. F. Gerrets, QA Manager
- *W. M. Morgan, Operations QA Supervisor
- *L. L. Bass, Project QA Engineer
- *L. F. Storz, Assistant Plant Manager, Operations and Maintenance
- *M. J. Wise, Startup Manager
- *O. D. Hayes, Operations Superintendent
- *P. V. Prasankumar, Technical Support Superintendent
- *J. N. Woods, Plant Quality Manager
- *S. A. Alleman, Assistant Plant Manager, Plant Technical Support
- *J. R. McGaha, Maintenance Superintendent
- *J. K. Somsel, Onsite Licensing
- F. J. Englebracht, Plant Administrative Manager
- D. E. Dobson, Project Manager

*Present at exit interviews.

In addition to the above personnel, the NRC inspectors held discussions with various operations, construction, engineering, technical support, and administrative members of the licensee's staff.

2. Plant Status

The Waterford 3 site is presently in the preoperational testing phase. Construction and startup are reported at 100% and 98% complete, respectively. Plant staff has accepted 105 systems out of 116 systems that are required for fuel load.

3. Human Engineering Walkdown

During this inspection period, the NRC inspector reviewed the completed human engineering deficiencies (HED) listed below and verified that each deficiency was completed.

B1-12	B5-F36	B6-F30	B8-F21
B1-F18	B5-F39	B6-F43	B1-F19
B4-F09	B5-F42	B7-F03	
B4-F10	B5-F43	B7-F04	
B5-F23	B5-F44	B7-F05	

All of the above items are considered closed.

No violations or deviations were identified.

4. Operational Readiness Meeting

On May 22, 1984, the NRC resident inspectors attended a meeting between LP&L and NRC at the Waterford 3 site. The purpose of the meeting was to discuss LP&L readiness to load fuel.

No violations or deviations were identified.

5. Test Results Evaluation

The NRC inspectors reviewed the following preoperational test results for technical content, compliance with the Final Safety Analysis Report (FSAR), and compliance with licensee's administrative procedures.

SPO-66-004	Plant Protection System Response Time
SPO-TP-200	Integrated Engineered Safety Features Test
SPO-TP-318	Shutdown Cooling Operation
SPO-TP-308	RCS Leak Rate Measurement
SIT-TP-314	Atmosphere Dump and Turbine Bypass Control

No violations or deviations were identified.

6. Emergency Operating Procedures (EOP) Training

The NRC inspectors observed portions of the control room walkdown training of the emergency operating procedures. The operators used the "Emergency Entry Procedure," OP-902-000, as well as various other EOP's to mitigate different types of accidents that were presented to them by the training instructors.

In general, the effort satisfactorily trained the operators and supervisors in the use of these procedures. Training on the EOP's is now essentially complete.

No violations or deviations were noted.

7. Startup Test Procedure Review

The NRC inspectors reviewed the startup test procedures for performing the initial startup of the plant. The procedures were reviewed for technical content, compliance with the FSAR, and compliance with licensee's administrative procedures. The startup test procedures reviewed are listed below:

SIT-TP-400	Initial Fuel Load
SIT-TP-503	CEDM Performance
SIT-TP-505	Pressurizer Spray and Control
SIT-TP-600	Initial Criticality
SIT-TP-705	Nuclear and Thermal Power Calibration
SIT-TP-709	NSSS Calorimetric Calculations
SIT-TP-718	Variable Tavg Test
SIT-TP-727	80% Total Loss of Flow Trip/Natural Circulation Test
SIT-TP-728	Loss of Offsite Power Trip Test
SIT-TP-751	80% Power Loss of Load Test
SIT-TP-755	Natural Circulation Demonstration Testing

Although there were no violations, these specific observations were discussed with licensee personnel. The licensee has committed to either taking corrective action, where necessary, or supplying additional information to answer these questions.

- a. Look at the reactor trip circuit breaker #9 to insure that CEDM MG sets are not inadvertently paralleled.
- b. Add the requirement for "sufficient decay heat" prior to the performance of SIT-TP-727, "80% Loss of Flow Test."
- c. Verify that logs for CPC and COLSS addressable constants will be available in the control room.
- d. Reference pressurizer levels in SIT-TP-600, "Initial Criticality."

No violations or deviations were noted.

8. Surveillance and Maintenance Procedure Reviews

The NRC inspectors reviewed the following surveillance and maintenance procedures to ascertain that the procedures adequately control safety-related operations within the applicable regulatory requirements:

MD-1-011 (Rev. 2)	Maintenance Department Procedures - Development, Control, and Distribution
MM-6-010 (Rev. 1)	Freeze Seal Application
MM-7-001 (Rev. 1)	Safety and Relief Valve Bench Testing
MM-8-043 (Rev. 0)	CEDM Venting and Ball Replacement
ME-3-230 (Rev. 2)	Battery Service Test
ME-4-361 (Rev. 0)	Component Cooling Water Pump Motors

MI-1-002 (Rev. 3)	Administrative Control of Measuring and Test Equipment
MI-1-005 (Rev. 1)	Administrative Controls of Calibration and Maintenance
MI-1-006 (Rev. 1)	Calibration and Loop Check Frequency for Process Instrumentation
MI-3-113 (Rev. 0)	Incore Detection System Channel Calibration
MI-3-391 (Rev. 0)	Component Cooling Water System "A" or "B" Liquid Radiation Monitor Channel Calibration
MI-3-400 (Rev. 1)	Emergency Feedwater Discharge Header Flow Loop Check and Calibration
MI-3-441 (Rev. 1)	Turbine Generator Turbine Electrical Overspeed Protection System Calibration
MI-4-307 (Rev. 0)	Maintenance of Rosemount Transmitters, Models 1153 and 1151
MI-5-042 (Rev. 0)	Calibration of Test Resistors
MI-5-145 (Rev. 1)	Calibration of Eberline BC-4 Beta Counter
MI-5-201 (Rev. 2)	Instrument Loop Check
MI-5-581 (Rev. 2)	Loop No. 1 Hot Leg Temperature Loop Check and Calibration
MI-5-583 (Rev. 2)	Shutdown Cooling and Low Pressure Safety Injection Flow Loop Check and Calibration
OP-903-002 (Rev. 1)	Boration Flow Path Valve Lineup Verification
OP-903-004 (Rev. 1)	Boric Acid Pump Operability

No violations or deviations were identified.

9. Review of IE Bulletins, Circulars, and Generic Letters

During this inspection period a review of IE Bulletins, Circulars, and Generic Letters was conducted by a senior engineer from EG&G Idaho, Inc. (EG&G) who was under contract with the NRC. For each IE Bulletin, it was determined whether a review for applicability was performed and, if applicable to the facility, that appropriate corrective actions were taken or are scheduled to be taken. The following IE Bulletins, Circulars, and Generic Letters are considered closed.

IE Bulletins

- 76-02 Relay Coil Failures - GE Type HFA, HGA, HKA, HMA Relays
- 78-04 Environmental Qualification of Certain Stem Mounted Limit Switch Inside Reactor Containment
- 83-05 ASME Nuclear Code Pumps and Spare Parts Manufactured by the Hayward Tyler Pump Company
- 84-02 Failures of General Electric Type HFA Relays in Use in Class IE Safety Systems

IE Circulars

- 77-04 Inadequate Lock Assemblies

Generic Letters

- 81-04 Emergency Procedures and Training for Station Blackout Events
- 83-28 Required Actions Based on Generic Implications of Salem ATWS Events (only the short term items were covered).

The NRC review in this area will continue as LP&L closeout of remaining items is completed. All applicable safety-related issues should be closed and inspected by NRC prior to OL.

No violations or deviations were identified.

10. System Open Items Review

The NRC inspectors reviewed the open items of selected systems to determine if any items not scheduled for completion before fuel load could have any impact on the safe operation of the systems. The conclusion of the review was that the master tracking properly identified the open items needing completion before fuel load. The following systems' open items were reviewed.

9A	Inverters and Distribution - Safety
9B	Inverters and Distribution - Nonsafety
9C	Inverters
13B	Freeze Protection
18-1	Radiation Monitors - FHB
36-1	Component Cooling Water
36-2/3	Component Cooling Water
45	Miscellaneous HVAC
46H	Miscellaneous RAB HVAC
50A	Miscellaneous Panels, Cabinets, and Racks
50B	Miscellaneous Panels
50C	Patch Panel
53A	Charging and Letdown
64	Control Element Drive

No violations or deviations were identified.

11. Open Issues Review

On March 12, 1984, William J. Dircks, Executive Director for Operations, established a task force approach to dealing with all open issues, including allegations, that remain to be resolved before the NRC can make a licensing decision.

The team initially arrived onsite April 2, 1984, to begin an in-depth probe of the issues, principally the allegations. The results of this effort will be documented in a supplement to the Waterford 3 Safety Evaluation Report (SSER). Any enforcement actions arising out of this task force effort will be issued in accordance with current NRC enforcement policy.

At the end of this inspection period, the team has left site and the main thrust of the inspection is now toward documenting the results in the SSER.

No violations or deviations will be identified until the conclusion of this effort.

12. Three Mile Island (TMI) Open Items

Most of the TMI lessons-learned were specifically addressed during the FSAR review process. At this time, an NRC inspection is in progress covering each of the remaining open items. The following items are now considered closed.

- I.C.2 Shift Relief and Turnover Procedures
- II.E.1.2 Auxiliary Feedwater Initiation and Indication
- II.E.4.1 Containment Dedicated Penetrations Hydrogen Control
- II.K.1 IE Bulletins on Measures to Mitigate SBLOCA's and Loss of FW Accidents
- II.K.3.17 Report on Outages of ECCS, LER and Proposed Technical Specification Changes

The items listed below still need resolution before fuel load.

- I.D.1 Control Room Design
- II.F.1 Additional Accident Monitoring Instrumentation
- II.F.2 Inadequate Core Cooling Instrumentation

No violations or deviations were identified.

13. Followup on Previous NRC Inspection Findings

a. (Closed) URI 50-382/8017-01: A-490 Bolt Failures (NISCO)

This item was upgraded to a significant construction deficiency (SCD) by the licensee and tracked to closure as SCD 59. SCD 59 was closed out in NRC Inspection Report 50-382/82-19. With the closure of SCD 59 this item is considered closed.

b. (Closed) Violation 50-382/8209-01: Unqualified Personnel Performing Calibrations

This item was a Severity Level IV violation revealed as a result of an investigation. A record search by LP&L revealed that 971 instruments were potentially calibrated by an unqualified technician. Subsequent records revealed that all of the instruments had been calibrated, retired from service, or were recalibrated. Only 6.5% of the instruments were out-of-tolerance at the beginning of the recalibration. All of the equipment calibrated with the out-of-tolerance instruments was recalled and recalibrated. This item is considered closed.

c. (Closed) URI 50-382/8303-01: 20KVA Solid State Inverter 3MC-S
Hold Down Bolt Installation Problems

The responsible EBASCO Services, Inc. (EBASCO) engineer, after reviewing Wyle Report WR-82-13, reopened NCR W3-2256. This unresolved item is being escalated to a violation.

Criterion XVI of 10 CFR 50 Appendix B requires that measures be established to assure that conditions adverse to quality, such as nonconformances, are promptly identified and corrected.

LP&L Quality Assurance Manual Quality Requirement 16.0, Revision 2, "Corrective Action," states that, "Within the LP&L organization, the Quality Assurance Group shall be responsible for identifying, documenting, and reporting nonconforming conditions. Nonconformances shall be corrected and the correction shall be documented by the responsible group.

Contrary to the above, EBASCO inappropriately closed out NCR W3-2256 on September 29, 1982. The Solid State Inverter 3MC-S had some missing and improperly shimmed hold-down bolts and some of the hold-down bolts had not been properly grouted. EBASCO had previously identified these conditions in NCR W3-2256. This NCR also identified missing hold-down bolts that could not be installed on two of the four inverters. Wyle Laboratories did an analysis of the inverters and performed some in situ testing of the inverters which was documented in the Wyle Report WR-82-13. Based on the analysis and in situ testing, Wyle verified that the installations, utilizing three hold-down bolts per panel instead of the original four that had been specified, were adequate. However, the NRC inspector was not able to identify in the Wyle report that improper installation of the other hold-down bolts had been adequately addressed to preclude the additional rework as originally required in the disposition of NCR W3-2256.

This NCR W3-2256 affected all four Class 1E solid state inverters, 3MA-S, 3MB-S, 3MC-S, and 3MD-S. All of the inverters had anchor bolts that were improperly shimmed and/or grouted. Subsequent to identification of this problem by the NRC inspector in NRC Inspection Report 50-382/83-03, NCR W3-2256 was reopened to properly install the anchor bolts on all four inverters.

The improper closure of NCR W3-2256 is a violation (50-382/8432-01). Supplement II.D. Severity Level IV.

The NRC inspector reviewed the final closeout of NCR W3-2256 and the associated inspection reports. The NRC inspector inspected the completed grouting of the hold-down bolts for all four inverters and found them to be appropriately installed. This violation (50-382/8432-01) is considered closed.

- d. (Closed) Violation 50-382/8309-01: Failure to Maintain Documentation For Installation of Safety-Related Electrical Equipment

Installation inspection documentation for Fan 3BSB (AH-12) and for the Diesel Generator Control and Relay Panel 3B-S were not available for the NRC inspector's review during the inspection in 1983. Three NCRs were originated to document the non-conformances and ensure tracking to closure. The NRC inspector reviewed NCRs W3-5577, W3-5761, and W3-7133 and the associated inspection reports. The NCRs accurately documented the non-conformances and the inspection reports adequately addressed the inspection of the installation of Fan 3BSB and Panel 3B-S.

The NRC inspector also reviewed the EBASCO force account's QC procedures and organization to determine that adequate controls existed to preclude recurrence of this problem. EBASCO force account now has the responsibility for the remaining activity in this area. This violation is considered closed.

- e. (Closed) Violation 50-382/8309-02: Failure to Follow Procedures for Updating Red-Line Drawings for Safety-Related Instrumentation

The licensee initiated an audit of Mercury of Norwood, Inc. (Mercury) and identified a generic problem with the implementation of the SP177 requirement to incorporate red-line drawings into a new revision within 90 days. Corrective Action Report (CAR) 133 was initiated to track this problem.

The NRC inspector reviewed the close-out documentation of CAR 133 including corrective action implementation, personnel training, and the updated drawings. This violation is considered closed.

- f. (Closed) URI 50-382/8309-03: Inadequate Documentation Tracking of Installed Instrumentation

The licensee provided the NRC inspector with documentation including condition identification work authorization (CIWA) 820031 that, in fact, provides appropriate tracking for instruments LT-SI-305B and PT-CA-6701 SMA, B, C, and D. This item is considered closed.

- g. (Closed) URI 50-382/8313-03: Final As-Built Drawing Must Incorporate Information From Two Different Drawings

EARR-15 had been reissued to EBASCO as EMDRAC 8469-2040, Rev. 1, Field Rev. 0, to revise the hardware numbering sequence. Tompkins-Beckwith, Inc. (T-B) had red-lined the previous Rev. 0, Field Rev. 2. The red-lines have now been picked up on the latest revision and are awaiting drafting for final revision. EARR-15 is now appropriately described on EMDRAC 8469-2040, Rev. 1, Field Rev. 0. This item is considered closed.

- h. (Closed) Open Item 50-382/8313-04: Inadequate Dimensioning on Drawing E-3029-LW3-EA-1, Rev. 2

This problem emanated from EBASCO incorrectly showing the boundary between EBASCO and vendor piping. Field Change Request (FCR) MP-2410 was initiated to correct this dimension by correctly identifying this interface. This item is considered closed.

- i. (Closed) Open Item 50-382/8313-05: SISR 1190 Incorrectly Located on Drawing E-2803-SI-IC-877

EBASCO walkdown of this line revealed the proper location. The as-built revision of E-2803-SI-IC-877 shows the correct location of SISR 1190. This item is considered closed.

- j. (Closed) Open Item 50-382/8313-06: Incorrect Dimension on Hanger Detail for SIRR 1147

The hanger detail for SIRR 1147 has been changed to correctly dimension the length of piece 3 and 36 inches. This item is considered closed.

- k. (Closed) Open Item 40-382/8313-07: Drawing E-2803-CH-IC-123 Shows Incorrect Location for Hanger CHRR-252

The NRC inspector incorrectly read the dimensions. The 10 foot 9 $\frac{1}{2}$ inch dimension was between hangers CHRR-252 and CHRR-251. This item is considered closed.

- l. (Closed) Open Item 50-382/8313-08: Clarification of Dimensions on Drawing E-3029-LW3-EA-2 for Valves EGA-139A and EGA-138A

This item was also taken care of on FCR MP-2410. The dimensional error was corrected when the EBASCO/vendor interface was correctly identified on the drawing. This item is considered closed.

- m. (Closed) Violation 50-382/8317-02: Failure to Provide Required Records for Reactor Vessel Internals

Separate maintenance records were not kept for the core shroud, core support barrel, and guide tube assemblies. The storage and maintenance activities were performed and documented as reactor vessel internals. These components are presently installed and, therefore, future storage and maintenance activity records are not required. The NRC inspector reviewed the training records for ASP-IV-19 that was given to the personnel responsible for these activities to preclude recurrence of this type of problem. This item is considered closed.

n. (Closed) Violation 50-382/8317-03: Failure to Establish Adequate Document Control Measures

Combustion Engineering, Inc. (CE) issued "certified as-built" prints of 1564-3905 through 1564-3919, Rev. 3, without incorporating FCR-IC-63. EBASCO performed an audit of vendor drawings during the period of February 7 to March 23, 1984. Approximately 30,000 were reviewed to determine how many drawings and what vendors were affected by forced changes as described above. Twenty vendor contracts and 237 drawings were audited. Four instances were identified where FCR's were not properly incorporated. All of the drawings for the contracts with the problems were then audited with no further negative results. The four drawings were corrected. This item is considered closed.

o. (Closed) Violations 50-382/8317-04, 8317-05, and 8317-06: Failure to Follow Document Control Procedures

- (1) The NRC inspector reviewed an EBASCO audit of DCC Station 10 performed on June 3, 1983, and the followup audit. The corrective action of the first audit was appropriate as revealed by the followup audit. Station 10 was purged of all out-of-date drawings.
- (2) Instruction Manual KVS-16.2 was audited and DCN-E-1037 was entered.
- (3) The site document control procedure was amended to preclude issuing all documents to all offices. Now only required documents are issued to a given office. Instruction Manual KV-16.2 and Specification 2564.482 (R6) were located and returned to the proper holder.

All DCC personnel received instructions on ASP-III-2 to ensure that they were aware of its requirements. These violations are considered closed.

p. (Closed) Violation 50-382/8321-01: Failure to Follow Procedure for Reactor Vessel Head Stud Removal

While witnessing removal of the reactor vessel head studs, an NRC inspector noted that the activity was performed using Diamond Power Specialty Corporation air powered stud handling tools rather than the CE tools specified in Procedure MM-08-014, Revision 0.

The NRC inspector reviewed committed corrective action including procedural changes implemented to address the Diamond Power stud installation/removal tool and documentation of personnel instruction

on the proper processing of procedures, revisions, changes, and temporary changes. Some additional minor procedural changes were recommended by the inspector and agreed upon by the applicant. This item is considered closed.

- q. (Closed) Open Item 50-382/8321-02: Procedure MM-03-015, Revision 0, "Emergency Diesel Engine Inspection," is Unclear Regarding Calibration of the Fuel Injection Pumps

The portion of MM-03-015 pertaining to repair and calibration of the fuel injection pumps has been removed from the procedure. These activities are now covered by Site Administrative Procedure, UNT-05-002, "Condition Identification and Work Authorization." This item is considered closed.

- r. (Closed) Open Item 50-382/8321-03: Procedure MM-03-025, "Building Firehose Station Inspection (Safety Areas)" Does Not Consider Plant Operating Modes Regarding Reactor Building Entries

The NRC inspector reviewed the revised procedure which specified that not all fire hose stations are accessible during plant operation. Additionally, the inspector learned that the procedure is on a refueling cycle schedule and is to be performed only during refueling outages. This item is considered closed.

- s. (Closed) Open Item 50-382/8321-04: Procedure ME-03-330, Revision 0, Refers to Attachment 10.2, Figure 2, Which Has Been Deleted

The reference to the deleted figure has been removed from the procedure. This item is considered closed.

- t. (Closed) Deviator 50-382/8324-05: Failure to Address "Job-Related Procedures and Instructions" in the General Employee Training Program

The NRC inspector reviewed Plant Operating Manual (POM) Procedure UNT-03-003, Revision 1 (February 11, 1984), "General Employee Training." The procedure specifically addresses training in job-related procedures and instructions. Documentation of training conducted in accordance with UNT-03-003 is maintained in accordance with UNT-03-002, "Training Records and Forms." This item is considered closed.

- u. (Open) Open Item 50-382/8223-04: Emergency Load Testing Using Maximum and Minimum Voltage as Required by Regulatory Guide 2.68, Appendix A, Section 1.2(2)

The position stated initially by the licensee in response to this item was that the CE motor specifications impose NEMA Standard MG1 which required testing at maximum and minimum voltages. In addition, vendor testing was performed at 75% of rated voltage.

The NRC inspector reviewed test data (75% of rated voltage) for the HPSI pumps provided by Allis Chalmers as typical of data available. The NRC inspector was shown CE Specification No. 0000-PE-410/0000-ICE-702, which imposed NEMA Publication MG1-1968 for AC motors.

In a followup discussion with NRR personnel responsible for review of the licensee's submittal of the startup test program, the NRC inspector was informed that, to satisfy the intent of Regulatory Guide 1.68, Appendix A, Section 1.2(2), the licensee should complete the testing and analysis required on page 8-7 of the Waterford Safety Evaluation Report (SER).

The NRC inspector found that the required testing appeared to be complete as documented in SPO-04-001 but that the reanalysis using as-found voltage conditions had not been completed. This item remains open.

- v. (Closed) Open Item 50-382/8327-01: Lack of Specific Part 21 Procedural Requirements and 10 CFR 50.55(e) Report Content

The NRC inspector reviewed EBASCO Quality Assurance Instruction QAI-26 and EBASCO Site Administrative Procedure ASP-IV-122. The NRC inspector found that specific 10 CFR Part 21 and 10 CFR 50.55 requirements are addressed. The NRC inspector reviewed examples of NCRs which were stamped to document review for reportability. The NRC inspector also verified that logs are maintained of potential reportable items as required by ASP-IV-122. The NRC inspector also verified the maintenance of records by LP&L of reviews performed as required by QASP 15.3.

The effectiveness of this program will be observed as part of the continuing NRC inspection program. This item is considered closed.

w. (Closed) Violation 50-382/8210-01: Failure to Follow Instructions for Installation of Safety-Related Instrumentation Systems

The NRC inspector verified the licensee actions as described in the LP&L letters to the NRC Region IV office dated July 21, 1982; November 25, 1982; and February 24, 1983. The NRC inspector found the licensee's actions to be in conformance. This item is considered closed.

x. (Closed) Open Item 50-382/8214-01: Implementation of Equipment Tracking Procedures

The NRC inspector verified the Startup Administrative Procedure SAP-13, "Test Execution of Phase I&II," had been revised to provide component tracking during removal, reinstallation, and storage of parts or components of safety class 1, 2, and 3 systems. This item is closed.

y. (Closed) Open Item 50-382/8214-02: Preoperational Test Procedure SPO-69-001

The NRC inspector verified that SPO-69-001 had been completed. This item is closed.

z. (Closed) Open Item 50-382/8223-06: Installation of an Anchor/Data by EBASCO

New supports were fabricated for Hanger Supports 127 and 125 in accordance with NCR-4467.

Training was provided QA inspectors, force account supervisors, general foremen, and craft personnel in accordance with NCR-4467.

Training was given to personnel to prevent recurrence. This item is closed.

aa. (Closed) Violation 50-382/8227-01: Failure to Follow Procedure for Steam Generator Hydrostatic Testing

The NRC inspector verified the licensee's corrective actions as described in the LP&L letter of February 24, 1983, to the NRC Region IV. The licensee's actions were found to conform to their written commitments. This item is considered closed.

bb. (Closed) Violation 50-382/8318-01: Failure to Follow Procedures During Startup Testing

The NRC inspector verified the licensee's corrective actions as described in the LP&L letter of August 2, 1983, and the LP&L supplemental response of October 14, 1983, to the NRC Region IV. The licensee's actions were found to conform to their written commitments. This item is closed.

- cc. (Closed) Open Item 50-382/8318-02: ASME Nuclear Code Pumps and Spare Parts by Hayward Tyler Company

The NRC inspector reviewed IE Bulletin 83-05 and LP&L corrective action plans. The NRC inspector inspected the warehouse to assure that the spare parts in question had hold tags and spare parts installed in equipment had been properly tested. This item is considered closed.

- dd. (Closed) Violation 50-382/8324-01: Failure to Follow Procedures in the Engineering Training Program

LP&L "Program Description for Engineering Training," PMD-TR-014, has been superceded by UNT-03-017, "Systems and Support Engineer Training." The NRC inspector reviewed UNT-03-017 and the accompanying "Engineer Course Description," TE-PE-01, both contained in the recently issued training manual (TM), for compliance with FSAR Section 13.2.2.2, "Engineering Training," revised by Amendment 34. No deficiencies were identified and corrective action has been completed as committed. This item is considered closed.

- ee. (Closed) Open Item 50-382/8324-02: Training Records for Mechanical Maintenance Personnel

The NRC inspector verified that the stipulation that approximately 60 hours of basic sciences training be given to mechanical maintenance personnel has been removed from FSAR Chapter 13.2. The FSAR now more appropriately addresses the major areas of mechanical maintenance training which are detailed in TM Procedure UNT-03-014 and associated TM course descriptions. The current approved FSAR revision indicates basic science training will be done after fuel load. This item is considered closed.

- ff. (Closed) Open Item 50-382/8324-03: Mechanical Training Schedules Inadequate

Mechanical maintenance training was tracked by a matrix of personnel versus training requirements. All phases of mechanical maintenance training were included on the matrix. The NRC inspector examined the method and found it acceptable. This item is considered closed.

- gg. (Closed) Open Item 50-382/8324-04: Documentation of Quality Control (QA) Training Requirements

The NRC inspector reviewed Plant Quality Department Procedure QI-010-001, Rev. L, "Inspector Qualification," and determined that both ANSI N45.2.6-1978 and FSAR requirements are invoked therein. The NRC inspector also reviewed training records for adequacy and completeness. This item is considered closed.

- hh. (Closed) Open Item 50-382/8324-06: Training Program Descriptions Not Uniform

Program descriptions have been deleted and relevant information incorporated into training course descriptions. This item is considered closed.

- ii. (Closed) Open Item 50-382/8313-01: Failure to Follow Procedures and Insufficient Design Detail for Attachment of Additional Loads to Seismic Supports for HVAC

This item was also identified in Construction Appraisal Team (CAT) Inspection 50-382/84-07. The verification of corrective action will be discussed in 50-382/84-30. This item is considered closed.

- jj. (Closed) Open Item 50-382/8313-02: Failure to Provide Appropriate Criteria for Installation Clearance Problems

This item was also identified in CAT Inspection 50-382/84-07. The verification of corrective action will be discussed in 50-382/84-30. This item is considered closed.

- kk. (Closed) Open Item 50-382/8401-02: Refueling Water Storage Pool (RWSP) Vacuum Breaker Testing

The NRC inspector verified that SI-703A and SI-703B were tested on May 23, 1984, and May 27, 1984, respectively, in accordance with OP-903-032. This item is considered closed.

- ll. (Closed) Open Item 50-382/8401-01: Chemical Testing of Spray Additive Does Not Appear to Demonstrate the Design Requirements

The NRC inspector verified that the Technical Specifications Section 4.5.2 has been changed to specify testing requirements consistent with plant testing requirements. This item is considered closed.

- mm. (Open) Violation 50-382/8214-A: Failure to Adequately Control the Quality of Safety-Related Work

The NRC inspector verified licensee corrective actions as described in two LP&L letters to the NRC dated January 4, 1983. Other actions as described in the LP&L letters of November 21 and April 8, 1983, are being reviewed by the NRC task force and were not inspected. The NRC inspector did not find that all corrective actions were implemented as described.

The following quotes were taken from the two LP&L January 4, 1983, letters to the NRC:

". . . T-B Quality Assurance has performed hanger installation surveillance and this will continue through the system release and turnover process."

* * *

". . . A Tompkins-Beckwith Quality Assurance Audit is conducted monthly to review a sample lot of hangers to verify that the reinspections and future inspection are properly performed"

* * *

"Tompkins-Beckwith and Ebasco Quality Assurance have performed hanger installation surveillances, which will continue through the system release and turnover process. Additionally, Tompkins-Beckwith is performing monthly hanger inspection program audits."

The licensee could not provide documentation which demonstrated performance of audits by Tompkins-Beckwith of hanger reinspection and/or hanger inspection on a monthly basis. There were no individual audit plans (Forms GP-723-28 and GP-723-29) or audit reports (Forms GP-723-30, GP-723-31, and GP-723-58) as prescribed by Tompkins-Beckwith QA Procedure TBP-8, "Quality Assurance Audit," Sections 6.2 and 6.4, respectively.

The licensee could not provide documentation which demonstrated surveillances of hanger installation by Tompkins-Beckwith that were to continue through the system release and turnover process. The licensee did provide memorandum which documented independent reinspection of selected hangers by the Tompkins-Beckwith QA engineer for the months of July, August, and September. The memoranda were designated as QAE 266, QAE 243, QAE 242, QAE 236, QAE 235, and QAE 230.

This item remains open. Enforcement action, as appropriate, will be included as part of the NRC Task Force effort.

nn. (Closed) Open Item 50-382/8334-02: Actual Safety Injection Tank Level

The NRC inspector verified that, in accordance with CIWA 832713, the wide range and narrow range indications were verified during hot functional testing to be written $\pm 1\%$ (narrow to narrow range) and $\pm 2\frac{1}{2}\%$ (narrow to wide range). This item is closed.

oo. (Closed) Open Item 50-382/8336-01: Clearance Improperly Released Prior to Completion of Work

The NRC inspector verified that Administrative Procedure UNT-TEM-008, "Review and Approval System Turnover," was revised to require plant staff personnel to accept responsibility for clearance of open CIWA's that are transferred during system turnover. Also, UNT-5-003, "Clearance Request," requires that the new holder of the clearance sign the clearance form to acknowledge acceptance. This item is considered closed.

pp. (Closed) Unresolved Item 50-382/8327-02: Length of Time Required to Report SCD-72, Radiation Monitoring System RM-23 Control Modules

The NRC inspector verified that discussions and training had been held with personnel involved to improve the timeliness in reporting. Attendance records indicated that training had been held for 31 engineering personnel regarding implementation of EBASCO Procedure N-23 on October 12, 1983. This item is closed.

qq. (Closed) Unresolved Item 50-382/8330-02: QA Training for Personnel Involved in Safety-Related Work

The NRC inspector verified that QA training, in accordance with ANSI N18.7, had been conducted for LP&L staff through review of training curriculum outlined in SP-QT-01 and attendance records. Training for 104 personnel had been completed as of March 31, 1984. This item is closed.

rr. (Open) Open Item 50-382/8334-01: Valve Indication

The NRC inspector verified that modifications were being made to rotohammer activator valve position indications in accordance with CIWA 007841. A total of 33 out of 40 valves had been inspected and corrected. The remaining 7 valves were found to have mechanical deficiencies and will be addressed under separate CIWAs. This item remains open.

ss. (Closed) Open Item 50-382/8326-01: Review of Actuation Legend

The NRC inspector confirmed that a formal submittal and review to ensure actuation legend was compatible with overall human engineering effort has been completed. This item is considered closed.

tt. (Closed) Open Item 50-382/8321-05: Lack of Administrative Procedures for Electrical Maintenance Department

A lack of electrical maintenance department procedures for organization and control, training, and electrical practices was identified by an LP&L quality assurance organization and program audit. The NRC inspector reviewed the corrective action implemented for closure of the audit deficiency. This item is considered closed.

14. Followup on 50.55(e) Items

a. (Closed) SCD 35 "Material Properties of Tube Track and Welded Fittings"

Tube track material and welded fittings supplied by the J. C. White Company were found unacceptable because of discrepancies in the certified material test results (CMTR) for tube track material and deficiencies in the vendor quality assurance program for manufacture of welded fittings. The NRC inspector reviewed the corrective action and found that all straight tube track material was accepted based upon receipt of the required CMTRs. The welded fittings were accepted following EBASCO review of chemical and physical property tests performed by Pipkins Laboratories, Inc. on vendor-supplied fittings. This item is considered closed.

b. (Closed) SCD 107 "Schedule 80, 1" and 2" Carbon Steel Pipe/Fittings p3"

A lack of traceability for 1" carbon steel schedule 80 pipe and 1" and 2" carbon steel 3000# fittings was identified during a documentation review of installation packages. Items lacking heat numbers on documentation and having no heat number present in the field have been removed, scrapped, and replaced with traceable materials. The NRC inspector reviewed corrective action and supporting documentation. This item is considered closed.

c. (Open) SCD 101 "Traceability of Stainless Steel Instrument Tubing"

A documentation review evidenced the fact that some stainless steel (SS) tubing with a 0.049" wall thickness had been received onsite and may have been installed where 0.065" wall thickness is specified. In addition, the documentation review indicated that nonsafety-related 1/4" O.D. SS tubing may have been installed in safety-related systems.

The NRC inspector reviewed corrective action and supporting documentation for resolution of the discrepant wall thickness issue. This issue is considered appropriately resolved.

However, the possible installation of nonsafety-related 1/4" O.D. SS tubing in safety-related systems remains open pending closure of Item 2 in the enclosure to D. Eisenhut letter of June 13, 1984, to J. M. Cain (LP&L). This item remains open.

d. (Open) SCD 61 "Linear Crack in Stainless Steel Tubing"

This item remains open pending closure of Item 6 in the enclosure to D. Eisenhut letter of June 13, 1984, to J. M. Cain (LP&L). This item remains open.

e. (Open) SCD 84 "Tube Track Welding Deficiencies"

This item remains open pending further review and closure of Item 6 in the enclosure to D. Eisenhut letter of June 13, 1984, to J. M. Cain (LP&L). This item remains open.

15. Safety Review Committee Activity

The NRC inspector reviewed the Safety Review Committee (SRC) Charter, Revision 2 (April 12, 1984), and determined that it contains provisions for the following:

- a. Responsibility and authority for conducting independent reviews
- b. SRC membership
- c. Method and responsibility for designating alternate members
- d. Requirements for a committee quorum
- e. Meeting frequency
- f. Requirements for maintaining and distributing minutes and records of SRC activities
- g. Followup action on unresolved items
- h. Use of consultants

Additionally, the inspector reviewed the minutes (and attachments therein) of three SRC meetings conducted this year. Attachments to the meeting minutes included:

- a. A matrix delineating proposed responsibilities
- b. Meeting minutes of standing subcommittees
- c. Approved audit schedule and completed audits for 1984 and 1985

- d. Plant Operation Review Committee (PORC) procedure revision
- e. Matrix of SRC members' experience and competence for areas specified in Section 6 of the Technical Specifications
- f. Vendor audit status
- g. Report of QA activities

The NRC inspector learned, through discussion with plant personnel, that current SRC structure was established near the first of the year. A checklist for review of proposed changes, tests, or experiments, in accordance with 10 CFR 50.59, was reviewed and approved by the SRC in May 1984.

The SRC meeting frequency, review group membership and qualification, and records reviewed appear to be in conformance with Technical Specification requirements, ANSI 18.7, and Chapter 13 of the FSAR. Minutes indicate that meetings are conducted with a quorum present.

No violations or deviations were identified.

16. Site Tour

At various times during the course of this inspection period, the NRC inspectors conducted general tours of the Fuel Handling Building, Reactor Auxiliary Building, Turbine Building, and Reactor Building to observe ongoing construction and testing. No violations or deviations were noted as a result of these tours.

17. Exit Interviews

The NRC inspectors met with the licensee representatives at various times during the course of the inspection. The scope and findings of the inspection were discussed.