# U. S. NUCLEAR REGULATORY COMMISSION

#### REGION III

Report No. 50-373/83-05(DPRP); 50-374/83-08(DPRP)

Docket No. 50-373; 50-374

License No. NPF-11: CPPR-100

Licensee: Commonwealth Edison Company

Post Office Box 767 Chicago, IL 60690

Facility Name: LaSalle County Station, Units 1 and 2

Inspection At: LaSalle Site, Marseilles, Il

Inspection Conducted: February 1 through March 10, 1983

Inspectors: W. Guldemond

R.D. Walker Bon

R. D. Walker, Chief Approved By: R.

Reactor Projects Section 2C

April 6, 1983 April 6, 1983 April 6, 1983

#### Inspection Summary

Inspection on February 1 through March 10, 1983 (Report No. 50-373/83-05(DPRP); 50-374/83-08(DPRP))

Areas Inspected: Routine, unannounced inspection by resident inspectors of licensee actions on previous inspection findings; operational safety; Licensee Event Reports; IE Bulletins; 10 CFR 50.55(e) reports; 10 CFR 21 reports; independent inspection; periodic and special reports; and training. The inspection involved a total of 250 inspector-hours onsite by two NRC inspectors including 54 inspector-hours onsite during off-shifts.

Results: Of the nine areas inspected, no items of noncompliance or deviations were identified in eight areas; one item of noncompliance was identified in the remaining area (failure to follow procedures - Paragraph 3).

#### DETAILS

## 1. Persons Contacted

\*G. J. Diederich, Superintendent

\*R. D. Bishop, Administrative and Support Services Assistant Superintendent

C. E. Sargent, Operating Assistant Superintendent

J. G. Marshall, Operating Engineer

\*J. C. Renwick, Technical Staff Supervisor

\*R. Kyrouac, Quality Assurance Supervisor

The inspectors also talked with and interviewed members of the operations, maintenance, health physics, and instrument and control sections.

\*Denotes personnel attending exit interviews.

# 2. Licensee Actions on Previous Inspection Findings

(Closed) Open Item (373/80-05-06(DPRP)): This open item required Operational Design Change Request review of diesel generator control circuitry modifications. The Office of Nuclear Reactor Regulation reviewed this subject and determined that modifications were not warranted. This issue is closed for Unit 1 and Unit 2.

(Closed) Open Item (373/82-11-04(DETI)): This open item tracks the calibration of panel mounted meters. This same subject is being and will continue to be tracked for Units 1 and 2 by open item (373/82-55-04 (DPRP)).

(Closed) Open Items (373/82-49-02(DPRP)) and 373/82-49-03(DPRP)): These open items documented procedural problems for transferring recirculation pumps from slow to fast speed. The licensee has revised their procedures to correct the problems.

(Closed) Open Item (373/82-11-15(DPRP)): This open item documents a failure to adequately identify changes to preoperational test procedures. The licensee has made changes to procedure LSU 500-2 which correct this problem. This corrective action satisfies similar concerns for Unit 2.

(Closed) Open Item (373/82-45-03(DPRP)): This open item duplicates open item (373/82-46-02(DETI)).

(Closed) Open Item (373/82-41-03(DPRP)): This open item documented observation of poor controls over radioactive materials. The licensee has performed additional training of station personnel to resolve this issue.

(Closed) Open Item (373/82-18-C1(DPRP)): The licensee had committed to providing written work instructions for the Onsite Nuclear Safety Group (ONSG) by January 1, 1983. Work instructions were written and in place prior to that date. These instructions provide guidance to the group

in performing the reviews required by Technical Specification Section 6.1. Other instructions have to be written delineating the organization, duties, and responsibilities of the group. Office routine is intentionally scheduled for only 50% of the group's time to allow for independent review effort. An informal method exists for Station Management to request assistance from the ONSG. The onsite supervisor decides if time is available and if the independence of the group will be maintained prior to accepting such work. Assistance is provided only in the form of recommendations. This item is common to Units 1 and 2 and is considered resolved for both units.

No items of noncompliance or deviations were identified.

# 3. Operational Safety Verification

- a. The inspectors observed control room operations, reviewed applicable logs, and conducted discussions with plant operators during the period February 1 March 10, 1983. The inspectors verified the operability of selected emergency systems, reviewed tagout records, and verified proper return to service of affected components. Tours of Unit 1 and Unit 2 reactor buildings and turbine buildings were conducted to observe plant equipment conditions, fire hazards, fluid leaks, and excessive vibrations and to verify that maintenance requests had been expeditiously initiated and resolved for equipment in need of maintenance.
- b. On February 21, 1983, the inspector discovered two normally locked suppression pool vacuum breaker test connection valves unlocked. The licensee was informed and immediately verified that the valves were in their correct position. Locks were placed on the valves. The fact these valves were required to be locked by LAP 240-1 yet were unlocked is viewed as a procedure violation and is an item of noncompliance (373/83-05-01(DPRP)).

While reviewing this event, it was discovered that the individual system valve lineup checklist does not require the valves to be locked; however, Administrative Procedure LAP 240-1, "Use of Locked Valves", does require the valve to be locked. Based on this procedural discrepancy, the licensee performed those portions of LAP 240-1 on systems outside the drywell and found seven additional valves which, while required to be locked, were unlocked. All seven valves were in their required positions when found unlocked. Further review revealed that three of the seven valves found unlocked were required to be locked by both LAP 240-1 and their individual system valve lineup checklists. The remaining four valves were required to be locked by LAP 240-1 but not by their individual system checklists. The immediate verification of the status of locked valves outside containment and a subsequent licensee commitment to resolve all discrepancies between individual system checklists and Procedure LAP 240-1 by May 1, 1983, are reviewed as prompt and effective actions and no response to this item of noncompliance is required

on February 22 the Resident Inspector observed an individual exiting a contaminated area through a uncontrolled portal. The inspector and site security personnel stopped the individual and contacted radiation protection personnel. It was determined that the individual was not contaminated nor had any contamination been spread outside of the controlled area. It was further determined that the door through which the individual exited was not identified as a radiological boundary and that the individual had no indication he had exited a contaminated area until stopped by the inspector. Resolution of this subject will be handled by Region III Division of Radiological and Materials Safety Programs personnel.

Another concern identified as a result of this incident was the differing techniques used by various groups to communicate plant locations. This concern had been discussed previously with the Site Security Supervisor. Security personnel communicate locations by door numbers. Radiation protection personnel communicate locations based on compass coordinates and elevation. Operations personnel communicate locations based on equipment locations. This difference in communication techniques has resulted in delays in response. In the above incident, a Radiation Protection Specialist was dispatched immediately but could not locate the potentially contaminated individual. Although this had no serious consequences, the inspectors are concerned that response could be delayed in situations where timely action would be required. This concern was identified to and acknowledged by the licensee.

- d. On February 24, 1983, the inspector found the "A" RHR heat exchanger outlet conductivity cell electrically disconnected. It was determined that the cell had been disconnected for repairs; however, no tags had been placed to ensure power remained disconnected. The Shift Engineer verified that power was disconnected and had tags placed to ensure it would remain disconnected.
- e. On February 28, 1983, the inspector found a valve lock and chain lying on "B" RHR pump pedestal. When notified, the Shift Engineer had portions of the locked valve checklist (LAP 240-1) performed for equipment in that room. No missing locks or chains were identified.
- f. The inspector, by observation and direct interview, verified that the physical security plan was being implemented in accordance with the station security plan, and that radiation protection controls were being implemented.

One item of noncompliance and no deviations were identified.

# 4. Licensee Event Reports Followup

Through direct observations, discussions with licensee personnel, and review of records the following Licensee Event Reports were reviewed to determine that reportability requirements were fulfilled, immediate corrective action was accomplished, and corrective action to prevent recurrence had been accomplished in accordance with Technical Specifications.

83-001/01T-0	Leaks on Static O Ring Pressure Switches
83-009/03L-0	Failed Mechanical Snubber
83-008/03L-0	Unpinned Snubber
83-011/03L-0	Reactor Water Level Instrument Drift
83-005/01T-0	Deficient Riley Temperature Modules
82-178/03L-0	Leaking Drywell Instrument Air Check Valves
82-177/03L-0	Failure of RHR Full Flow Test Valve to Close
83-004/03L-0	Failure to Calibrate Hydrogen Recombiner Temperature
	Instruments

No items of noncompliance or deviations were identified.

# 5. IE Bulletin Followup

For the IE Bulletins listed below, the inspector verified that the written response was within the time period stated in the bulletin, that the written response included the information required to be reported, that the written response included adequate corrective action commitments based on information presentation in the bulletin and the licensee's response, that licensee management forwarded copies of the written response to the appropriate onsite management representatives, that information discussed in the licensee's written response was accurate, and that corrective action taken by the licensee was as described in the written response.

## Unit 2

Bulletin No.	<u>Title</u>
78-09	BWR Drywell Leakage Paths Associated With Inadequate Drywell Closures
79-02 Rev. 2	Pipe Base Plate Designs Using Concrete Expansion Anchor Bolts
79-09	Failure of GE Type AK-2 Circuit Breakers in Safety Related Systems
79-11	Faulty Overcurrent Trip Device in Circuit Breakers for ESF Systems
79-12	Short Period Scrams at BWR's
79-15	Deep Draft Pump Deficiencies
79-23	Potential Failure of Emergency Diesel Generator Field Exciter Transformer
79-27	Loss of Non-Class 1E Instrumentation and Control Power Systems Bus During Operation
80-23	Failures of Solenoid Valves Manufactured by Valcor Engineering Corporation
80-20	Failures of Westinghouse Type W-2 Spring Return to Neutral Control Switches
80-19	Failures of Mercury Wetted Matrix Relays in Reactor Protection Systems
80-16	Potential Misapplication of Rosemount Models 1151 and 1152 Pressure Transmitters with Either "A" or "D" Output Codes

80-14	Degradation of Scram Discharge Volume Capability
80-03	Loss of Charcoal From Standard Type II, 2 Inch Tray Absorber Cells
81-01 Rev. 1	Surveillance of Mechanical Snubbers
81-02	Failure of Gate Type Valves to Close Against Differential Pressure
81-03	Flow Blockage of Cooling Water to Safety System Components by Corbicula Sp. (Asiatic Clam) and Mytilus Sp. (Mussel)
80-01	Operability of ADS Valve Pneumatic Supply
80-09	Hydramotor Actuator Deficiencies
80-10	Contamination of Nonradioactive Systems and Resulting Potential for Unmonitored Uncontrolled Release to the Environment
82-01 and	Alteration of Radiographs of Welds in Piping
82-01 Rev. 1	Subassemblies

## Units 1 and 2

83-01 Failure of Reactor Trip Breakers to Open on Automatic Trip Signal (Information Only)

IE Bulletin 80-16 addressed a problem which manifests itself in generation of ambiguous output signals to control devices if the subject transmitters were exposed to excessive over or reverse pressure applications. The licensee's final response to this bulletin dated October 8, 1981, stated that no Rosemount 1152 pressure transmitters were used in safety-related applications at LaSalle. The response further stated that eleven Model 1151 Rosemount transmitters had been designated for use in Units 1 and 2. The licensee has replaced the eleven transmitters in Unit 1 and has committed to replacing the transmitters in Unit 2 prior to fuel load. Based on these actions, Bulletin 80-16 is considered closed for both units. The replacement of Unit 2 transmitters will be tracked as an open item which must be closed prior to fuel loading (374/83-08-01(DPRP)).

IE Bulletin 80-11, "Masonry Wall Design", pre-fuel load requirements were closed in Section 3.8.3 of Supplement 2 to NUREG 0519, "LaSalle County Station Safety Evaluation Report". Additional requirements of this bulletin were imposed on Unit 1 as Condition (8) to NRC Operating License NPF-11. These requirements are also applicable to Unit 2 and will be tracked as an open item (374/83-08-02(DPRP)).

No items of noncompliance or deviations were identified.

#### 6. 10 CFR 50.55(e) Reports

(Closed) 10 CFR 50.55(e) Reports (373/82-09 and 374/82-09): These reports documented deficiencies in the pressure rating of pressure switches installed in Units 1 and 2 RHR systems. The corrective action specified was to install replacement switches in Unit 1 by February 1, 1983, and in Unit 2 prior to fuel load. The replacement switches have been installed in Unit 1. The installation in Unit 2 will be tracked

as an open item which must be resolved prior to fuel load (374/83-08-03 (DPRP)).

The inspectors reviewed the status of all 10 CFR 50.55(e) reports for Units 1 and 2 through report number 83-02. It was determined that the following reports have yet to be closed by NRC inspection: 81-01; 81-02; 81-06; 81-07; 81-09; 81-10; 82-02; 82-03; 82-06; 82-07; 82-08; 82-10; 82-11; 83-01; and 83-02. Final reports have yet to be received for report numbers 83-01 and 83-02.

No items of noncompliance or deviations were identified.

## 7. 10 CFR 21 Report

On August 12, 1981, General Electric informed the NRC of two problems that had been discovered with Crosby Model CVG-01 Safety/Relief solenoid valves, failure to actuate with the minimum available DC voltage during a postulated loss-of-coolant accident and failure of gasket material to prevent steam leakage into valve electrical components. The vendor modified the CVG-01 valve design to correct the noted problems and conducted a satisfactory environmental test. The Unit 1 and Unit 2 safety relief valves at LaSalle were originally equipped with the defective CVG-01 solenoid valves. The solenoid valves in Unit 1 were replaced with the redesigned and qualified IMF-2 valves on June 19, 1982. The licensee has committed to replace the solenoid valves in Unit 2 prior to fuel load and is currently awaiting delivery of the valves. This replacement will be tracked as an open item which must be resolved prior to Unit 2 fuel load (374/83-08-04(DPRP)).

## 8. Independent Inspection Effort

- a. On February 1, 1983, the NRC made a news release reporting completion of an investigation of allegations concerning the safety of pumps manufactured by the Hayward Tyler Pump Company of Burlington, Vermont. The inspector determined that no Hayward Tyler pumps are in use at LaSalle County Station.
- b. A vibration problem was experienced for battery charging units supplied by Power Conversion Company at Callaway Nuclear Plant. The inspectors determined the subject battery chargers are not used at LaSalle County Station.
- c. A recent report made by the Shoreham Plant concerned an error in data transmitted by Stone and Webster to General Electric concerning the Mark II Containment confirmatory program. The inspectors determined that adequate measures were taken to preclude this problem from occurring at LaSalle when similar data was transferred from Sargent and Lundy to General Electric.
- d. In a letter dated January 18, 1983 from Mr. L. O. DelGeorge (Commonwealth Edison) to Mr. J. G. Keppler (NRC), the licensee informed the NRC of their intention to perform confirmatory pipe

whip restraint gap measurements during an outage in progress. These measurements were committed to be performed during the first refueling outage for Unit 1. On February 23, 1983, the inspector verified by discussion with the LaSalle Construction Superintendent that gap measurements under both cold and hot conditions had been performed on 23 whip restraints and that the information obtained had been forwarded to the architect-engineer for evaluation.

- e. On March 8, 1982, the NRC was notified by TVA that the elevation of the lube oil coolers on certain Trans America Delaval Inc. diesel generators was such that the lube oil system could become airbound and result in a failure of the diesel generators to start. The inspectors determined that the diesel generators at LaSalle were not manufactured by Trans America Delaval and that the problem is not applicable to LaSalle.
- f. During an NRC Vendor Program Branch inspection of ITT Grinnel conducted on November 15-18, 1982, it was identified that ITT Grinnel had failed to evaluate a nonconforming dimensional condition which could preclude the ability of their Figure 306/307 mechanical snubbers to achieve a 10 degree included angle cone of action to the pipe clamp axis. It was further identified that the subject snubbers had been supplied to LaSalle.

The inspectors reviewed this information and made the following determinations:

- (1) The subject snubbers are installed at LaSalle.
- (2) ITT Grinnell informed the licensee of the problems on November 16, 1982.
- (3) An evaluation of the problem was completed in January 1983 and it was determined that the installation configuration at LaSalle was such that the problem was not applicable to LaSalle.

No items of noncompliance or deviations were identified.

#### 9. Review of Periodic and Special Reports

On December 23, 1982, the licensee submitted a special report to the NRC documenting out-of-tolerance room temperatures in the 2A diesel generator room. The report identified the cause of the out-of-tolerance conditions as a failed room heater. In order to facilitate more timely identification and trending of such conditions the licensee committed in the report to revise their procedures to require hourly readings of area temperatures that are outside prescribed units. The inspector verified that these revisions have been made.

No items of noncompliance or deviations were identified.

# 10. Training

On March 8, 1983, the inspector observed the licensee's annual nuclear orientation training. The subjects covered during the training were radiological protection requirements and practices including 10 CFR Part 19 and 20 requirements and advisories to women of childbearing age, practice sessions on the use of radiation protection equipment, emergency response, quality assurance, and security. The training was noted to be excellent. The required material was presented in a thorough and professional manner. One minor discrepancy was found in the pamphlet provided to the trainees on the above subjects. This was brought to the attention of the instructor and the Training Supervisor for resolution.

No items of noncompliance or deviations were identified.

#### 11. Open Items

Open items are matters which have been discussed with the licensee, which will be reviewed further by the inspector, and which will involve some action on the part of the NRC or the licensee or both. Open items disclosed during the inspection are discussed in Paragraphs 5, 6, and 7.

#### 12. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) throughout the month and at the conclusion of the inspection period and summarized the scope and findings of the inspection activities. The licensee acknowledged these findings.