

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-373/83-01(DPRP); 50-374/83-01(DPRP)

Docket Nos. 50-373; 50-374

Licenses 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: January 3-31, 1983

R. D. Walker for
Inspectors: W. G. Guldemon

February 25, 1983

R. D. Walker for
A. L. Madison

February 25, 1983

R. D. Walker
Approved By: R. D. Walker, Chief
Reactor Projects Section 2B

February 25, 1983

Inspection Summary

Inspection on January 3-31, 1983 (Reports No. 50-373/83-01(DPRP);
50-374/83-01(DPRP))

Areas Inspected: Routine, unannounced inspection by Resident Inspectors of licensee action on previous inspection findings; operational safety; maintenance; surveillance; Licensee Event Reports; IE Information Notices; preoperational test witnessing; and independent inspection of a problem identified on rigid pipe hanger struts and procedures for handling irradiated fuel. The inspection involved a total of 132 inspector-hours onsite by two NRC inspectors including 30 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
- 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. Followup on Previously Identified Items

(Closed) Open Item (373/78-14-01(DETI)): This open item documents inspector concerns over fire residue on Unit 2 steam separators. This is not a Unit 1 item and is tracked for Unit 2 by open item (374/78-07-08).

(Closed) Open Item (373/79-06-07(DETI)): This item requires a generic review by the Office of Nuclear Reactor Regulation to determine if feed and condensate systems are subject to 10 CFR Part 50, Appendix B requirements, and while potentially applicable to LaSalle, is not a specific concern for LaSalle.

(Closed) Open Item (373/81-06-11(DPRP)): This item documents inspector concerns over the susceptibility of the steam condensing mode of the Residual Heat Removal system to a loss of offsite power. It has been determined that credit is not taken for this mode of operation during accident conditions; thus, the system need not be designed to withstand a loss of offsite power.

(Closed) Open Item (373/81-15-11(DPRP)): This item documents a license condition requiring closure of Category A deficiencies on Human Factors Review of the control room before fuel loading. The open item was closed prior to fuel load but its closure was inadvertently omitted from an inspection report.

(Closed) Open Item (373/81-24-04(DPRP)): This open item requires inspector witnessing of the secondary containment integrity test. This was done prior to initial fuel loading.

(Closed) Open Item (373/82-XX-02(DPRP)): This open item documents final resolution as to the cause of the failure of the seal on the 1A recirculation pump. The cause was determined to be thermal shock resulting from a sudden increase in cooling water flow. The increase occurred as a result of manual attempts at controlling seal temperatures.

(Closed) Open Item (373/82-11-14(DPRP)): This open item documents inspector concerns over licensee controls for jumpers and lifted leads during preoperational testing. The inspector has verified that the licensee has implemented appropriate procedural controls including incorporation of jumper and lifted lead logs in the Shift Engineer's

copy of preoperational tests.

(Open) Open Item (373/81-00-122(DPRP)): This open item documents Condition 2.C.(26).b of Operating License No. NPF-11 for LaSalle Unit 1. This license condition requires, in part, "By June 1, 1983, the licensee shall have Radiation/Chemistry Technicians onshift for 24 hours per day who meet ANSI N18.1-1971 or who are qualified in accordance with a NRC alternative program." On January 18, 1983, the licensee submitted an alternate training program to the Office of Nuclear Reactor Regulation. The submittal stated that another training program, to be implemented by Commonwealth Edison's Production Training Department, would be available for NRC review and approved by approximately February 1, 1983.

(Closed) License Condition (Condition (33) to Operating License No. NPF-11 (DPRP)): Condition (33) to LaSalle Unit 1 Operating License No. NPF-11 required that prior to exceeding 5% power operation, the licensee was to provide formal documentation of information regarding HVAC design fabrication and installation. Condition (33) further required that prior to exceeding 50% power operation, the licensee was to submit the results of an independent review of the HVAC system encompassing all safety-related HVAC systems and the effect of non-safety related HVAC system failures on safety systems. In an August 13, 1982 letter the Office of Nuclear Reactor Regulation informed the licensee that the information required to allow operation in excess of 5% power had been received, the information was acceptable, and LaSalle Unit 1 was released for operation at power levels above 5%. In a letter dated December 3, 1982, the Office of Nuclear Reactor Regulation informed the licensee that the information provided on the independent review of the HVAC system was acceptable and that operation at power levels in excess of 50% was authorized. The December 3, 1982 letter did request additional information which was presented at a December 1, 1982 meeting with the licensee and the independent design reviewer, corrective actions planned for one observation made by the independent reviewer, and corrective actions completed or planned for Unit 2 HVAC systems in response to the types of discrepancies identified by the independent reviewer on Unit 1 systems. This information was provided in a December 22, 1982 letter from Commonwealth Edison to the Office of Nuclear Reactor Regulation.

(Closed) Noncompliance (373/82-52-01; 374/82-20-01(DPRP)): This item of noncompliance documented a failure to adhere to radiological control procedures. The licensee has reemphasized the importance of adherence to radiological control procedures to all personnel. While isolated instances continue to occur, the widespread disregard for certain requirements is no longer in evidence.

No items of noncompliance or deviations were identified in this area.

3. Operational Safety Verification

The inspectors observed control room operations, reviewed applicable logs, and conducted discussions with plant operators during the month of January 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. Minor deficiencies identified by the inspector were promptly corrected when brought to the attention of plant supervision.

While performing a valve lineup check on the Standby Liquid Control System (SBLC) on January 19, 1983, the Resident Inspector found normally locked Valve F-014 unlocked. The chain and padlock were present and the valve was closed as required. The inspector reported his finding to the Shift Engineer who had the valve locked immediately.

The licensee determined that the last time the valve had been officially operated was on January 12, 1983 during performance of LOP-SC-07, SBLC System Flushing Procedure. This procedure required F-014 to be closed and locked. Failure to lock the valve constitutes a failure to follow procedures and is considered an item of noncompliance (373/83-01-01(DPRP)).

While following up on this item of noncompliance, the inspectors identified a separate concern. The licensee currently has no formal control mechanisms in effect for keys used on locked valves. Such controls are implied in an October 1977 document from the Office of Nuclear Reactor Regulation to the Office of Inspection and Enforcement providing guidance on the position to be taken with respect to control of equipment and locked valves. The inspectors provided a copy of this document to the licensee. The licensee agreed to take the inspector's concerns under consideration.

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 was identified in this area.

4. Monthly Maintenance Observation

Station maintenance activities of safety related systems and components listed below were observed/reviewed to ascertain that they were conducted in accordance with approved procedures, regulatory guides and industry codes or standards and in conformance with Technical Specifications.

The following items were considered during this review: the limiting conditions for operation were met while components or systems were removed from service; approvals were obtained prior to initiating the work; activities were accomplished using approved procedures and were inspected as applicable; functional testing and/or calibrations were performed prior to returning components or systems to service; quality control records were maintained; activities were accomplished by qualified personnel; parts and materials used were properly certified; radiological controls were implemented; and, fire prevention controls were implemented.

Work requests were reviewed to determine status of outstanding jobs and to assure that priority is assigned to safety related equipment maintenance which may affect system performance.

The following maintenance activities were observed/reviewed:

- a. 1B Diesel Generator Governor Replacement
- b. 1B Diesel Generator Air Start Motor Replacement
- c. In-Place Repair of Unit 1 Recirculation Loop A Discharge Valve

Following completion of maintenance on the above items, the inspector verified that these systems had been returned to service properly.

No items of noncompliance or deviations were identified in this area.

5. Monthly Surveillance Observation

The inspector observed Technical Specifications required surveillance testing on the Unit 1 reactor vessel low water level scram, primary containment isolation, and emergency core cooling system actuation functions and verified that testing was performed in accordance with adequate procedures, that test instrumentation was calibrated, that limiting conditions for operation were met, that removal and restoration of the affected components were accomplished, that test results conformed with Technical Specifications and procedure requirements and were reviewed by personnel other than the individual directing the test, and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

- a. Surveillance Issue on Declaring Components Inoperable

On January 3, 1983, the inspectors met with plant management representatives to present the findings of inspections conducted in December 1982 and documented in IE Inspection Report No. 50-373/82-55. One topic discussed during the meeting was equipment operability as demonstrated by surveillance testing.

On December 28, 1982, the "B" diesel fire pump (DFP) experienced an apparent failure of its weekly surveillance test. Personnel on shift deferred the question of pump operability pending an evaluation of the surveillance results by the plant Technical

Staff. The position taken by the inspectors and expressed to the licensee in the January 3, 1983 meeting was that if a component fails a Technical Specification required portion of a surveillance test, that component must be declared inoperable at the time of failure. It is acceptable to delay the declaration of inoperability for evaluation only during the normal time interval allowed for performing the surveillance test. It is unacceptable to delay a determination of operability pending review of surveillance results by other groups or organizations. The licensee acknowledged this position.

During the performance of surveillance testing on the 1B Diesel Generator on January 9, 1983, it was discovered that, without operator action, the generator output voltage would fluctuate and the generator would trip. Based on these observations and prior experience, the licensee declared the diesel generator "degraded," but not inoperable. The resident inspectors were made aware of this problem on January 10 and, based on the discussions of January 3, questioned the decision to declare the 1B Diesel Generator degraded rather than inoperable.

The 1B Diesel Generator was subsequently tested and it was determined that the voltage fluctuations and generator trip were caused by a faulty current sensing device. This device is bypassed when the diesel generator is performing its safety function. The conclusion reached was that the diesel generator was continuously operable. This information was, however, not available when the decision was made to declare the diesel generator degraded rather than inoperable.

As the diesel generator was never actually inoperable, the failure to declare it inoperable as a result of unsatisfactory surveillance test results was not cited as an item of noncompliance. The inspectors did, however, review this situation with plant management and reemphasized the position stated on January 3 concerning surveillance test results and equipment operability. The inspectors will continue to monitor licensee performance in this area.

b. Missed Surveillance Tests

On January 14, 1983, the inspector met with the Plant Superintendent and the Administrative and Support Services Assistant Superintendent to discuss intended Region III enforcement actions for missed surveillance tests as follows:

"Whenever Technical Specification surveillance intervals are exceeded, the involved component or system is to be considered inoperable and the applicable action statement is deemed to have been entered at the time the surveillance should have been performed. If the allowable action time has been exceeded, action

should be initiated within one hour to place the unit in a mode in which the limiting condition for operation (LCO) does not apply. Failure to initiate action within one hour will be considered a combination violation of the surveillance requirement and the LCO regardless of what subsequent testing reveals. If action is initiated within one hour (i) a citation will be issued for failure to perform surveillance testing if subsequent testing reveals that the component or system was always operable, or (ii) a combination citation will be issued for failure to perform surveillance testing and violation of the LCO if subsequent testing reveals that the component or system was inoperable."

The following additional information was provided:

- (i) Technical Specification surveillance intervals include all of the extension allowances provided for in the Technical Specifications.
- (ii) In the event that the licensee should elect to perform the missed surveillance test, the one hour action requirement still applies. If the surveillance test is completed within the one hour period, it may not be necessary to change plant conditions depending on the results of the test. However, action to place the plant in a condition in which the LCO does not apply may not be delayed beyond one hour to complete the missed surveillance test.

No items of noncompliance or deviations were identified in this area.

6. Licensee Event Reports Followup

Through direct observations, discussions with licensee personnel, and review of records the following 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.

373/82-171/03L-0	Failure Of The Rod Worth Minimizer
373/82-179/03L-0	Failed Lake Blowdown Instrument
373/82-175/03L-0	Intermediate Indication On A Drywell Vacuum Breaker
373/82-174/03L-0	Reactor Startup With "B" Intermediate Range Monitor Out of Service
373/82-172/03L-0	Loss Of Division II Reactor Vessel Water Level Reference Leg
373/82-173/03L-0	Failure Of A Containment Isolation Valve To Close
373/82-158/03L-0	Failure Of A Containment Isolation Valve To Close
373/82-151/03L-0	Failed Control Room Ammonia Detector
373/82-153/03L-0	Leak In RWCU System
373/82-156/03L-0	Excessive Coolant Conductivity
373/82-146/03L-0	Failed Reactor Building Process Radiation Monitor
373/82-147/03L-0	Failure Of Both Offgas System Hydrogen Analyzers

373/82-148/03L-0	Containment Oxygen Monitor Instrument Drift
373/82-149/03L-0	Failed Lake Blowdown Flow Monitor
373/82-150/03L-0	Loose Leads On The RCIC Flow Controller
373/82-152/03L-0	Out Of Tolerance RCIC High Steam Flow Isolation Setpoint
373/82-155/03L-0	Violation Of Secondary Containment Integrity
373/82-151/03L-0	Failed Control Room Ventilation Damper
373/82-168/03L-0	RCIC Steam Leak
373/82-167/03L-0	Inoperable Containment Oxygen Monitoring Channel
373/82-163/03L-0	Out Of Tolerance RCIC Area And Differential Temperature Monitoring/Instrumentation
373/82-160/03L-0	Condensate System Leak

LER 373/82-176 documents the December 28, 1982 failure of the Unit 1 "B" Residual Heat Removal System pump. The report satisfies all requirements and is considered closed; however, in the report the licensee commits to a followup report which will describe the results of planned vibration analysis. The status of the vibration analysis will be tracked as an open item (373/83-01-02(DPRP)).

LER 373/82-180 documents administrative errors which resulted in incorrect information on safety related snubber locations being incorporated into Table 3.7.9-2 in the Technical Specifications. The report satisfies all reporting requirements and is considered closed; however, the report also commits to a Technical Specification change to correct the errors in Table 3.7.9-2. This will be carried as an open item until the submittal is made (373/83-01-07(DPRP)). The report fails to identify what action will be taken to preclude a recurrence of this problem for Unit 2. This corrective action will be tracked as an open item (374/83-01-06(DPRP)).

LER 373/82-155/03L-0 documents a situation in which secondary containment integrity was violated when both doors on a reactor building airlock were simultaneously open. The LER satisfies all regulatory requirements and is considered closed; however, in the LER the licensee commits to changing secondary containment integrity test procedures to include airlock doors. These changes will be tracked as open items for Units 1 and 2 (373/83-01-04(DPRP) and (374/83-01-02(DPRP))).

LER 373/82-169/03L-0 documents a situation in which suppression pool level sightglass isolation valves, which are normally locked closed to form part of the primary containment boundary, were found locked open. No violation of containment integrity occurred because the sightglass is designed to withstand accident pressure in the containment. The LER satisfies regulatory requirements and is considered closed; however, in the LER the licensee commits to preparing a procedure to provide a means of verification and documentation of the final position of locked valves following temporary position changes. This commitment will be tracked by open items for Units 1 and 2 (373/83-01-05(DPRP) and 374/83-01-03(DPRP)).

LER 373/82-166-03L-0 documents a situation where both primary containment air monitors sample pumps tripped off. The cause was a combination of a leaking cross-tie valve and electronic interference. The LER satisfies regulatory requirements and is considered closed,

however, in the LER the licensee commits to revise radiation Procedures LRP 1350-20, 21, and 24 to run the monitors in the manual mode where electronic interference is reduced. These procedure changes are being tracked as open items for Units 1 and 2 (373/83-01-06(DPRP) and 374/83-01-04(DPRP)).

No items of noncompliance or deviations were identified in this area.

7. Preoperational Test Witnessing

On January 15, 1983, the inspector witnessed portions of Unit 2 High and Low Pressure Core Spray System preoperational testing. The portions included actual reactor vessel injections with the reactor vessel head removed. The inspector observed nearly symmetrical spray patterns for both systems. There appeared to be some minor spray flow oscillations during the Low Pressure Core Spray System tests.

Observations in the control room and discussions with test personnel revealed that the total Low Pressure Core Spray System flow during reactor vessel injection was approximately 10% below expected values. The licensee will prepare a deviation report documenting this observation and resolution will be required. This is an open item (374/83-01-05(DPRP)).

On January 26, the inspector witnessed portions of PT-SC-201, Standby Liquid Control Pump System preoperational testing. Testing was performed according to approved written procedures. Minor deficiencies were identified and corrected promptly by test personnel.

No items of noncompliance or deviations were identified in this area.

8. Followup of Information Notices

(Closed) IE Information Notice No. 82-44 (Clarification of Emergency Plan Exercise Requirements): This notice transmitted clarification of the required participation of state and local governments during annual emergency plan exercises. Commonwealth Edison Company corporate offices reported compliance with all aspects of the notice for LaSalle County Station.

No items of noncompliance or deviations were identified in this area.

9. Independent Inspection

The following subjects were pursued by the inspectors independent of formalized inspection requirements:

- a. Rigid Pipe Hanger Struts: On December 23, 1982, the licensee informed the NRC of an item potentially reportable pursuant to 10 CFR 50.55(e). A quality assurance audit performed by the licensee of the Elcen Corporation of Melrose Park, Illinois, indicated that inadequate quality assurance measures may have been applied in the manufacture of rigid pipe hanger struts. On January 21, 1983, the licensee provided information based on

actual test results which demonstrated if the subject materials had been used, allowable design margins would not have been exceeded. Based on this information, the item is considered closed.

- b. Procedures for Handling Irradiated Fuel: The inspectors reviewed licensee procedures for handling irradiated fuel and noted the following deficiencies:
- (i) Procedures for handling irradiated fuel/refueling have yet to be issued. LOA-NB-11 is an example of such a procedure.
 - (ii) Those procedures which have been written inadequately describe the prerequisites for refueling/handling irradiated fuel or the equipment needed. Specifically, the radiation monitoring equipment to be relied upon is not detailed.
 - (iii) Procedures for dropped fuel bundle, as required by Regulatory Guide 1.33, have not been written. LOA-22-08 concerning irradiated fuel damage does not effectively address the immediate actions to be taken in the event of a dropped fuel bundle.

The licensee has been made aware of these deficiencies and has committed to have adequate procedures in place prior to handling irradiated fuel. This will be an open item until such procedures are in place (373/83-01-03(DPRP) and 374/83-01-01(DPRP)).

- c. Technical Specification Interpretations: On January 6, 1983, the licensee requested guidance from the inspectors in complying with Section 3.8.1.2 of the Technical Specifications. The licensee wished to place the 1A Diesel Generator out of service to perform annual preventive maintenance while performing work on the 1A Recirculation Pump discharge valve. The latter task created the potential for draining the reactor vessel. The question stemmed from the following statements in the Technical Specifications: "As a minimum, the following A.C. electrical power sources shall be operable...Diesel Generator 0 and/or 1A, and Diesel Generator 1B when the HPCS System is required to be operable..." and, "With all offsite circuits inoperable and/or with Diesel Generators 0 and/or 1A inoperable, suspend all Core Alterations, Handling of Irradiated Fuel in the Secondary Containment and Operations with a Potential for Draining the Reactor Vessel."

The following guidance was provided by the Office of Nuclear Reactor Regulation: (a) The "and/or" was determined to mean that if the electrical loads supplied by both power sources were required to be operable, the statements would read Diesel Generator 0 and 1A. (b) If the loads supplied by only one power source were required to be operable, the statement would read "Diesel Generators 0 or 1A."

The licensee was informed of this guidance and that with the 1A Diesel Generator inoperable any loads supplied by the 1A Diesel should be considered inoperable unless specific relief was granted in the Technical Specifications.

A second question was raised concerning the use of the conjunction and in the statement defining Operational Condition * . Section 3.6.5.3 of the Technical Specifications defines Operational Condition * as: "When irradiated fuel is being handled in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel. The statement implies that all three conditions must be met to be in Operational Condition * . The inspectors were informed by a representative of the Office of Nuclear Reactor Regulation that any one of the conditions constituted Operational Condition*.

No items of noncompliance or deviations were identified in this area.

10. Open Items

Open items are matters which have been discussed with the licensee, which will be reviewed further by the inspectors, and which involve some action on the part of the NRC or the licensee or both. Open items disclosed during the inspection are discussed in Paragraphs 6, 7, and 9.

11. 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.