

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-373/82-45(DPRP); 50-374/82-13(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: September 1-30, 1982

Inspectors: *R. D. Walker for*
W. Guldemon 11-3-82

R. D. Walker for
A. Madison 11-3-82

R. D. Walker for
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R. D. Walker for
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Approved By: *R. D. Walker*
R. D. Walker, Chief 11-3-82
Reactor Projects Section 2A

Inspection Summary

Inspection on September 1-30, 1982 (Report No. 50-373/82-45(DPRP); 50-374/82-13(DPRP))

Areas Inspected: Routine, unannounced resident inspection of Licensee Actions on Previous Inspection Findings; Operational Safety Verification; Monthly Maintenance Observation; Monthly Surveillance Observation; Licensee Event Report Followup; Information Notice Followup; Plant Trips/Safety System Challenges; Review of Periodic and Special Reports; Independent Inspection Effort; Startup Test Witnessing Activities; and Preoperational Test Witnessing. The inspection involved 125 inspector-hours on-site including 20 inspector-hours during off-shifts.

Results: Of the eleven areas inspected, no items of noncompliance were identified in nine areas; one item of noncompliance was identified in each of the remaining two areas (Paragraph 4, Inadequate Control of Maintenance; Paragraph 8, Failure to Follow Procedures).

DETAILS

1. Persons Contacted

- R. Holyoak, Project Manager, LaSalle Station
- *G. J. Diederich, Superintendent, LaSalle Station
- *C. Sargent, Operating Assistant Superintendent, LaSalle Station
 - R. D. Bishop, Administrative and Support Services Assistant Superintendent
 - J. G. Marshall, Operating Engineer
- *J. C. Renwick, Technical Staff Supervisor
 - G. Cooper, Master Instrument Mechanic
- *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 (373/82-28-02): Commitment to Perform Functional Tests or Line Walkdowns of Unit 1 Safety-Related Instrumentation. This commitment was made in response to two cases in which the high and low pressure sensing lines for safety-related differential pressure detectors were connected backwards. For one of the detectors, the line reversal was due to a drawing error. The licensee committed to change this drawing. The inspector verified that the line walkdowns and functional tests were completed as committed to. The required drawing change is in the process of being performed. Until the drawing change is completed, the licensee has annotated the controlled drawing to indicate that a change is being made and to make reference to the drawing change request number.

(Closed) Open Item (373/82-28-03): Inability of Personnel in the Lower Level of the Service Building to Hear the Assembly and Fire Sirens. The licensee has installed a new siren in a central location in the lower level of the service building.

(Closed) Noncompliance Item (373/82-37-01): Out of Calibration Instrument Used for Surveillance Testing. The licensee responded to this item of noncompliance in a September 16, 1982 letter from Mr. L. O. DelGeorge to Mr. J. G. Keppler, NRC Region III Regional Administrator. The inspector reviewed the licensee's corrective actions and determined that they adequately address the concerns expressed in the item of noncompliance.

(Closed) Noncompliance Item (373/82-30-01): Mode Change with Required Leakage Detection Systems Inoperable. The cause of this event, as identified in Licensee Event Report 50-373/82-35/03L-0, was a failure on the part of the Instrument Maintenance Department (IM) and Operations

to recognize that surveillances for the leakage detection system were required prior to entering Operational Mode 3. Thus, system operability was not checked prior to the mode change. The licensee's corrective actions consisted of restoring the leakage detection systems to an operational condition and having the IM Department review Technical Specification surveillance requirements to ensure that all requirements were appropriately incorporated in the surveillance program. The inspector considers these actions appropriate and has verified that they have been completed.

(Closed) Noncompliance Item (373/82-30-02): Failure to Properly Implement Technical Specifications. On June 17, 1982, the licensee submitted a special report documenting concerns over and corrective actions for the subject of this noncompliance. The inspector considers the corrective actions contained in this special report adequate and has verified that, with the exception of long-term programs which are in progress, these corrective actions have been satisfactorily implemented.

(Closed) Noncompliance Item (373/82-30-03): Unauthorized Modification to the Standby Gas Treatment System. As a result of the modification, the system was made inoperable to Division II initiating signals. In addition to restoring the Standby Gas Treatment System to full operability, the licensee has implemented a new Administrative Procedure, LAP 240-6, "Temporary System Changes to Unit 1 Systems and Equipment and Common and Unit 2 Systems and Equipment Required for Unit 1 Operation," which requires the completion of a 10 CFR 50.59 review and proper authorization prior to implementing any temporary system change.

3. Operational Safety Verification

The inspectors observed control room operations, reviewed applicable logs, and conducted discussions with plant operators during the month of September 1982. 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.

Throughout the inspection period, the inspector continued to track the status of Unit 1 control room work requests. This was done in response to concerns first expressed in IE Inspection Report 50-373/82-30, over what appeared to be excessive numbers of deficiencies. For the first three weeks of the inspection period, the number of work requests showed a monotonic increase to a peak of 133. On several occasions during this period, the inspector expressed concern over the increases. During the last week of the inspection period, the number of outstanding work requests dropped to 117. While this value is still excessive, the downward trend is indicative of the priority Station Management has given to correcting control room deficiencies.

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.

While conducting a routine fire protection inspection in the radwaste building on September 30, 1982, the inspector observed the drumming of waste evaporator residue. During the course of this operation, a minor spillage occurred from a filled drum in a controlled area. When the radwaste operator observed this, he took corrective action to control the spill. The actions were in accordance with approved procedures and succeeded in controlling the spill.

No items of noncompliance were identified in this area.

4. Monthly Maintenance Observation

On September 30, 1982, the inspector monitored repair activities on the Offgas System Pretreatment Logarithmic Process Radiation Monitor. Troubleshooting was performed in accordance with the Instrument Technical Manual. All instruments used in the work were verified to be within their calibration frequency.

On September 28, 1982, the inspector discovered that the Reactor Core Isolation Cooling (RCIC) system flow controller had been removed from the Remote Shutdown Panel and taken to the instrument shop without the knowledge of the operations staff. This action made the Remote Shutdown Panel inoperable and placed Unit 1 in a seven day action statement per Technical Specifications, Section 3.3.7.4. The Instrument Mechanic did inform the Shift Engineer and the Unit 1 operator that he was going to "look at" the controller. The operations staff was not aware of the situation until informed by the inspector and did not log the event. This incident is a result of poor communications and is considered an item of noncompliance (373/82-45-01).

One item of noncompliance and no deviations were identified in this area.

5. Monthly Surveillance Observation

On September 30, 1982, the inspector monitored the performance of LIS-NR-05, "Rod Block Monitor Calibration". The inspector verified that the surveillance was performed in accordance with the approved procedure after obtaining proper approvals. During the performance of the surveillance, several points in the calibration check of the Rod Block Monitor trip circuits were found outside the specified values. The inspector noted that the technicians performing the surveillance performed the proper notifications and received the proper approvals prior to proceeding with testing.

The inspector had two comments on the surveillance procedure itself. Step F.8.d requires that the status of a number of Local Power Range Monitors (LPRM's) be verified. However, no guidance is provided on

what status is to be verified, e.g., upscale, installed, etc. This lack of guidance confused the technicians performing the test with the result that the length of time the equipment was in a test condition was unnecessarily extended. Step F.8.d lists the LPRM's to be verified by module location. However, the modules in the cabinet are labelled by LPRM location. It thus became necessary to stop testing until a correlation could be made between procedure component identification and in-cabinet labelling. This again delayed testing with the result that the length of time the equipment was in a test condition was unnecessarily extended.

These comments were provided to the licensee during the exit meeting at the end of the inspection period.

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

6. Licensee Event Report 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.

50-373/82-61/03L-0	Spurious RHR Integrity Monitor Alarms
50-373/82-62/03L-0	False Readings on Drywell Gaseous and Particulate CAM's
50-373/82-63/03L-0	Improperly Calibrated APRM
50-373/82-64/03L-0	Failed SRV Position Indication
50-373/82-66/03L-0	RCIC System Inoperable
50-373/82-67/03L-0	Failed Dampers in the Auxiliary Electrical Equipment Room HVAC System
50-373/82-68/03L-0	Failed SRV Position Indication
50-373/82-69/03L-0	Low Drywell Pressure
50-373/82-73/03L-0	Excessive Heatup Rate
50-373/82-74/03L-0	Out Of Calibration Containment Hydrogen and Oxygen Calibration Gas Instrumentation
50-373/82-76/03L-0	Out Of Calibration RCIC Pressure Switches
50-373/82-81/03L-0	Out Of Calibration RCIC Area High Temperature Isolation Switch
50-373/82-83/01T-0	Deficient Welds in Unit 2 Ventilation System
50-373/82-84/03L-0	Steam Leak on an Equalizing Header Valve
50-373/82-86/03L-0	Excessive Drywell Temperature
50-373/82-87/03L-0	Surveillance Frequency Exceeded
50-373/82-89/03L-0	RCIC Turbine Trip Due to Governor Binding
50-373/82-90/03L-0	Snubber Failure
50-373/8202/03L-0	Failed Vent Stack Flow Transmitter
50-373/82-08-03L-0	Failed Vent Stack Flow Transmitter

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

7. Information Notice Followup

(Closed) IN 82-13: Failures of General Electric Type HKA Relays. All safety-related GE type HFA relay coil spools have been replaced with the new Century series "TEFZEI" coil spools.

(Closed) IN 82-20: Check Valve Problems. After a review, it was determined that the check valve types mentioned in the Information Notice were not used in any safety-related system at LaSalle.

(Closed) IN 82-25: Failures of Hiller Actuators Upon Gradual Loss of Air Pressure. After a review, it was determined that no Hiller Actuators were used in any safety-related system at LaSalle.

(Closed) IN 82-36: Respirator Users Warning for Certain 5-Minute Emergency Scope Self-Contained Breathing Apparatus. After a review, it was determined that the Survivair models 0028-00 and 0028-03 respirators are not in use at LaSalle.

(Closed) IN 82-40: Deficiencies in Primary Containment Electrical Penetration Assemblies. This Information Notice documents deficiencies in primary containment electrical penetration assemblies manufactured by Bunker Ramo Corporation. The inspector reviewed the Information Notice and, after discussions with the licensee, determined that these assemblies are used in Unit 2 only. The types of deficiencies described in the Information Notice are described in a 10 CFR 50.55(e) report submitted by the licensee to the NRC on September 16, 1982. This report documents testing on these assemblies performed to date and establishes a commitment to complete additional testing by late December, 1982. This issue will be followed through the 10 CFR 50.55(e) reporting system.

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

8. Plant Trips/Safety System Challenges

At 4:17 a.m. on September 2, 1982, while starting the motor driven feed pump, Unit 1 scrambled on Intermediate Range High Flux. Leakage past the feedwater regulating valve (FRV) was being compensated for with the feedwater (FW) flushing valves. Prior to starting the pump, FW flushing was secured. The injection of cold water into the reactor resulted in a power transient and subsequent high flux scram. No safety systems were required to initiate. The licensee intends to analyze the feedwater system for a solution to the leaking FRV problem.

As a separate matter, it was found that the open condition of the FW flushing valves was in violation of Startup Procedures LGP-1 and LOP-FW-03.

According to the licensee, it has been the practice on each startup to have these valves open. While the inspectors see the need to compensate for and control the leakage through the FRV, it is imperative that procedures be adhered to. The licensee's administrative procedures do

contain methods for obtaining both temporary and permanent changes to procedures through approved channels.

Section 6.2 of LaSalle's Technical Specifications requires that procedures be adhered to. LGP-1 and LOP-FW-03 require the FW flushing valves (18 & 26) to be shut prior to and after starting the motor driven feedwater pump.

Contrary to the above, the licensee has consistently utilized the FW flushing valves to control leakage around the feedwater regulating valves. This is a failure to follow procedures and is considered an item of noncompliance (373/82-45-02).

One item of noncompliance and no deviations were identified in this area.

9. Review of Periodic and Special Reports

On August 18, 1982, the licensee submitted a Special Report to the Region III Regional Administrator documenting a failure of the LaSalle seismic monitoring instrumentation. The inspector reviewed this report and verified that the actions and reporting requirements of the Technical Specifications were complied with. The exact date the seismic monitoring instrumentation was returned to service could not be determined because of a typographical error in the report. This was discussed with the licensee and it was determined that the instrumentation was returned to service on August 10, 1982.

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

10. Independent Inspection Effort

On August 5, 1982, the NRC issued a memorandum documenting a potentially generic defect in High Pressure Coolant Injection System (HPCI) and Reactor Core Isolation Cooling System (RCIC) high steam flow sensing piping. The memorandum contained a description of an event at Browns Ferry in which both HPCI high steam flow pressure switches were rendered inoperable by one equalizing valve leaking past its seat. The problem occurred because the two pressure switches, each with its own isolation and equalizing valves, share common high and low pressure sensing lines. It was determined that the same valve and piping arrangement existed for RCIC.

The inspector reviewed the design of the High Steam Flow Sensing System for RCIC at LaSalle and determined that steam flow is monitored by two differential pressure indicating switches, each connected across its own separate mechanical flow element installed in the RCIC steam supply line. Thus, as no sensing piping is shared, the problem encountered at Browns Ferry is not applicable to RCIC at LaSalle. The LaSalle High Pressure Core Spray System (HPCS) is analogous to HPCI at Browns Ferry. HPCS is motor driven, thus, the problem with HPCI at Browns Ferry is not applicable to LaSalle.

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

11. Startup Test Witnessing

On September 23, 27, and 30, 1982, the inspector observed the performance of those portions of STP-71, startup testing of the Residual Heat Removal System (RHR) which required the residual heat removal heat exchangers to be placed in the steam condensing mode of operation. These evolutions were conducted in accordance with approved procedures, however, several problems were encountered.

On September 23, 1982, while securing from the steam condensing mode on the "A" RHR heat exchanger, the heat exchanger was thermally shocked by the excessive addition of RHR water to the shell side of the heat exchanger. The problem was caused by inadequate procedural guidance which has since been rectified. Ancillary indications led the licensee to believe that, as a result of the thermal shock, a tube leak had developed in the heat exchanger. The heat exchanger was taken out-of-service and satisfactorily leak tested on September 23.

On September 27, 1982, difficulty was encountered in establishing proper level control in the A RHR heat exchanger as it was being placed in the steam condensing mode. The operators and test engineers correctly deduced that the problem was caused by conflicting signals to the heat exchanger shell outlet valve from the heat exchanger level controller and the Reactor Core Isolation Cooling System pump suction pressure controller. This necessitated adjusting the setpoint on the latter controller to a value which would not interfere with the level controller.

As a result of previous testing in the steam condensing mode, the licensee determined that the heat exchanger heat load, as determined by RHR service water differential temperature across the heat exchanger, did not agree with the heat load as determined by steam condensation rate. On September 30, the heat exchangers were placed back in the steam condensing mode to obtain additional data. From this additional information, it was determined that incomplete mixing of the RHR service water at the heat exchanger outlet was producing conservatively erroneous temperature indications at the heat exchanger outlet. As a result, the heat balances performed using service water differential temperature across the heat exchanger were misleading. At the close of the inspection period, the licensee was still evaluating the problem. This item remains open (373/82-45-03).

On September 30, 1982, the inspector also witnessed portions of STP-13, Process Computer. The observations were limited to comparison of control rod positions as indicated on the control board and those printed out by the process computer.

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

12. Preoperational Test Witnessing

On September 30, 1982, the inspector witnessed portions of the preparation for Unit 2 Preoperational Test PT-HP-201, High Pressure Core Spray Pump Run. Those portions of the preparations observed were performed in accordance with the approved test procedure. However, the licensee was experiencing difficulties filling the High Pressure Core Spray System. As of the close of the inspection period, the system had not been completely filled.

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

13. 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.