U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-373/82-12(DPRP)

Docket No. 50-373 License No. CPPR-99

Licensee: Commonwealth Edison Company
Post Office Box 767
Chicago, IL 60690

Facility Name: LaSalle County Nuclear Station, Unit 1

Inspection At: LaSalle Site, Marseilles, IL

Inspection Conducted: February 8-26 and March 1-12, 1982

Inspectors: S. E. Shepley RC Knop for 3-23-82

N. Chrissotimos 3-23-82

L. A. Reyes RC Knop for 3-23-82

Approved By: R. D. Walker, Chief RC Knop for 3-23-82
Reactor Projects Section 1C

Inspection Summary

Inspection on February 8-26 and March 1-12, 1982 (Report No. 50-373/82-12(DPRP))
Areas Inspected: Routine, resident inspector, preoperational inspection. The inspection consisted of followup on previous inspection findings, instructions for checking oil level of Emergency Diesel Generator Governor (AITS F0520013), inspection activities preparatory to license issuance, plant walk-through/ operational status review and followup on significant event while inspector is onsite. The inspection involved a total of 126 inspector-hours by three NRC inspectors including 22 inspector-hours onsite during off-shifts.
Results: Of the five areas inspected, no items of noncompliance were identified in three areas; two items of apparent noncompliance were identified in the other two areas (control of cleanliness and housekeeping - Paragraph 5 and failure to follow the out of service procedure - Paragraph 6).

## DETAILS

1. Persons Contacted

*B. B. Stephenson, LaSalle County Station Project Manager
*R. H. Holyoak, Station Superintendent
*R. D. Kyrouac, Quality Assurance Engineer
G. J. Diederich, Station Operating Assistant Superintendent
*R. D. Bishop, Administrative and Support Services Assistant Superintendent
*J. C. Renwick, Technical Staff Supervisor
J. M. Marshall, Operating Engineer

The inspector also interviewed other licensee employees including members of the technical, operating, and construction staff, as well as certain licensee contractor employees.

*Denotes persons present at management interview conducted at the close of the inspection period.

2. Followup On Previous Inspection Findings

(Closed) Open Item (373/79-23-04): Verification that all necessary mechanical and electrical checklists are performed after each reactor outage. The inspector reviewed Procedures LGP 1-S1, "Master Startup Checklist" and LGP 1-S2, "Minimum Startup Checklist" and verified that the lastest revision of these procedures was being processed and that it included the necessary mechanical and electrical checklists.

(Closed) Unresolved Item (373/81-00-47): Followup on implementation of NUREG-0612, "Control of Heavy Loads." The requirement to complete the critical "L" path will be deferred until it is required by Technical Specification 3.9.7 as per a meeting held on March 6, 1982, between the licensee, NRR, and Region III. A letter to document the licensee's request and NRR decision is forthcoming.

(Closed) Open Item (373/81-00-27): SER Chapter 7.3.3.8, Override and Reset of Engineering Safety Features Signals. The licensee completed the necessary modifications and conducted tests to satisfy their commitments made in the Safety Evaluation Report.

(Closed) Open Item (373/81-00-04): The main steam line flow instrumentation lines were visually examined and a line walkdown was performed on March 3, 1982, by the inspector. The cognizant Commonwealth Engineer and Sargent and Lundy Design Engineer accompanied the inspector. The vibration supports in place appear to be adequate. All other aspects of the requirements of Paragraph 3.9.2.1 of the Safety Evaluation Report (SER) were reviewed and closed via Open Items (373/81-38-03), (373/81-38-04), and (373/81-38-05).

(Closed) Open Item (373/81-36-05): Channel Box Deflection Verification Program. The inspector reviewed the licensee's Channel Box Deflection Program against (GE) the NSSS Vendor recommendations and NRR correspondence. The licensee program adequately reflects the GE and NRR recommendations.

(Open) Unresolved Item (373/81-00-28): Install Class 1E circuitry that will realign the Reactor Core Isolation Cooling (RCIC) suction from the Condensate Storage Tank (CST) per TMI Task Action Plan Requirement II.K.3, Item 22. This item was closed in Inspection Report No. 50-373/81-40(DPRP) because the licensee had performed this modification; however, subsequent review has divulged that one relay in the control circuit is not qualified and the item remains open pending qualification of the circuit. This item is not required to be closed until the first refueling outage after initial startup.

(Closed) Unresolved Item (373/81-00-82): Complete work necessary to implement symptomatic emergency operating procedures required by TMI Task Action Plan Item I.C.8. The inspector reviewed the following items which remained opened from Inspection Report No. 50-373/81-40(DPRP):

a. The primary containment pressure limit has been inserted in Procedure LGA-05, Revision 4, dated January 7, 1982, as required.

b. Procedure LGA-05, Revision 4, dated January 7, 1982, has been modified to include a provision to continue flooding the reactor vessel until a differential pressure (DP) of 90 psid above suppression pool pressure is obtained as required.

c. Procedure LGA-04, Revision 4, dated January 10, 1982, has been modified to initiate the steam cooling operation at -236" on the fuel zone level indication as required.

d. The licensee has provided a governing book in the control room with all necessary support procedures and documents for the implementation of the symptomatic emergency operating procedures as required.

The closing of the above issues concludes the review of TMI Task Action Plan Item I.C.8 and closes this open item.

(Open) Unresolved Item (373/81-15-11): Followup on TMI Task Action Item I.D.1, Control Room Design Review Category A deficiencies to be corrected prior to fuel loading.

In Inspection Reports No. 50-373/81-15(DPRP) and No. 50-373/81-40(DPRP), the inspector closed all items in this category except the following:

Item A.1.c. (A.1.(b)(8))*
Item A.1.d. (A.1.(b)(9))*
Item A.2.b. (A.2.(b)(2))*
Item A.3.a. (A.3.(b)(1))*

Item A.4.i. (A.4.(b)(9))*
Item A.5.b. (A.5.(b)(2))*
Item A.6.a. (A.6.(b)(1))*
Item A.7.a. (A.7.(b)(1)(d))*
Item A.7.h. (A.7.(b)(5)(c))*
Item A.7.k. (A.7.(b)(8)(b))*
Item A.7.1. (A.7.(b)(8)(c))*
Item A.7.m. (A.7.(b)(9)(b)(c))*
Item A.9.b. (A.9.(b)(2))*

The inspector during this inspection period, reviewed the following items and found them adequate:

Item A.1.c. (A.1.(b)(8))*
Item A.1.d. (A.1.(b)(9))*
Item A.2.b. (A.2.(b)(2))*
Item A.3.a. (A.3.(b)(1))*
Item A.4.i. (A.4.(b)(9))*
Item A.5.b. (A.5.(b)(2))*
Item A.7.a. (A.7.(b)(1)(d))*
Item A.7.h. (A.7.(b)(5)(c))*
Item A.7.k. (A.7.(b)(8)(b))*
Item A.7.1. (A.7.(b)(8)(c))*
Item A.9.b. (A.9.(b)(2))*

The following Category A deficiencies remain to be corrected prior to initial criticality.

Item A.6.a. (A.6.(b)(1))*
Item A.7.m. (A.7.(b)(9)(b)(c))*

*Indicates Control Room Design Review of October 23, 1980, identifying number.

3. Instructions For Checking Oil Level Of Diesel Generator Governor (AITS F0520013)

The inspector reviewed licensees' Procedures LOS-DG-M2, "1A(2A) Diesel Generator Operability Test and LOS-DG-M1, "0" Diesel Generator Operability Test. These procedures are used to conduct the monthly surveillance testing on the Diesel Generators. Both procedures require the operator to verify the oil level in the Diesel Generator Governor. The procedure requirement is in agreement with the manufacturer recommendations.

No items of noncompliance or deviations were identified.

4. Inspection Activities Preparatory To License Issuance (Status of Licensee Procedures and Preoperational Testing Program)

a. Operating, Maintenance, Surveillance, Abnormal and Emergency Procedure Status

The licensee and NRC have effectively completed their review of these procedures.

b. Preoperational Testing Program Status

The licensee has a total of 99 Preoperational Tests/Systems Demonstrations required by the FSAR for Unit 1 fuel load or low power operations of which 89 are specific to Unit 1 and the remaining 10 are specific to Unit 2. The licensee reported that 99 of these systems have been turned over for preoperational testing, that 97 of these Preoperational Tests and Systems Demonstrations have been started, that 91 Preoperational Tests and Systems Demonstrations have been completed, and the program is 99% complete at this time. The licensee stated that final Preoperational Test or System Demonstration results for 76 tests of the 99 required by the NRC are ready for NRC review, i.e., the entire test is complete and the results have been reviewed and accepted by the licensee. These 76 tests are:

PT-VO-101, "Off Gas Filter Building Heating, Ventilation, and Air Conditioning System"
PT-VP-101, "Primary Containment Vent and Purge System"
PT-VP-104, "Primary Containment Chilled Water System"
PT-VY-102, "Core Standby Cooling System Equipment Ventilation"
SD-WR-101, "Reactor Building Closed Cooling Water System"
SD-WS-101, "Service Water System"
SD-WX-101, "Solid Radwaste System"
SD-CD-101, "Condensate and Condensate Booster System"
SD-CD-102, "Condenser and Auxiliary Equipment System"
SD-CW-101, "Circulating Water and Auxiliary Equipment System"
SD-CY-101, "Cycled Condensate System"
SD-EH-101A, "Turbine EHC"
SD-EH-101B, "Turbine Supervisory Panel"
SD-FW-101, "Reactor Feedwater"
SD-FW-102, "Feedwater Control System"
SD-HD-101A, "Heater Drains"
SD-HD-101B, "Moisture Separator/Reheater"
SD-WE-101A, "Waste Collector"
SD-WE-101C, "Laundry Equipment and Floor Drain Reprocessing and Disposal System"
SD-WE-101E, "Equipment Floor Drains"
PT-AP-201, "Unit 2 AC Distribution"
PT-AP-202, "Unit 2 DC Distribution"
PT-DO-201, "Unit 2 Diesel Oil System"
PT-AP-101, "Unit 1 AC Distribution"
PT-A-101, "Area Radiation Monitoring Equipment"

SD-CX-102, "Rod Worth Minimizer"
PT-DO-101, "Unit 1 Diesel Oil System"
PT-FC-101, "Fuel Pool Cooling System"
SD-FC-101, "Fuel Pool Cooling System"
PT-HC-101, "Reactor Building Crane"
PT-HP-101, "High Pressure Core Spray System"
PT-LD-101, "Leak Detection System"
PT-LP-101, "Low Pressure Core Spray System"
PT-NB-101, "Nuclear Boiler"
PT-NR-101A, "Source Range Monitor"
PT-NR-101B, "Intermediate Range Monitor"
PT-NR-101C, "Power Range Neutron Monitors"
SD-PS-101, "Process Sampling System"
PT-PV-101, "Reactor Vessel Internals Vibration Monitoring"
PT-RD-101A, "Rod Drive COntrol and Rod Position Indication System"
PT-RD-102, "Control Rod Drive Hydraulic"
PT-RI-101, "Reactor Core Isolation Cooling System"
SD-SA-101, "Service and Instrument Air System"
PT-SC-101, "Standby Liquid Control System"
PT-VD-101, "Diesel Generator Ventilation System"
PT-VJ-101, "Machine Shop Heating, Ventilation, and Air Conditioning System"
PT-VL-101, "Laboratory, Heating, Ventilation, and Air Conditioning System"
PT-VD-201, "Unit 2 Diesel Generator Ventilation System"
PT-VP-202, "Unit 2 Post LOCA Hydrogen Control System"
PT-VY-201, "Unit 2 Core Standby Cooling System Equipment Cooling"
PT-DG-101A, "Diesel Generator 0 and 1A"
PT-DG-101B, "Diesel Generator 1B"
PT-FR-101, "Fuel Handling and Vessel Servicing Equipment"
PT-MS-101B, "MSIV and Instrumentation"
PT-MS-101C, "Mainsteam Safety Relief Valves and ADS"
PT-PC-103, "Primary Containment Isolation"
PT-RD-101B, "Rod Sequence Control System"
SD-RT-101, "Reactor Water Cleanup"
PT-VY-101, "CSCS Equipment Cooling"
SD-WE-101B, "Floor Drain Reprocessing"
SD-WE-101D, "Chemical Waste"
PT-DG-201A, "Diesel Generator 2A and Auxiliaries"
PT-AP-102, "DC Distribution System"
PT-CM-102, "Post Accident Primary Containment Monitoring System"
PT-MS-101A, "Main Steam Leakage Control"
PT-RH-101, "Residual Heat Removal"
PT-RP-101, "Reactor Protection System"
PT-RP-102, "Remote Shutdown Panel"
PT-RR-101, "Reactor Recirculation"
PT-SI-101, "Seismic Instrumentation"
PT-VG-101, "Standby Gas Treatment System"
PT-VP-102, "Post LOCA Hydrogen Control System"
PT-VP-103, "Primary Containment Heating, Ventilation, and Air Conditioning System"
PT-VR-101, "Reactor Building Heating, Ventilation, and Air Conditioning System"

PT-VW-101, "Radwaste Area Heating, Ventilation, and Air Conditioning System"
SD-CM-101, "High Range Containment Radiation Monitors"

c. Deficiency Status

The licensee is currently listing 853 Station Operations deficiencies and 1365 Station Construction deficiencies as outstanding items on the 99 Preoperational Tests/System Demonstrations required by the licensee. The licensee has segregated these deficiencies into those that will impact fuel load and those that will not. The licensee has reviewed approximately 2024 of these deficiencies for segregation and preliminary assessment is that 417 of those reviewed would need to be cleared prior to fuel load. The inspector will continue to review this matter.

No items of noncompliance were identified in this area.

5. Plant Walk-through/Operational Status Review

The inspector conducted walk-throughs and reviewed the plant operations status including examinations of control room log books, routine patrol sheets, shift engineers log books, equipment outage logs, special operating orders, and jumper tagout logs for the period of February 8 through March 12, 1982. The inspector observed the operations status during three off-shifts during the same period as above. The inspector also made visual observations of the routine surveillance, functional, and preoperational tests in progress during this period. This review was conducted to verify that facility operations were in conformance with the requirements established under 10 CFR and administrative procedures. The inspector observed shift turnovers to verify that plant component status and problem areas were being turned over to a relieving shift. The inspector conducted tours of Unit 1 and 2 reactor, auxiliary, and turbine buildings throughout the period and noted the status of construction and plant housekeeping/cleanliness. With respect to housekeeping/cleanliness, the inspector made a tour of the drywell and found that the general cleanliness of the drywell was very much improved over last month and that the drywell is judged clean enough for operation.

While conducting a tour of the plant the inspector discovered that housekeeping in the Emergency Diesel Rooms and Battery Rooms had seriously deteriorated. The following was found:

Battery Rooms

a. Battery Room 125V, 710 level:

1. Cigarette butt on floor
2. Trash and paper stuffed in support post and in general area

b. Battery Room 250V, 710 level:

1. Trash and paper in general area
2. Large metal table being stored in Battery Room

Diesel Generator Rooms

a. "0" DG control panel (energized)

1. Many light bulbs, nuts, bolts, washers, cable ties, plastic, paper

b. "B" DG control panel (energized)

1. Large metal box
2. Glass jars
3. Light bulbs, nuts, bolts, washers

c. In all three DG Rooms

1. Paper, trash, cigarette butts, oil soaked rags, pop cans

d. In DG day tank rooms

1. Wooden ladders
2. Open tub of oil
3. Testing equipment
4. Rags and paper

e. In DG room cable tray 156A1GP

1. Paint rags
2. Bucket containing paint (open)

f. Unit 2 DG 2B control panel (energized)

1. Large quantities of stored wire, parts, paper
2. Light bulbs, nuts, bolts, washers, fuses

Unit 1 Reactor Building

a. Cable tray 1035A 1BP:

1. Blueprints on cables

The above examples are contrary to Commonwealth Edison Company Quality Assurance Program, Regulatory Guides 1.38 and 1.39 and ANSI 45.2.2. This is considered an item of noncompliance (373/82-12-01).

The licensee must respond to this item of noncompliance with commitments which address housekeeping surveillances that assure cleanliness safety-related areas are adequate to prevent a fire protection hazard. The surveillances must be established and functional by initial criticality.

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

6. Followup On Significant Event That Occurs While Inspector Is Onsite

On February 15, 1982, construction crafts began the disassembly of the RHR Suction Cooling Outboard Isolation Valve 1E12-F008 without the authorization of the LSCS startup engineer. The startup engineer was unaware of the work in process on valve 1E12-F008, therefore he had not reviewed the tagging of the isolation points for the valve outage.

On February 17, 1982, at approximately 4:15 p.m., 5,000 gallons of reactor water were discharged to the Reactor Building through valve 1E12-F008 when the Suction Cooling Inboard Isolation Valve 1E12-F009 was open. Valve 1E12-F009 was an untagged isolation point due to an error on the outage checklist prepared by the shift foreman.

The construction craft supervisor in charge of the work had not properly walked down the outage for valve 1E12-F008 in that work was authorized to proceed in a valve tagged as an isolation point and with isolation point valve 1E12-F009 untagged.

LaSalle County Station Equipment Out Of Service Procedure LAP-900-4 and Construction Instruction 1-2-G-1 require that the supervisor in charge of the work has the responsibility to assure that out of service cards have been placed correctly and that the equipment is safe to work.

This event is considered a further example of problems identified in a noncompliance documented in Inspection Reports No. 50-373/80-05(DPRP) and No. 50-373/81-06(DPRP). The inspectors are concerned that this lack of control over the activities of construction personnel will reduce the safety of operations once Unit 1 becomes operational. This is considered an item of noncompliance (373/82-12-02). All corrective action associated with the licensee's response to this item of noncompliance must be established and functioning by initial fuel load.

No other items of noncompliance or deviations were identified.

7. Management Interview

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