U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-373/80-45

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

Licensee: Commonwealth Edison Company
P. O. Box 767
Chicago, IL 60690

Facility Name: LaSalle County Nuclear Power Station, Unit 1

Inspection At: LaSalle Site, Seneca, IL

Inspection Conducted: October 27-28, 1980

Inspectors: for W. L. Fisher
D. E. Miller 11-12-80

L. J. Hueter 11-12-80

P. C. Lovendale 11/12/80

Approved By: W. L. Fisher, Chief 11-12-80
Fuel Facility Projects and
Radiation Support Section

Inspection Summary

Inspection on October 27-28, 1980 (Report No. 50-373/80-45)
Areas Inspected: Routine, unannounced preoperational inspection of the radiation protection program, including organizational changes and Rad/Chem Technician training. The inspection involved 46 inspector-hours onsite by three NRC inspectors.
Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

*R. Holyoak, Superintendent
*R. Bishop, Assistant Superintendent, Administrative and Support Services
*F. Lawless, Rad/Chem Supervisor
*J. McDonald, Training Supervisor
T. Hodges, Rad/Chem Foreman
B. Nelson, Rad/Chem Foreman
C. Schroeder, Technical Staff Supervisor
*R. Walker, NRC Senior Resident

The inspectors also talked with several technicians during the inspection.

*Denotes those present at the exit interview.

2. General

This inspection, which began at 10:00 a.m. on October 27, 1980, was conducted to examine training being received by Rad/Chem Technicians (RCTs). During the inspection, the inspectors met with individual RCTs and twice met with several RCTs as a group. The inspectors had been informed before the inspection that several RCTs had concerns about the training.

3. Organization

Since the last inspection (50-373/80-33), the following Rad/Chem related organizational changes have been made:

a. R. Bishop, former Technical Staff Supervisor, has been promoted to Assistant Superintendent, Administrative and Support Services.

b. F. Lawless, Rad/Chem Supervisor, now reports to the Assistant Superintendent, Administrative and Support Services instead of to the Technical Staff Supervisor.

4. Rad/Chem Technician (RCT) Concerns

During meetings with the inspectors, several RCTs expressed concern about their ability to satisfactorily perform RCT functions, due to little or no hands-on training. They stated that the formal training program was generally good in other aspects. The inspectors' review of the training provided is summarized in Paragraph 5.

Section 13.1.3.2 of the licensee's FSAR lists the qualifications required for RCTs in training, health physics coverage during backshifts, and RCTs in responsible positions. The licensee has several RCTs,

supervisors, and engineering assistants who are qualified as technicians in accordance with ANSI N18.1-1971. These individuals could fulfill the requirements for technicians in responsible positions and backshift health physics coverage at fuel load. Most RCTs, however, are not currently qualified as technicians.

The RCT concerns about lack of hands-on experience were discussed with licensee management during the inspection and at the exit interview. The licensee acknowledged that RCTs who have no significant previous experience would benefit from hands-on training. The inspectors stated that the qualifications of persons assigned to fill the FSAR required positions would be reviewed closely before fuel load.

5. Rad/Chem Technician Training

5.1 Formal

The licensee has a total of 19 Rad/Chem Technicians (RCTs). Eleven have been employed as RCTs by the licensee for two or more years. The other eight have been employed as RCTs in recent months.

The eleven technicians comprise part of a group of fourteen technicians who received technician training about two years ago. (Two technicians have since been promoted to other positions; one has terminated). The training consisted of: (1) a formal five-week plant systems description course; (2) a formal sixteen-week course covering basic nuclear theory, radiation protection theory and practices, instrumentation and equipment, and procedures for both radiation protection and chemistry; and (3) one to two week training in practical applications, including some actual surveys at an operating nuclear power plant (Dresden). A review of the outline of material presented in the formal sixteen-week course showed it to be quite comprehensive except for training on equipment which had not been received and procedures which had not been prepared.

To provide refresher training, as well as training not previously provided (new equipment and procedures) for those formerly trained, the licensee has developed and implemented a qualification card program described in Paragraph 5.2. This program is also incorporated into the formal sixteen-week training course for the eight new RCTs now in training.

The licensee plans to develop and implement an annual retraining course for RCTs by spring 1981.

5.2 Qualification Card Program

The licensee has developed for RCTs a qualification card program which outlines and documents training received, self-study completed, or practical factors accomplished. An RCT who has obtained

the required knowledge of a subject area receives an oral exam. The instructor indicates successful completion by signing the individual's qualification card. This program presently is used as a retraining program for previously trained RCTs and as part of initial training for newly hired RCTs.

Question and answer sheets are used during training in each subject area. These same questions are asked during the oral exams. Although the question and answer sheets may be useful training tools, their use during the oral exam compromises the intent of the exam and may not adequately measure the student's understanding.

Section 4.4.7.2 of ANS 3.1 Draft Revision December 6, 1979, "Standard for Qualification and Training of Personnel for Nuclear Power Plants" requires that instructors have special education and experience consistent with the materials being presented. Some of the instructors used by the licensee to present lectures and oral exams under the qualification card program do not meet this criterion. Although the licensee is not required to meet ANS 3.1 requirements, its implementation would enhance the RCT training program. This matter will be further reviewed during future inspections.

6. Exit Interview

The inspectors met with licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection on October 28, 1980.

The following matters were discussed:

a. The purpose and scope of the inspection.

b. RCT concerns about minimal hands-on training (Paragraphs 2 and 4). The licensee stated that the matter would be reviewed.

c. The need to ensure that qualified persons are available to fill FSAR required Rad/Chem positions at fuel load. (Paragraph 4)

d. Qualifications of instructors who train RCTs. (Paragraph 5.2) The licensee stated that the matter would be reviewed.