

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No: 50-295/89040; 50-304/89036

Docket Nos.: 50-295; 50-304

Licenses No. DPR-39; DPR-48  
EA 89-255

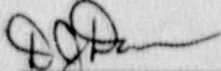
Licensee: Commonwealth Edison Company  
Post Office Box 767  
Chicago, IL 60690

Facility Name: Zion Generating Station - Units 1 & 2

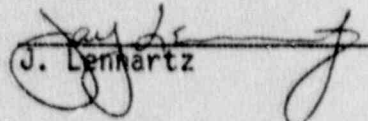
Inspection At: Zion, IL 60099

Inspection Conducted: November 21, 1989, December 13-15, 1989, and January 5, 1990.

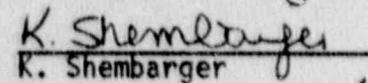
Inspectors:

  
D. Damon

1/10/90  
Date

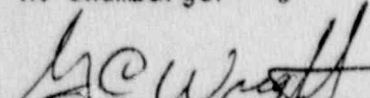
  
J. Lemhartz

1/9/90  
Date

  
K. Shembarger  
R. Shembarger

1/10/90  
Date

Approved By:

  
G. C. Wright, Chief  
Operations Branch

1/10/90  
Date

Inspection Summary

Inspection on November 21, 1989, December 13-15, 1989, and January 5, 1990  
(Reports No. 50-304/89040; 50-304/89036)

Areas Inspected: Reactive unannounced inspection follow up on event LER-89-16-00 for Zion Generating Station Unit 1, in which a licensed senior reactor operator limited to fuel handling supervised a core off-load during a time when his license failed to meet the requirements as described in 10 CFR 55.53(e). The areas covered included review of licensee programs and controls to preclude similar occurrences as well as licensee actions to identify and correct any root cause for the event. The inspection was conducted in accordance with Inspection Procedure 92700.

Results: Four apparent violations were identified: (1) a senior operator limited to fuel handling performed licensed duties during a time when his

license failed to meet the requirements as described in 10 CFR 55.53(e) regarding maintaining active status of license; (2) the licensee permitted manipulation of the controls by operators whose licenses failed to meet the requirements as described in 10 CFR 55.53(h) regarding completion of a requalification program; (3) a senior operator was responsible for directing the licensed activities of licensed operators during a time when his license failed to meet the requirements as described in 10 CFR 55.53(h) regarding completion of a requalification program; (4) the licensee permitted manipulation of the controls by operators whose licenses failed to meet the requirements as described in 10 CFR 55.53(i) regarding biennial medical examinations. These apparent violations are discussed in Sections 3 and 4 of this report.

In addition to the above apparent violations, the inspectors also identified the following concerns regarding control and tracking of individual Part 55 licenses:

1. Licensee corrective action for event LER 295/89-16-00 was limited to precluding recurrence of this event for SRO's with limited SRO licenses. This action would not prevent similar occurrences in other licensed positions.
2. No formal measures exist to ensure that all licensed operators meet all the conditions of their licenses as stated in 10 CFR 55.53.

## DETAILS

### 1. Persons Contacted

#### Zion Nuclear Power Station

- \*T. P. Joyce, Zion Station Manager
- \*C. Schultz, Quality Control
- \*P. LeBlond, Assistant Superintendent, Operations
- \*R. J. Budowte, Services Director
- \*R. D. Thornton, Operator Training
- +\*T. Saksefski, Regulatory Assurance
- \*H. Logaras, Operator Training
- + G. Tryzna, Training Supervisor
- K. Petersen, Operator Training
- D. Kent, Training Administrative Assistant
- D. Egger, Operations Scheduler
- L. Thorsen, Regulatory Assurance, Fuel Handling Supervisor
- T. Reick, Technical Superintendent
- M. Carnahan, Operations Engineer
- T. Koleno, Operator Training
- T. Egger, Shift Supervisor
- G. Armstrong, Shift Supervisor
- W. Demo, Operating Engineer

#### U. S. Nuclear Regulatory Commission (US NRC)

- \*R. J. Leemon, Resident Inspector, Zion Station
- J. D. Smith, Senior Resident Inspector, Zion Station

\*Denotes those personnel in attendance at the exit interview on December 15, 1989.

+Denotes those personnel in attendance at the exit interview on January 5, 1990

### 2. Purpose of Inspection

The purpose of this inspection was to follow up on LER 89-16-00 at Zion Generating Station Unit 1 to review the licensee's formal program controls that would preclude similar events from occurring. In addition, the inspection was to verify that LER 89-16-00 was an isolated case and that other licensed individuals were not performing licensed duties during a time when they failed to meet the conditions of their license as stated in 10 CFR 55.53.

This was accomplished by performing a review of the following records for randomly selected individual licenses: (1) attendance at scheduled requalification training sessions during the period from January 1 through December 8, 1989, including subsequent requalification examination results for 20 individual licenses; (2) Control Room Shift Engineer (SE)/Shift Foreman (SF) and Nuclear Station Operator (NSO) logs to determine the amount of time

spent on shift performing licensed duties during the period from January 1 to December 11, 1989 for 13 individual licenses; and (3) medical examination dates for the last 2 examinations received for 21 individual licenses. Control Room SE/SF and NSO logs were also reviewed for four individuals during the time period that the individual licensees initially failed the NRC administered requalification examination on September 15, 1989, until they were notified of subsequent successful completion of the examination on November 17, 1989. The inspectors also conducted a review of the licensee's system for tracking individual Part 55 license condition requirements as well as Training Instruction (TI) 202, Licensed Operator Retraining/Requalification Program. In addition, interviews with Training Department personnel and licensed operators were conducted.

3. Zion Generating Power Station LER 89-16-00 Summary:

Zion Generating Station Unit 3 LER 89-16-00 involved a licensed Senior Reactor Operator (SRO) limited to Fuel Handling (SROL) who assumed fuel handling supervisor duties during the period of September 19 thru September 21, 1989. The duties assumed by the SROL required an active license issued pursuant to 10 CFR 55. On October 16, 1989, the individual licensee realized that he had not met the condition of his license as stated in 10 CFR 55.53 Paragraph (e) at the time licensed duties were performed.

10 CFR 50.54m(2)(iv) states, in part, as a condition of the facility operating license, that the licensee shall have a person holding a senior operator license limited to fuel handling (SROL) present during fuel transfer to directly supervise the activity. 10 CFR 55.53 (e) states, in part, "If a licensee has not been actively performing the functions of an operator or senior operator, the licensee may not resume activities authorized by a license issued under this part except as permitted by paragraph (f) of this Section." 10 CFR 55.53(f) states, in part, "If Paragraph (e) of this section is not met, before resumption of functions authorized by a license issued under this part, an authorized representative of the facility licensee shall certify the following: 1) that the qualifications and status of the license are current and valid; and 2) that the licensee has completed a minimum of 40 hours of shift functions under the direction of an operator or senior operator as appropriate and in the position to which the individual will be assigned. . . . for senior operators limited to fuel handling under Paragraph (c) of this section, one shift must have been completed."

The SROL was assigned fuel handling supervisor duties without completing one shift of licensed duties under the instruction of an SRO holding an active license. Assigning an SROL fuel handling supervisor duties during a time when his license failed to meet the requirements of 10 CFR 55.53 is an apparent violation of 10 CFR 50.54(2)(iv). (295/39040-01; 304/89063-01)

The inspectors found no evidence that the individual licensee failed to meet any other license conditions during this same period.

The inspectors found that the corrective actions taken by the facility were limited to SROs assigned to fuel handling duties. The corrective actions taken consisted of adding a caution and a signature requirement to the fuel handling procedures to ensure that the Fuel Handling Supervisor's license is active prior to any fuel movement. This event was identified by the facility in LER 50-295/89-016-00.

#### 4. Results

##### a. Attendance at Scheduled Requalification Training

10 CFR 50.54(i) states, as a condition of the facility operating license, in part, ". . . the licensee may not permit the manipulation of the controls of any facility by anyone who is not a licensed operator or senior operator as provided in Part 55 of this chapter." 10 CFR 55.53(h) states, as a condition of the individual license, "The licensee shall complete a requalification program as described by 55.59."

The inspection identified that 12 of the 20 individual licensee records reviewed had failed to attend all scheduled requalification training sessions which are required by 10 CFR 55.59(c)(2). The facility records provided no evidence that these individuals made up all of the missed lectures. Failing to attend requalification lectures precludes successful completion of the requalification program. Of these 12, 6 individual licensees who were normally assigned licensed duties in the control room had the following requalification training attendance records:

- One Shift Engineer attended only 2 of the 11 scheduled sessions.
- One Shift Engineer attended only 7 of the 11 scheduled sessions.
- One Shift Foreman attended 10 of the 11 scheduled sessions.
- One NSO attended only 7 of the 11 scheduled sessions.
- Two NSOs attended 10 of the 11 scheduled sessions.

Assigning these six individual licensees licensed duties in the control room which would permit manipulation of the facility controls during the time when their licenses failed to meet the condition of the licenses as stated in 10 CFR 55.53(h) is an apparent violation of 10 CFR 50.54(i).

The inspectors found no evidence of any formal administrative requirement on the part of the licensee which would mandate attendance at requalification training, nor was there any evidence of a program requiring making up missed lectures. Additionally, there were no formal controls in place which would preclude a licensed operator who had failed to attend all required requalification training from being assigned licensed duties.

b. Control Room Logs

The Control Room SE/SF and NSO logs were reviewed for four individuals who had been informed of their failure to satisfactorily complete the NRC administered requalification examination during the week of September 10, 1989. The facility was notified of these failures by the NRC and agreed not to return these individuals to licensed duties prior to their reexamination by the NRC. The individuals were reexamined and successfully completed the NRC administered requalification examination during the week of November 12, 1989.

10 CFR 50.54(1) states, as a condition of the facility operating license, in part, that the licensee shall designate individuals licensed as senior operators pursuant to Part 55 of this chapter to be responsible for directing the licensed activities of licensed operators. 10 CFR 55.53(h) states, as a condition of the individual license, "The licensee shall complete a requalification program as described by 55.59." 10 CFR 55.59(a)(2) states, that each licensee shall "pass a comprehensive requalification written examination and an annual operating test."

The inspectors identified that one SRO who failed the NRC administered requalification examination during the week of September 10, 1989, was logged onto the Control Room SE/SF logs as one of three SF for one shift on September 24, 1989. This was prior to the date of successful completion of the second NRC administered requalification examination. This is an apparent violation of 10 CFR 50.54(1). (295/89040-03; 304/89036-03)

c. Medical Examinations

10 CFR 50.54(i) states, as a condition of the facility operating license, in part, ". . . the licensee may not permit the manipulation of the controls of any facility by anyone who is not a licensed operator or senior operator as provided in Part 55 of this chapter." 10 CFR 55.53 (i) states, as a condition of the individual license, "The licensee shall have a biennial medical examination."

The inspection identified that 14 of the 21 individual licensee records reviewed had failed to have a medical examination within the required 2 year period of their license. Of these 14, 8 had medical examinations that were administered at least 30 days after the required date with 1 medical examination administered 61 days beyond the required date. Additionally, six individuals were assigned licensed duties in the control room which would permit manipulation of the facility controls during a time period when their license did not meet the required conditions as stated in 10 CFR 55.53(i). This is an apparent violation of 10 CFR 50.54(i) (295/89040-04; 304/89036-04). It is noted that the results of medicals, when given, did not indicate any conditions not previously known.

The licensees system for tracking medical examination requirements is an informal system which is maintained by the Training Administrative Assistant. There is no formal administrative requirement in place, and the informal method presently utilized is inadequate as evidenced by the above mentioned 14 of 21 individual licensees who exceeded the 2 year requirement for medical examinations. This apparent violation is the direct result of the lack of formal administrative controls governing 10 CFR 55.53(i) on the part of the licensee.

d. Training Instructions

The review of TI-202, Licensed Operator Retraining/Requalification Program, provided evidence that this Training Instruction contains guidance for returning operators to licensed duties when the operator was removed from licensed duties for observed deficiencies. Training Department personnel consider an operator with an inactive license to have a "Duty Performance Deficiency," and thus is subject to the requirements of this instruction prior to resuming licensed duties. However, the requirements for returning an operator with an inactive license to active status were not specifically addressed in this instruction.

e. Personnel Interviews

Interviews with several licensed operators revealed that the operators assume that the status of all Part 55 licenses is tracked by the Training Department. Interviews with Training Department personnel revealed that the Training Department tracks only the status of individuals assigned to the Training Department for annual, remedial, or upgrade training. Once the individual returns to the Operations Department, the Part 55 license is no longer tracked. Interviews with Shift Supervisors revealed that when an individual is assigned to shift for purposes of reactivating a license, the Shift Supervisor is often unaware that the individual has an inactive license and is not allowed to perform licensed duties without being accompanied by an operator or senior operator with an active license. The inspectors found no evidence of formal administrative controls for preventing a licensed operator with an inactive license from performing licensed duties on shift in the Control Room.

The inspectors found that the Operations Scheduler, in an informal agreement with union personnel, tracks the status of licensed union members which include the NSOs. The Scheduler assures that the NSOs will be scheduled for the minimum shift time required by 10 CFR 55 during each calendar quarter in order to maintain part 55 licenses in an active status. Non-union licensed operators are not tracked by the Operations Scheduler. It appears that the status of active versus inactive SRO licenses is tracked largely by corporate memory or

relies on the individual Part 55 licensee to notify management of an inactive license prior to resuming licensed duties. There is no formal administrative procedure to govern scheduling which would ensure that each licensed individual would maintain his/her license active or to ensure that the requirements of 10 CFR 55.53(f) are met prior to resumption of licensed duties. This lack of formal administrative controls governing 10 CFR 55.53(e) on the part of the licensee relates directly to the before mentioned LER (See Section 3).

## 5. Summary

As noted in Sections 3 and 4 of this report, there are four apparent violations of various paragraphs of 10 CFR 50.54. These apparent violations are the direct result of the lack of formal administrative controls and tracking for Part 55 licenses. In addition, two concerns were identified by the inspectors regarding (1) the lack of in depth corrective actions taken by the licensee for LER 295/89-16-00, and (2) lack of formal administrative controls to ensure individual licensees are satisfying the conditions of their license as stated in 10 CFR 55.53.

During the inspection, the following positive attributes were identified:

- ° Procedure FHI-00, Fuel Handling Administrative Controls, was revised to add a caution stating that licensed operators supervising fuel movement must have an active license.
- ° Procedure FHI-33, Fuel Shuffle, was revised to include a signature on the check-off sheet to ensure that the Fuel Handling Supervisor has an active license. This check-off sheet must be completed prior to fuel movement.

## 6. Exit Interview

The inspectors met with the licensee representatives denoted in Section 1 on December 15, 1989 and January 5, 1990. The inspectors summarized the purpose, scope, and findings of the inspection, and the likely information content of the inspection report. The licensee acknowledged this information and did not identify any proprietary information.