

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-254/85010(DRSS); 50-265/85011(DRSS)

Docket Nos. 50-254; 50-265

Licenses No. DPR-29; DPR-30

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

Facility Name: Quad-Cities Nuclear Generating Station, Units 1 and 2

Inspection At: Quad-Cities Station, Cordova, IL

Inspectors: *G. A. Brown*
G. A. Brown

7/22/85
Date

J. P. Patterson
J. P. Patterson

July 19, 1985
Date

Approved By: *M. P. Phillips*
M. P. Phillips, Chief
Emergency Preparedness Section

7/22/85
Date

W. D. Shaffer
C. J. Paparella, Chief
Emergency Preparedness and
Radiological Safety Branch

7-23-85
Date

Inspection Summary

Inspection on June 24-28, 1985 (Reports No. 50-254/85010(DRSS); 50-264/85011(DRSS))

Areas Inspected Routine announced inspection of the following areas of the emergency preparedness program: licensee actions on previously-identified items; activation of the emergency plan; changes to the emergency preparedness program; knowledge and performance of duties (training); licensee audits; and maintenance of emergency preparedness. The inspection involved 80 inspector-hours onsite by two NRC inspectors.

Results: Of the six areas inspected, no apparent items of noncompliance or deviations were identified in five areas; one apparent item of noncompliance (failure to provide emergency response training to two Maintenance Directors) was identified in one area.

8507310157 850725
PDR ADOCK 05000254
G PDR

DETAILS

1. Persons Contacted

*N. Kalivianakis, Station Manager
*T. Tamlyn, Services Superintendent
*J. Neal, Training Supervisor
*B. Strub, Compliance Coordinator
*D. Gibson, Quality Assurance Supervisor
*J. Schnitzmeyer, Technical Staff Engineer
R. Robey, Assistant Superintendent Operations
J. Sirovy, Radiation Chemistry Supervisor
H. Lihou, Technical Staff Supervisor
R. Buss, Procedures Coordinator
R. Keister, Procedures Clerk
W. Graham, Training Coordinator
H. Toren, Training Instructor
D. VanPelt, Assistant Superintendent Maintenance
T. Rushing, Mechanical Engineer
T. Crippes, Mechanical Engineer
D. Hannum, Technical Staff Engineer
R. Braddy, Training Instructor
D. Essary, Licensing Retraining Instructor
R. Kelly, Training Instructor
T. Schares, Maintenance Training Group Leader
N. Griser, Quality Assurance Auditor
C. Norwood, Quality Assurance Auditor
R. Carson, Lead Health Physicist
J. Dishman, Rad/Chem Foreman
R. Bielema, Rad/Chem Foreman
R. Venci, Health Physicist
J. Fish, Master Mechanic
J. Swales, Operating Engineer
D. Craddick, Master Electrician

*Indicates those attending the June 28, 1985 exit interview.

2. Licensee Actions on Previously-Identified Items

(Closed) Open Items No. 254/83010-01 and No. 265/83010-01: Develop and implement system for distribution of controlled copies of corporate plans and procedures to ensure that all controlled copies are current. Receivers of controlled plans and procedures are now given six months after issue to acknowledge receipt. After that time they are sent a "First Notice." If no acknowledgement is received after thirty days from the "First Notice," a personal contact is made. Additionally, any who exceed the six month period will be placed in a three-month category whereby they will thereafter be sent the "First Notice" after only three months. This item is considered closed.

(Closed) Open Items No. 254/83026-01 and No. 265/83025-01: Failure to submit corporate procedure revisions to NRC Region and Headquarters within thirty days. The licensee now maintains one master log for the distribution of corporate emergency plan implementing procedure revisions. All procedures are distributed to those listed in this log within 30 days of the procedure's issuance, including the NRC offices. The licensee has submitted all subsequent procedure revisions to the NRC offices within the prescribed time. This item is considered closed.

(Closed) Open Items No. 254/83026-06 and No. 265/83025-06: Establish and implement administrative measures for the audit program that will both identify changes in regulatory requirements and ensure that affected procedures and programs have been appropriately adjusted. The licensee has developed a GSEP audit matrix which incorporates 10 CRF 50 requirements, Technical Specification Section TS 6.16.b(5), and Preliminary Safety Evaluation Report/Final Safety Evaluation Report. This GSEP matrix is also cross-referenced with the QA audit schedule recently issued in December 1984. This schedule is reviewed semi-annually for inclusion of changes or omission of certain requirements. These two documents provide administrative guidance for both onsite and offsite audits. A supplemental onsite audit was conducted in October 1984 which did address applicable Technical Specifications and regulatory requirements as recommended in the previous inspection. This item is considered closed.

(Closed) Open Items No. 254/83026-07 and No. 265/83025-07: Institute a formal tracking system, utilized by both corporate emergency preparedness staff and the station GSEP Coordinator to assure completion of corrective actions taken to correct weaknesses identified during drills and exercises. The licensee has initiated a tracking system to ensure completion of corrective actions taken to resolve weaknesses identified during drills and exercises. The system also includes Open Items from NRC inspection reports and licensee critiques. The system is maintained in a bound notebook and includes item number, description, date initiated and date completed. Since the implementation of this system, all weaknesses and Open Items have been addressed in a timely manner by the licensee. This item is considered closed.

(Closed) Open Items No. 254/84009-01 and No. 265/84009-01: Reevaluate the wording and interpretation of the unplanned explosion EALs with emphasis on providing more detailed guidance. QEP 200-T1 EAL Condition 4 was addressed in Revision 13 (December 1984) to provide more detailed guidance in Alert and Site Emergency classifications. The new revision now provides that an Alert Condition is established by an unplanned explosion which causes on-site equipment described in the Technical Specifications which is affected such that it is operated in a degraded mode permitted by a Limiting Condition for Operation. The Site Emergency Condition specifies that the equipment must be degraded such that an immediate shutdown is required. This revised clarifications satisfies this NRC concern. This item is considered closed.

(Closed) Open Items No. 254/84009-02 and No. 265/84008-02: The OSC Supervisor was unable to adequately perform all assigned tasks due to the lack of procedural provisions for having one or more assistants. QEP 310-T3 Revision 15 was implemented January 9, 1985 and provides up to seven OSC support personnel which may be called in by the OSC Director as required. This item is considered closed.

(Closed) Open Items No. 254/84018-01 and No. 265/84016-01: Revise the Site Area and General Emergency EALs for Condition No. 17 (Radiation Releases From the Plant) to provide adequate guidance for classifying an emergency based either on dose assessment or on actual field measurements. EAL Condition No. 17, Revision 13 was implemented December 1984. The changes include guidance to base classifications on either dose projections or on actual field measurements. This action satisfies this NRC concern. This item is considered closed.

(Open) Open Items No. 254/84018-01 and No. 265/84016-01: Provide additional training to appropriate Control Room personnel on the methodology used to classify gaseous effluent releases per EAL Condition No. 17. The inspector was unable to verify that additional training, as required, had been given to appropriate Control Room personnel. Training which includes a review of this and other EALS for Shift Engineers and SCREs is scheduled to begin in September 1985. This item remains open.

(Closed) Open Items No. 254/84018-03 and 265/84016-03: Revise Procedure QEP 110-1 to reference the flowchart for rapid offsite protective decisions. QEP 110-1 Revision 11 was implemented January 9, 1985. Section F.4 provides a reference to QEP 350-T1 as required by this item. This item is considered closed.

(Closed) Open Items No. 254/84018-04 and No. 265/84016-04: Reference, in Procedures QEP 110-1, 110-2 and 310-1, the methodology used to compute the downwind distance "R" as used in Section 9c of the NARS Form. QEP 110-1 Revision 11, QEP 110-2, Revision 8 and QEP 310-1, Revision 11 were implemented January 9, 1985 to address this Open Item. The revisions adequately satisfy this NRC concern. This item is considered closed.

(Closed) Open Item No. 254/84018-05 and No. 265/84016-05: Provide adequate procedural guidance regarding the planning and execution of onsite search and rescue activities. QEP 120-1 Revision 5 was implemented in October 1984. Section F.6 provides information on the organization of the rescue team and QEP 120-T1 gives guidance regarding its execution. This item is considered closed.

(Closed) Open Items No. 254/84018-07 and No. 265/84016-07: Revise the annual QEP training program and matrix as necessary to incorporate Shift Foreman and SCREs (as acting Station Directors) and the OSC Directors. The inspector reviewed records in the Training Department and interviewed the Training Supervisor and determined that the annual QEP training program has been revised to include a matrix that incorporates the Shift Foreman, SCRE, and OSC Directors. This item is considered closed.

(Closed) Open Items No. 254/84018-08 and No. 265/84015-08: GSEP drill records must include, as appropriate to drill type, a scenario, statements of goals, listing of participants, sequence of events, and critique comments. GSEP drill records of the Shift Staff and Augmentation Drills of May 1985, monthly communications drills for 1985, and semi-annual Health Physics drill of May 1985 were reviewed. All met the requirements of this NRC concern. This item is considered closed.

3. Activation of the Emergency Plan

During the period from October 1984 to June 24, 1985, the licensee activated the GSEP on five occasions. All were in the "Notice of Unusual Event" Classification. The inspector reviewed the EALs referenced for each event and concluded that each event was correctly classified, based on description of the event and the EAL Condition cited. The associated Nuclear Accident Reporting System (NARS) forms and documents were reviewed to ascertain when the appropriate states agencies were notified. The following table summarizes the relevant information:

GSEP ACTIVATIONS
OCTOBER 1984 to JUNE 1985

<u>DATE</u>	<u>DECLARATION TIME</u>	<u>IESDA(%) TIME</u>	<u>ELAPSED TIME</u>	<u>IODS(@) TIME</u>	<u>ELAPSED TIME</u>
01/29/85	0315	0318	3	0320	5
02/05/85	0238	0243	5	0241	3
05/07/85	1540	1549	9	*1611	*31
05/22/85	1835	1845	10	*1900	*25
06/08/85	2155	2203	8	*2225	*30

% IESDA. Illinois Emergency Services and Disaster Agency

@ IODS. Iowa Office of Disaster Services

* Both IESDA and IODS are notified simultaneously with a ring-down from the licensee. IODS then proceeds to notify the current Duty Officer. This usually takes about 10-15 minutes, according to IODS. The time recorded is the time the Duty Officer was notified, not the actual time the licensee notified the State of Iowa.

4. Changes to the Emergency Preparedness Program

Pursuant to 10 CFR 50.47(b)(16), 10 CFR 50.54(q), and 10 CFR 50, Appendix E, Sections IV and V, this area was reviewed to determine whether changes were made to the program since the last routine inspection in October 1984, and to note how these changes affected the overall state of emergency preparedness.

The inspector discussed the licensee's program for making changes to the emergency plan and implementing procedures. Procedure 8.5, Distribution, Review and Updating of the GSEP and Corresponding EIPs, was reviewed. The inspector verified that changes to the plan and procedures were reviewed and approved by management. It was also noted that such changes were submitted to NRC within 30 days of the effective date, as required.

A review of the organization and management of the emergency preparedness program revealed a number of personnel changes in key positions as Operations Director, Technical Director and Maintenance Director. While none had actually participated in a GSEP drill, exercise or actual event in their respective new assignments, it was judged that their professional expertise was sufficient to adequately support an emergency by the license.

The inspector reviewed the licensee's program for distribution of changes to the emergency plan and procedures. Document control records showed that appropriate personnel and organizations were sent copies of the plan and procedural changes, as required.

No violations or deviations were identified in this program area.

5. Knowledge and Performance of Duties (Training)

Pursuant to 10 CFR 50.47(b)(15) and 10 CFR Part 50, Appendix E, Section IV.F, this area was inspected to determine whether emergency response personnel understood their emergency response roles and could perform their assigned functions.

The inspector reviewed the description (in the emergency plan) of the training program, training procedures, and selected lesson plans, and interviewed members of the instructional staff. Based on these reviews and interviews, the inspector determined that the licensee maintains an emergency training program.

Records of training for key members of the emergency organization for the 1984-1985 training period were reviewed. The training records revealed that two individuals appeared on the alternate Maintenance Director Prioritized Notification Listing (QEP 310-T3 Revision 15 dated May 1985) when neither had received appropriate training as required by 10 CFR 50.47(b)(15) and Section 8.2 of the GSEP. This is in violation with NRC requirements (Open Items No. 254/85010-01 and No. 265/85001-01).

The inspector conducted walk-through evaluations with selected key members of the emergency organization. During these walk-throughs, individuals were given various hypothetical sets of emergency conditions and data and asked to respond as if an emergency actually existed. The individuals demonstrated familiarity with emergency procedures.

It was noted that the Prioritized Notification Listing (QEP 310-T3 Revision 15) identified some individuals as being selected to "augment" certain director's list. While the licensee intended these individuals to support the directors, the word "augment" was incorrectly interpreted by the inspector as one who could also serve as a director. Use of this term could cause confusion to some who are not intimately familiar with the procedures.

Section 8.2 of the GSEP says in part, "The training program for emergency personnel allows each member to meet the following objectives:

Know the objectives of the GSEP;

Understand the graded emergency classification system;

Display an adequate knowledge of personal responsibilities and duties as listed in the GSEP and EPIPs;

Know the persons with whom they may interface while performing GSEP functions; and

Display a functional knowledge of the documents (e.g. procedures) necessary to fulfill their role in the GSEP."

The inspectors interviewed sixteen individuals who were assigned functions in the GSEP. Most displayed an inadequate knowledge of the five learning objectives listed above. The licensee's current method of disseminating this GSEP training is to provide a notebook containing this information and allowing the students to read it during the course of the annual station-wide employee training. This is, apparently, an ineffective way of accomplishing these objectives. This is an Open Item (254/85010-02 and 265/85011-02).

Training for emergency preparedness representatives from Illinois Department of Nuclear Safety, Illinois ESDA, U.S. Army Corps of Engineers, and the Iowa Office of Disaster Services was conducted in November 1984 at the Quad Cities Station Visitor's Center. The training included a review of the GSEP and topics of Radiation Protection.

One item of noncompliance was identified in this program area.

6. Licensee Audits

Pursuant to 10 CFR 50.47(b)(14) and (16) and 10 CFR 50.54(t) this area was inspected to determine whether the licensee had performed an independent review or audit of the emergency preparedness program.

Records of audits of the program were reviewed. A supplemental audit was conducted by the plant Quality Assurance Department in October 1984 as recommended in the September NRC inspection (Reports No. 50-254/84018 and No. 50/265/84016). The inspector reviewed this audit (QAO-4-84-20,

Supplement 1) which included applicable Technical Specification requirements, Final Safety Analysis Report, Section G, and specific regulatory requirements related to emergency preparedness. As part of this audit the Station's QEPs were reviewed to ensure that they met the regulatory requirements. Areas of the program evaluated included Organization and Administration, Training and Qualifications, Administration of Exercises and Drills, External Interfaces, Facilities and Equipment, and Procedures and Plan. This QA audit report concluded that there were no findings or observations revealed as a result of this audit.

Licensee emergency plans and procedures required critiques following exercises and drills. Licensee documentation for two Shift Staffing and Augmentation drills dated May 9, 1985 and May 15, 1985 and a Health Physics drill dated May 30, 1985 indicated that critiques were held following the drills. The records as reviewed indicated that deficiencies were discussed in the critiques and that corrective actions were made.

The licensee's program for follow-up action on audit, drill, and exercise findings was reviewed. Licensee procedures required follow-up on deficient areas identified during audits, drills, and exercises. The inspector reviewed licensee records dated May 14, 1985 which indicated that corrective action was taken on identified problems, as appropriate. The licensee has established a tracking system as a management tool in following up on actions taken in deficient areas.

No violations or deviations were identified in this program area.

7. Maintenance of Emergency Preparedness

A review was made of the licensee's Letters-of-Agreement with offsite groups and agencies. All letters were observed to be current within the last 24 months.

An examination was made of the documentation of the following drills required by the Emergency Plan and Emergency Plan Implementing Procedures: Communication drills, Medical emergency drills, and Health Physics drills. All were conducted within the frequencies required by the Emergency Plan and procedures.

Records of inventories and checks of emergency supplies and equipment indicate that missing items are identified and promptly replaced, and equipment is maintained in a state of readiness.

No violations or deviations were identified in this program area.

8. Exit Interview

On June 28, 1985, an exit interview with licensee representatives was held to present the NRC's preliminary findings. The inspector discussed the likely content of the inspection report. The licensee did not identify any of the material as proprietary or safeguards.