

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report Nos. 50-334/90-27 and 50-412/90-27
Docket Nos. 50-334 and 50-412
License Nos. NPF-66 and NPF-73
Licensee: Duquesne Light Company
Post Office Box 4
Shippingport, Pennsylvania 15077
Facility Name: Beaver Valley Atomic Power Station, Units 1 & 2
Inspection at: Shippingport, Pennsylvania
Inspection Conducted: November 27 - 30, 1990

NRC Inspector: *E. F. Fox* 12/27/90
E. F. Fox, Emergency Preparedness Specialist date

Approved By: *William J. Lazarus* 12/27/90
William J. Lazarus, Chief date
Emergency Preparedness Section

Inspection Summary: Inspection on November 27-30, 1990 (Report Nos. 50-334/90-27 and 50-412/90-27)

Areas Inspected: Routine unannounced safety inspection of the Emergency Preparedness Program including review of previously identified inspection findings, review of revisions to the Emergency Plan and Implementing Procedures, review of organization and management control, inspection of independent program audits, inspection of emergency response organization training, and inspection of emergency facilities, equipment, instrumentation and supplies.

Results: No violations, deviations, or unresolved items were identified. The Emergency Preparedness Program is being maintained in a state of operational readiness.

DETAILS

1.0 Persons Contacted

The following licensee representatives were contacted during the conduct of the inspection:

- * C. Bibee, Communications Specialist
- * E. Chatfield, Training Manager
- * R. Drew, Senior Nuclear Technical Instructor
- G. Farr, Offsite Planning Coordinator
- W. Haught, Offsite Training
- S. LaVie, Health Physics Specialist
- * F. Lipchick, Senior Licensing Supervisor
- W. Mahan, Senior Planner
- * J. Marietta, Nuclear Technical Instructor
- * G. McKee, Emergency Plan Specialist
- * R. Moser, Health Physics Associate
- * M. Pavlick, Director, Quality Services
- * F. Pavlechko, Director Emergency Preparedness
- J. Sasala, Director Nuclear Communications
- R. Scheib, Nuclear Shift Operations Foreman
- * D. Sperry, General Manager, Nuclear Operations Support
- S. Stubbs, Senior Quality Assurance Specialist
- * H. Szklinski, Health Physics Specialist
- B. Tuite, Nuclear Shift Supervisor

* Denotes those present at the exit meeting November 20, 1990

The inspector also observed the actions of other licensee personnel.

Nuclear Regulatory Commission

- * J. Beall, Senior Resident Inspector

2.0 Changes to the Emergency Preparedness Program

In order to verify that significant changes made to the emergency preparedness program had not adversely affected the overall state of emergency preparedness, and that the changes had been appropriately incorporated into the Emergency Plan (EP) and Emergency Plan Implementing Procedures (EPIPs), the inspector reviewed changes which had been made to the Duquesne Light Emergency Program since the last inspection.

The inspector reviewed Administrative Procedure, EP-1, "Emergency Plan/Procedure Preparation and Revision" (Rev 4, 1990) and determined the licensee has instituted

a formal process to review and evaluate changes proposed to their emergency preparedness program to verify that changes do not degrade the effectiveness of the program. The licensee's review program is adequate and changes made to EP and EIPs since the last inspection had been made in accordance with this procedures and NRC requirements.

During the previous inspection (IR Nos. 50-334/89-11 & 50-412/89-12), it was determined that a significant change occurred when the licensee instituted a major revision to the Emergency Action Level (EAL) and emergency classification scheme. NRC concerns identified at the conclusion of that inspection have been adequately addressed in the revised emergency classification procedures.

However, during a limited walkthrough with two licensee personnel who were presented with a scenario wherein barriers were threatened but not breached, there still exists a concern as to how the severity of the threat to a barrier is determined and related to a specific emergency classification. The licensee acknowledged this concern and stated it would be reviewed and corrective action taken. This will be reviewed in a future inspection.

3.0 Emergency Facilities, Equipment, Instrumentation, and Supplies

Emergency Response Facilities (ERFs) are designed to meet the requirements of 10 CFR 50.47(b), Section IV of Appendix E to 10 CFR 50, Supplement I to NUREG-0737 and Regulatory Guide 1.97. Equipment, status boards, communications systems, plans, procedures, habitability and access control provisions were reviewed for the Control Room, Operations Support Center, Radiological Operations Center, Technical Support Center, Emergency Operations Facility (EOF), the Alternate EOF, and the Joint Public Information Center (JPIC). The TSC and the EOF are dedicated facilities located within the owner controlled area in the Emergency Response Facility. All facilities were found to be adequately maintained and in a state of operational readiness.

During the previous inspection, the licensee provided information regarding a significant upgrade to the JPIC. The new building for the JPIC has been completed and is located out of the Emergency Planning Zone. This facility was used successfully during the 1989 annual exercise. It has a closed circuit TV capability, as well as a media monitoring room and an interview room. Communications and other ancillary equipment is adequate to support over 100 reporters. It is located in the same building as the Alternate EOF. The Alternate EOF has adequate space, equipment, facilities, instrumentation and supplies to support the emergency response should the primary EOF not be habitable. Both the alternate EOF and the JPIC have adequate backup power. The licensee was informed that the use of the Alternate EOF should be demonstrated in a future NRC observed drill/exercise.

The offsite monitoring kits located in the Pump House were inspected and equipment was found to be operational and properly calibrated. The licensee has included photographs of the monitoring sites in the kits to assist the Offsite Monitoring Teams in finding the correct monitoring locations.

The inspector reviewed the 1989 Siren Test Data sheets and determined that siren availability for 1989 was 98.2% and that the licensee had taken prompt corrective actions to restore a siren failure was reported.

This portion of the licensee's Emergency Preparedness Program is acceptable.

4.0 Organization and Management Control

The inspector reviewed task assignments for individuals within the Emergency Response Organization (ERO), the emergency preparedness group, evaluated emergency preparedness program management and administration, and held discussions with cognizant licensee personnel to determine the effect of any changes which may have been made to the emergency organization and/or management control systems and to verify that these changes have been properly incorporated into the EP and EPIPs.

EP program staffing has remained constant over the past few years and the existing staff level is adequate to carry out basic program responsibilities. Such responsibilities include maintenance of the Emergency Preparedness Plan and Implementing Procedures, ERFs and designated equipment, development of exercise scenarios, training of the onsite ERO and State/local responders, and cooperation with offsite support groups.

The functions of the ERO have remained stable and a Document Support Staff has been added to the ERO to facilitate document retrieval after an event. The licensee is also in the process of adding a State Liaison Person - for Ohio only - to the ERO as a result of experience gained in previous drills/exercises.

This portion of the licensee's Emergency Preparedness Program is acceptable.

5.0 Knowledge and Performance of Duties (Training)

Emergency preparedness training (EPT) activities, training records, lesson plans, Emergency Response Organization (ERO) qualification roster and the training matrix were reviewed. Representative of both the Training Department and Emergency Preparedness Section responsible for training were interviewed in order

to verify that emergency preparedness training is in compliance with 10 CFR 50.47(b) and Section IV.F of Appendix E, 10 CFR 50.

Although the training tracking system indicated that some personnel had not completed their emergency response training as prescribed, the inspector reviewed rosters for the required training and it was determined that requalification for ERO persons is now current. This was a concern identified in a previous inspection which has now been corrected. The staffing of the ERO appears to be sufficient to support a protracted emergency.

The Emergency Preparedness Training Program is published annually for the period of January through December of the calendar year and provided to the persons listed on the Emergency Response Organization Call List. Personnel assignments are given for each emergency position and it is the responsibility of each person to arrange the required training according to the approved schedule issued by the Training Department. Failure to attend required training, or make acceptable alternate arrangements with the Training Department results in the intervention of the unit manager to schedule the training for the individual and take any other action that may be appropriate. Training provided to key response personnel by the Training Department includes both classroom and practical instruction in emergency classification protective action recommendations, technical support, onsite/offsite surveys, chemistry, communication, and radiological assessment.

Training of offsite support groups is provided by EPA staff members and is tracked to assure response personnel in the EPZ are adequately trained in accordance with State/local plans.

EP lesson plans are detailed and focus on important response elements or implementing procedures. The lesson plan for Emergency Director training was reviewed and it was determined that it provides an outline of learning objectives on emergency classifications, facilities, ERO, dose assessment, communication and protective action recommendations. Exam questions relate directly to lesson plan material and individuals must demonstrate proficiency in their respective response duties as part of the annual requalification. Performance of response personnel has consistently been demonstrated in drills and walkthrough exercise and no concerns were identified with response of personnel to emergencies.

This portion of the licensee's Emergency Preparedness Program is acceptable.

6.0 Independent Reviews/Audits

The inspector reviewed the 1990 Audit of the Emergency Preparedness Program (BV-C-90-06) dated April 6, 1990 as conducted by the licensee's quality assurance

unit. The audit identified one finding and six observations. At the time of this inspection, the licensee had corrected the finding and four of the six observations. The licensee tracks these items by the Commitment Tracking System which is sent to all department heads twice monthly. If no corrective actions have been determined and/or completed within thirty days, those issues are escalated to higher management. Management is appraised of audit findings at the conclusion of the audit and remain cognizant of their resolution through the CTS.

The Emergency Program Audit was thorough, adequate in scope and met the requirements of 10 CFR 50.54 (t). The inspector verified the audit had been conducted by persons who are independent of the Emergency Preparedness Unit. The licensee increased the number of persons for this audit and the checklist used was complete and thorough.

The interface between the licensee and offsite agencies was conducted thoroughly and the results of that audit were made available to the local offsite agencies.

This portion of the licensee's Emergency Preparedness Program is acceptable.

7.0 Public Information

The annual media briefing was conducted at the JPIC June 27, 1990. Inserts have been placed in the Beaver County and Columbiana County telephone directories. In Hancock County, the licensee places ads in the local papers five times per year. Notices on actions to take for emergencies are provided to motels, parks, etc to be given to transients. The 1990 Public Information Brochures had been reviewed by State/local agencies and were being distributed at the time of this inspection.

The licensee conducted an annual offsite agency training program, October 25 - 26, 1990 with the states and risk counties within the Beaver Valley Nuclear Power Station EPZ. During the course, the Emergency Action Levels (EALs) were reviewed and discussed. The licensee has developed a training booklet to assist in assuring the states and risk counties understand the EALS.

This portion of the Licensee's Emergency Preparedness Program is acceptable.

8.0 Review of Response to an Actual Event

At 1110 hours, August 20, 1990, the licensee declared an Alert at Beaver Valley Nuclear Power Station, Unit 2, due to an inadvertent CO₂ discharge in the West Cable Vault. The discharge occurred at 1002 hours and following measurements of oxygen levels, the licensee, following EPP/E-1, TAB 18, "Toxic/Flammable Gas",

classified the event as an Alert. Initial and followup notifications to onsite and offsite agencies were prompt and timely. The Radiological Operations Center, the Operation Support Center and the Technical Support Center were activated and provided adequate support. Search and rescue operations were conducted in the affected area and security was established properly.

The licensee identified equipment, procedural, and performance issues and determined corrective actions to be taken for them. This includes clarification as to the definition of Toxic or how it applies to inadvertent CO₂ discharges. The licensee's corrective actions will be reviewed during a future inspection.

9.0 Exit Meeting

The inspector met with the licensee personnel denoted in Section 1 at the conclusion of the inspection to discuss the findings as presented in this report. The licensee acknowledged the findings and agreed to evaluate them and institute corrective actions as appropriate.