

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-334/84-16

Docket No. 50-334

License No. DPR-66

Priority --

Category C

Licensee: Duquesne Light Company
One Oxford Center, 301 Grant Street
Pittsburgh, Pennsylvania 15219

Facility Name: Beaver Valley Power Station Unit 1

Inspection At: Shippingport, Pennsylvania

Inspection Conducted: June 25-28, 1984

Inspectors:

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R.H. Smith, Emergency Preparedness Specialist

7/24/84
date

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7/26/84
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Inspection Summary: Inspection on June 25-28, 1984 (Report No. 50-334/84-16)

Areas Inspected: Routine, announced, emergency preparedness inspection and observation of the licensee's annual full-scale emergency exercise performed on June 25-28, 1984. The inspection involved 186 inspector hours by a team of seven NRC Region I and NRC contractor personnel.

Results: No violations were identified. The licensee's emergency response actions for this exercise scenario were adequate to provide protective measures for the health and safety of the public.

DETAILS

1. Persons Contacted

The following licensee representatives attended the exit meeting on June 28, 1984:

R. Caldwell, Ohio Edison Corporation Representative
J.J. Carey, Vice President, Nuclear Group
M. Coppola, Superintendent, Nuclear Services
R.J. Druga, Chief Engineer
D.E. Faller, Director, Administrative Services
J.D. Frank, Public Information Department
K.D. Grada, Superintendent, Licensing and Compliance
R.L. Hansen, Station Maintenance Supervisor
T.D. Jones, General Manager, Nuclear Operations
J.A. Kosmal, Radiological Operations Coordinator
W.S. Lacey, Station Superintendent - Unit 1
J.E. Laudenslager, Manager, Public Information Unit
J.H. Lukehart, Director, Security
R.M. Mafrice, Director, General Engineering
J.V. McGee, Director, Budget and Planning
D.J. Miller, Emergency Planning Supervisor
F.L. Pavlechko, Health Physics Specialist
L.G. Shad, Operations Supervisor
J.D. Sieber, General Manager, Nuclear Services
N.R. Tonet, General Manager, Nuclear Engineering and Construction
W.F. Wirth, Director, Environmental and Radiological Safety

The team observed and interviewed several licensee emergency response personnel, controllers, and observers as they performed their assigned functions during the exercise.

2. Emergency Exercise

The Beaver Valley Nuclear Power Station full scale exercise was conducted on June 27, 1984 from 7:00 a.m. until 5:15 p.m.

a. Pre-Exercise Activities

Prior to the emergency exercise, NRC Region I representatives had telephone discussions with licensee representatives to review the scope and content of the exercise scenario.

In addition, NRC team observers attended a licensee briefing for licensee controllers and observers on June 26, 1984, and participated in the discussion of emergency response actions expected during the various phases of the scenario. The licensee specified the emergency response activities that would be simulated and also that controllers would intercede in activities to prevent disturbing normal plant operations.

The exercise scenario included the following events:

- Leakage of water from the the Reactor Coolant Systems;
- Cooling Tower and Intake Structure Area damage due to a tornado;
- A contaminated injured individual requiring hospitalization;
- Partial loss of offsite power;
- Rupture of steam generator tubes;
- Reactor core degradation;
- Unmonitored release of radioactive material; and
- Implementation of the Recovery Organization

The above events caused the activation of the licensee's emergency facilities and also permitted the states and local government agencies to exercise their Emergency Plans.

b. Exercise Observation

During the conduct of the licensee's exercise, seven NRC team members made detailed observations of the activation and augmentation of the emergency organization; activation of emergency response facilities; and actions of emergency response personnel during the operation of the emergency response facilities. The following activities were observed:

- (1) Detection, classification, and assessment of the scenario events;
- (2) Direction and coordination of the emergency response;
- (3) Notification of licensee personnel and offsite agencies of pertinent information;
- (4) Assembly and accounting for licensee and contractor personnel;
- (5) Assessment and projection of radiological (dose) data and consideration of protective actions;
- (6) Provisions for in-plant radiation protection;
- (7) Performance of offsite, onsite, and in-plant radiological surveys;
- (8) Maintenance of site security and access control;
- (9) Performance of technical support;

- (10) Performance of repair and corrective actions;
- (11) Performance of first aid and rescue;
- (12) Communications/information flow, and record keeping;
- (13) Provisions for information flow to the public; and
- (14) Management of Recovery Operations.

The NRC team noted that the licensee's activation and augmentation of the emergency organization; activation of the emergency response facilities; and actions and use of the facilities were generally consistent with their emergency response plan and implementing procedures. The team also noted the following areas where the licensee's activities were thoroughly planned and efficiently implemented:

- Emergency response personnel were knowledgeable in their assignments and the emergency procedures. Individuals were conscientious and in general, demonstrated that they were competent in performing their assigned functions.
- Personnel briefings were conducted in a timely manner by the individual in command of each emergency facility.
- Status and information displays were maintained and continuously updated at the emergency facilities. Of particular note, was the remote TV camera display of control room instrumentation and the Plant Variable Computer display available in the Technical Support Center (TSC).
- Personnel access and accountability were effectively maintained at the site facilities and the news media center.
- Communications equipment problems were minimal and there was a continuous flow of information within and between the emergency facilities including the news media center.
- The command positions in the emergency facilities were changed in a timely and effective manner by shift turnovers, and detailed briefings were conducted.
- In-Plant teams were thoroughly briefed prior to being dispatched and assignments were performed with consideration of ALARA.
- Frequent and comprehensive communications were maintained in the EOF with the representatives of the three states.
- The operation of the news media center was adequate and recovery operations were thorough and well planned.

- The observed activities performed by the emergency response organization were indicative of an active training and emergency preparedness program.
- Exercise controllers demonstrated excellent training by providing timely and required additional data.
- The deficiencies noted during the February 16, 1983, exercise were corrected.

The NRC team findings in areas for licensee improvement were the following:

- The Radcon Operations Center (ROC) does not contain adequate space.
- Information such as the transient which occurred and the known release of radioactive material should be discussed with the ROC.
- The status boards for displaying monitoring points results should be enlarged and oriented for trending. The time of results should also be recorded on survey information pertaining to onsite structures.
- Provide detailed and clear maps in the offsite monitoring kits.
- Revise Emergency Preparedness Plan Implementing Procedure 2.3 to clarify the use of silver zeolite cartridges for obtaining air samples.
- Determine preliminary protective action recommendations for dose assessment projections based on a potential release.

c. Exercise Critique

The NRC team attended the licensee's post-exercise critique on June 28, 1984, during which key licensee controllers discussed their observations of the exercise. The licensee participants highlighted areas for improvement which the licensee indicated would be evaluated and appropriate action taken.

3. Exit Meeting and NRC Critique

Following the licensee's self-critique, the NRC team met with the licensee representatives listed in Section 1. The team leader summarized the observations made during the exercise and discussed the areas described in Section 2.b.

The licensee was informed that no violations were observed and although there were areas identified for improvement, the NRC team determined that within the scope and limitations of the scenario, the licensee's performance demonstrated that they could implement their Emergency Plan and Emergency Plan Implementing Procedures in a manner which would adequately provide for the health and safety of the public.

Licensee management acknowledged the findings and indicated that appropriate action would be taken regarding the identified improvement areas.

At no time during the inspection was written material provided to the licensee by the inspectors.