

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

Region I

Report No. 50-334/80-03
Docket No. 50-334
License No. DPR-66 Priority _____ Category C
Licensee: Duquesne Light Company
435 Sixth Avenue
Pittsburgh, Pennsylvania 15219
Facility Name: Beaver Valley Power Station, Unit No. 1
Inspection at: Shippingport, Pennsylvania
Inspection conducted: January 28-31, February 1, 1980
Inspectors: *P. S. Koltay* 3/17/80
P. S. Koltay, Reactor Inspector date signed

date signed

date signed
Approved by: *S. D. Ebnetter* 3/27/80
S. D. Ebnetter, Chief, Engineering date signed
Support Section No. 2, Reactor
Construction and Engineering Support Branch

Inspection Summary:

Inspection on January 28-31, and February 1, 1980 (Report No. 50-334/80-03)

Areas Inspected: Routine unannounced inspection of the Fire Protection/Prevention Program including: assignment of functional responsibilities; implementation of administrative controls; fire brigade training; observation of ignition source and combustible materials control; observation of fire protection systems and components; observation of plant modifications; review of surveillance test records associated with fire protection program; and observation of critical fire areas. The inspection involved 30 hours onsite by one NRC regional based inspector.

Results: Of the 8 areas inspected, no items of noncompliance were identified in 7 areas; one item of noncompliance was identified in one area, (Infraction - failure to follow plant housekeeping procedure).

DETAILS

1. Persons Contacted

Duquesne Light Company

- *C. Beaty, QA Engineer
- R. Burski, Senior Compliance Engineer
- *F. Lipchick, Compliance Engineer
- *J. Maracek, Senior Engineer
- J. Vassalo, Training Supervisor
- *J. Werling, Station Superintendent

USNRC

D. Beckman, Senior Resident Inspector

*Denotes those personnel who were present at the exit interview.

2. Fire Protection/Prevention Program Review

a. Functional Responsibilities

The inspector reviewed the following licensee procedures:

- Operating Manual Chapter 56B - Fire Prevention and Control Section 1.56B.4, issue 1, dated 12/31/79.
- Operating Manual Chapter 56B - Fire Prevention and Control, Section 1.56B.1 issue 1, dated 12/31/79.

The inspector verified that the licensee has developed lines of communication for onsite and offsite organizations and assigned responsibilities for fire protection/prevention activities.

No items of noncompliance were identified.

b. Administrative Controls

The inspector reviewed the following licensee documents and procedures:

- Technical Specification Section 6.5.2.8

- Emergency Preparedness Plan, Chapter 57 Section II-A-2, Fire Fighting Procedures Radiological Control Areas, issue 5, dated 8/7/79.
- Operating Manual Chapter 56B, Fire Prevention and Control Section 1.56.4, issue 1, dated 12/31/79.
- Training Manual Section 9.3, Fire Protection Training, revision 2, dated 6/19/78.

The inspector verified that the licensee has developed administrative controls which include:

- (1) Requirements for periodic audits.
- (2) Requirements for indoctrination of all contractor personnel and offsite licensee personnel who work onsite in appropriate administrative procedures which implement the fire protection program, and the emergency procedures relative to fire protection.
- (3) Qualifications of fire brigade members.
- (4) Identification of actions to be taken by an individual discovering fire and subsequent actions to be taken by control room operator.

The inspector reviewed Fire Protection Program Audit No. BV-1-79-3, dated 2/22/79.

No items of noncompliance were identified.

c. Control of Combustibles

The inspector reviewed the following licensee procedure:

- Operating Manual Chapter 56B, Fire Prevention and Control, Section 1.56.B.4, issue 1, dated 12/31/79.

The inspector verified that the licensee has developed administrative controls which require:

- (1) Special authorization for the use of combustible, flammable or explosive hazardous material in safety related areas.

- (2) Prohibition on the storage of combustible, flammable or explosive hazardous material in safety related areas.
- (3) The removal of all wastes, debris, rags, oil spills or other combustible materials resulting from work activity following completion of the activity or at the end of each work shift, whichever is sooner.
- (4) All wood used in safety related areas to be treated with flame retardant.
- (5) Periodic inspection for accumulation of combustibles.

The inspector reviewed licensee's Maintenance Manual, Chapter 1, Conduct of Maintenance, Section J Housekeeping, revision 4, dated 9/10/79, which states in part that: "The entire station will be toured once a month ... responsible supervisors ... ensure that all areas are cleaned ..."

A review of the licensee's records indicates that contrary to the above, the licensee did not conduct station housekeeping tours since November 19, 1979. As a result of the inspector's notification, the licensee resumed the monthly inspections and conducted a plant tour while the inspector was on site.

This is an infraction level item of noncompliance (80-C.1-01).

d. Control of Ignition Sources

The inspector reviewed the following licensee procedures:

- Operating Manual Chapter 56B, Fire Prevention and Control, Section 1.56B.4, issue 1, dated 12/31/79.
- Maintenance Manual Chapter 1, Conduct of Maintenance Section 2, General Work Practices for Cutting Welding and Open Flame Work, GWP-1, revision 2, dated 1/2/80.

The inspector verified that the licensee developed administrative controls which require:

- (1) Requirements for special authorization for activities involving welding, open flame, or other ignition sources and that they take cognizance of nearby flammable material, cable trays or critical process equipment.

- (2) Prohibition on smoking in safety related areas, except where "smoking permitted" areas have been specifically designated by plant management.
- (3) Requirements for maintaining fire doors closed at all times.

No items of noncompliance were identified.

e. Fire Fighting Procedures

The inspector reviewed the following licensee procedure:

- Operating Manual Chapter 56B, Fire Protection and Control, Sections 1.56.B.1 and 1.56.B.4, issue 1, dated 12/31/79.

The inspector verified that the licensee has developed administrative controls which require:

- (1) Actions to be taken by the fire brigade.
- (2) Coordination of fire fighting activities with offsite fire departments.
- (3) Actions to be taken by plant superintendent and security guards after notification of fire.
- (4) Instructions for plant operators and general plant personnel during a fire.

No items of noncompliance were identified.

f. Fire Brigade Training

The inspector reviewed the following licensee procedures:

- Training Manual Section 9.3, Fire Protection Training, revision 2, dated 6/19/78.
- Operating Manual Chapter 56B, Fire Prevention and Control, Section 1.56B.1 issue 1, dated 12/31/79.

The inspector verified that the licensee has developed training procedures which include:

- (1) A requirement for periodic drills and critiques.
- (2) A requirement that the local fire department participate in at least one drill every two years.

The inspector noted that the licensee's procedures do not specify the minimum number of drills, announced and unannounced, each fire brigade must participate in yearly. The inspector also noted that the drill critiques lack detail.

The licensee stated that the applicable procedures will be reviewed and the inclusion of guidelines regarding drills and drill critiques, as outlined in NRC document entitled, Nuclear Plant Fire Protection Functional Responsibilities, Administrative Controls and Quality Assurance, Attachment No. 2, Section 3, will be considered. This item is considered unresolved pending NRC review of licensee's evaluation and corrective action.
(80-03-02)

3. Review of Fire Protection/Prevention Program Implementation

a. Fire Inspections

The inspector reviewed the loss prevention report dated August 28, 1979, prepared by the licensee's insurer, American Nuclear Insurer (ANI). The licensee stated that the recommendations contained in the report are being evaluated and corrective action will be taken as necessary. The recommendations did not involve safety related areas.

No items of noncompliance were identified.

b. Facility Tour

The inspector examined fire protection water systems, including fire pumps, fire water piping and distribution systems, yard fire protection equipment including indicator valves, hydrants and contents of hose houses. The inspector toured all accessible vital and nonvital plant areas and examined fire detection and alarm systems, automatic and manual fixed suppression systems interior hose stations, fire barrier penetration seals, and fire doors. The inspector observed general plant housekeeping conditions and randomly checked tags of portable extinguishers for evidence of periodic inspections. No deterioration of equipment was noted, and the inspection tags attached to extinguishers indicated that monthly inspections were performed.

No items of noncompliance were identified.

4. Review of Surveillance Test Records Associated with Technical Specification Requirement 4.7.14

The inspector selected and reviewed the following records to verify that the associated required Fire Protection Program surveillances had been performed and that the acceptance criteria had been met.

OST 1.33.2 Fire Protection System Hose Station Test January 27, 1980.

OST 1.33.4 Fire Protection System Hydro Test October 14, 1979.

OST 1.33.7 Weekly Motor Driven Fire Pump Operational Test January 28, 1980.

OST 1.33.16 Smoke Detection Instrumentation Test October 17, 1979.

The inspector witnessed smoke detection tests carried out by the Honeywell Corp., a contractor on site. The instrument utilized in the testing of detectors requires periodic calibration, in accordance with the testing procedure OST 1.33.16. Proof of instrument calibration was not available at the site. Licensee stated that records of instrument calibration will be obtained from the contractor and maintained on site. This item is unresolved pending NRC review of licensee's corrective action. (80-03-03)

5. Modifications Required by Amendment 18 to DPR-66

By work observation, inspection of new equipment and examination of records the inspector verified licensee compliance with scheduled modification implementation dates identified in Table 3.1 of the Fire Protection Safety Evaluation Report (SER). For this determination the inspector examined the following items listed in SER Section 3, paragraphs 3.1 through 3.24.

- a. Items SER 3.14, installation of fire detectors in the charging pump cubicles, and SER 3.21 installation of battery room ventilation air flow detectors, has been delayed and documented in a letter to the Director of Nuclear Reactor Regulation, dated December 27, 1979. Both items will be completed during the current refueling outage.
- b. Items 3.1.2 Fire Fighting Equipment, SER 3.22 Smoke Ejectors, and SER 3.9, Maintenance of Equipment Inventories.

The licensee erected a noncombustible enclosure in the southeast corner of the Turbine Building, which contains all fire fighting equipment required by the fire brigade, including three explosion-proof 5,000 cfm. capacity smoke ejectors. The licensee installed temper-proof seals on all fire protection equipment storage enclosures.

c. Item SER 3.4, Exterior Hose Houses,

The inspector verified that the licensee added the necessary hose gaskets, gated "Y" and forcible entry tools to hose cabinets and hose cart cabinets as needed.

d. Item SER 3.6, Fire Suppression System Valves Supervision,

The inspector verified that the licensee installed plastic tamper-proof seals on all valves, and performs monthly inspections of the valves in accordance with inspection procedure OST 1.33.1.

e. Items SER 3.7, Exterior Fire Hydrant Inspection, and SER 3.12 Control of Unnecessary Combustibles.

The inspector verified that the licensee issued the following procedures:

- (1) Operating Manual Chapter 56B, Fire Prevention and Control, Section 1.56B.4, issue 1, dated 12/31/79.
- (2) Maintenance Manual Chapter 1, Conduct of Maintenance Section 2, General Work Practices for Cutting Welding and Open Flame Work, GWP-1, revision 2, dated 1/2/80.
- (3) Fire Protection System Hydrant Test, OST 1.33.4 revision 1, dated 5/4/79.

The inspector verified that the above procedures establish administrative controls for:

- (1) Periodic maintenance for yard fire hydrants.
- (2) Control of flammable liquids in safety related areas.
- (3) Use of fire retardant wood .
- (4) Placement and use of approved trash containers .
- (5) Control of combustible waste storage.

f. Item 3.19 Control Room Fire Suppression

The inspector verified that the licensee completed the following modifications in the control room:

- (1) Installed three smoke detectors in the walk through section of the vertical control panels. The installation is in accordance with National Fire Protection Code 72 E. (MWR 790289)
- (2) Installed a one hour rated fire barrier between the kitchen area and the control room. (MWR C010953)
- (3) Provided a 20 pound dry power type extinguisher in the kitchen area, and two 2 1/2 gallon water type extinguishers one at each of the two control room entrances.

6. Unresolved Item

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. Unresolved items disclosed during this inspection are discussed in paragraphs (2f, 4).

7. Exit Interview

The inspector met with the licensee representatives (denoted in Details paragraph 1) at the site on February 1, 1980, and summarized the purpose and scope of the inspection and findings.