

U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report Nos. 50-272/82-18
50-311/82-18

Docket Nos. 50-272
50-311

License Nos. DPR-70 Priority --- Category C
DPR-75

Licensee: Public Service Electric and Gas Company
80 Park Plaza
Newark, New Jersey 07101

Facility Name: Salem Nuclear Generating Station, Units 1 and 2

Inspection At: Hancocks Bridge, New Jersey

Inspection Conducted: August 16-20, 1980

Inspectors: *L. H. Bettenhausen* 9/2/82
A. E. Finkel, Reactor Engineering date
Inspector

Approved by: *L. H. Bettenhausen* 9/2/82
L. H. Bettenhausen, Acting Chief, date
Plant Systems Section, EPB, DFTP

Inspection Summary:

Inspection on August 16-20, 1982 (Combined Report Numbers 50-272/82-18 and 50-311/82-18)

Units 1 and 2 Areas Inspected: Routine, unannounced inspection of the plant Fire Protection/Prevention Program, including: implementation of administrative procedures, fire brigade training, observation of ignition source and combustible material control, review and observation of plant modifications and observation of critical plant fire areas. The inspection involved 36 hours on site by one NRC region based inspector.

Results: No violations were identified.

DETAILS

1. Persons Contacted

Public Service Electric and Gas Company

- J. Beattie, Nuclear Training Specialist
- R. Edmonds, Safety Skill Department Head
- *H. Midura, General Manager Salem Operations
- *P. Moeller, Manager Nuclear Site Protection
- *M. Platt, Fire Protection Supervisor
- R. Scaletti, Nuclear Training Specialist
- *T. Storey, Nuclear Site Protection Engineer
- *J. Zupko, General Manager, Nuclear Services

*Denotes those present at the exit interview.

2. Facility Tour

During a facility tour of units 1 and 2 the inspector examined both common and separate fire protection systems which included the fire protection water systems, yard fire protection equipment including yard indicator valves, hydrants, and contents of hose houses. The inspector toured all accessible vital and non-vital plant areas and examined fire detection and alarm systems, automatic and manual fixed suppression systems, interior hose stations, fire barrier penetration seals, fire doors and fire dampers. In addition to the above, the inspector examined the control rooms, switchgear rooms, cable spreading area, and the diesel generator rooms.

No violations were identified.

3. Fire Protection/Prevention Program

a. Administrative Controls

The inspector reviewed the licensee Fire Fighting and Organization Manual (FFOM) which describes the fire protection/prevention program for the site. This manual describes the following program areas and functions and references administrative and surveillance procedures which are also provided within the appendix section of the manual.

- (1) Fire Fighting Organization
- (2) Fire Prevention
- (3) Fire Fighting Equipment
- (4) Fire Fighting Procedures
- (5) Revisions to Manual
- (6) Procedures
- (7) Fire Brigade Training Lesson Plans

The administrative procedure requirements stated in the Fire Fighting and Organization Manual are also incorporated in the licensee's Inspection Order (IO) system. The IO system is defined in Administrative Procedure No. 10 dated February 5, 1982, Revision 4 which describes a program for timely notification to departments and scheduling of required tasks of a recurring nature including, inspections, surveillance and preventative maintenance.

b. Surveillance Procedures

The inspector verified that the Technical Specification requirements for fire inspections, surveillance and preventive maintenance are included in the IO computer program listing. The IO program identifies when the task is to be performed, procedures to be used and the department responsible for performing the task. If the task is not performed within the required time window it is highlighted in the computer listing. The inspector verified that the Fire Protection Supervisor reviews the IO computer listing to assure that program tasks are performed within the time windows allowed for the specific tasks. On a random basis the inspector selected the following tasks from the IO program listing and verified that they were performed as required by the Technical Specification and the applicable procedures listed in the IO program.

- (1) Fire Battery Tests
- (2) Operational Tests of Fire Pumps
- (3) Inspection of Key Fire Valves
- (4) Fire Extinguisher Surveillance
- (5) Hose House, Foam Station and Brigade Equipment Surveillance
- (6) Fire Hose Hydro Surveillance Dates
- (7) Brigade Training Schedule Dates, and
- (8) Operating Cycle Test of CV Cardox System.

No violations were identified.

4. Housekeeping

Housekeeping throughout the two unit site was found to be in compliance with the requirements of Administrative Procedures (AP) No. 31 and No. 21 entitled Housekeeping Program and Equipment Cleanliness and Mechanical System Cleanliness Program procedures. During the site tour the inspector observed equipment being cleaned as described in AP No. 21 and referenced procedures.

No violations were identified.

5. Fire Brigade Training and Drills

The inspector reviewed the fire brigade training lesson plans and training and drill records for the first half of 1982 confirming that the licensee was complying with the Fire Fighting and Organization Manual,

Section 8, entitled "Fire Brigade Training Lesson Plan." The inspector also verified that the Fire Protection Supervisor routinely confirms that the above tasks are being performed within the established time windows on a scheduled basis.

No violations were identified.

6. Fire Brigade Records

The Fire Protection Supervisor maintains the fire brigade training and drill records and notifies plant management and the shift supervisor of changes in the list of qualified personnel. The Fire Protection Supervisor also assures that fire brigade personnel are scheduled for the required training to maintain their qualifications. The inspector audited the fire brigade records for the first half of 1982 and determined that the fire brigade personnel records were properly maintained. The Fire Protection Supervisor had scheduled fire brigade personnel for retraining/requalification as required.

No violations were identified.

7. Control of Combustibles and Welding and Cutting Operations

The requirements for the control of combustibles, ignition sources, and welding and cutting operations are defined in Sections 3.7 and 3.8 of the Fire Fighting and Organization Manual (FFOM). The task specific requirements for the above items are detailed in an appendix to the FFOM. These tasks are also identified in the Inspection Order (IO) program.

The inspector randomly selected fire system modification tasks from the IO listing for the months of January, March, April and September 1982 for compliance with the requirements identified in the FFOM. The inspector verified that the control of combustibles, ignition sources, and welding and cutting operations performed during the audit period was performed in accordance with specific AP's, and FFOM requirements.

No violations were identified.

8. Fire Brigade Equipment

The inspector verified that the fire brigade equipment including the emergency breathing apparatus was properly stored and maintained in working order. The equipment outside of the control room was listed in the IO program, was inspected by the Fire Protection Supervisor and was operational and in sufficient quantity.

No violations were identified.

9. Fire Protection Program Plan

The present fire protection/prevention plan is being implemented as described in the Fire Fighting and Organization Manual (FFOM).

To support a major licensee re-organization, on July 26, 1982 the licensee issued a Fire Protection Program letter establishing the responsibilities for the fire protection program among the following organizations:

- Operations Manager - Salem Operations
- Manager Nuclear Training - Nuclear Services Group, and
- Manager Nuclear Site Protection - Nuclear Service Group.

The fire task assignments identified in the July 26, 1982 letter are to be shared among the three managers identified above. Until the new plan and the necessary documents are issued and personnel assignments made, the Fire Protection Supervisor will continue to administer the fire protection/prevention program as described in the present Fire Fighting and Organization Manual.

During the exit meeting the inspector requested the date by which the new fire protection program, procedures and personnel organization would be implemented. The licensee stated that the date for program implementation would be provided to Region I by September 17, 1982.

This item is unresolved pending NRC review of the licensee's actions (50-272/82-18-01 and 50-311/82-18-01).

10. Fire Protection System Valve Supervision Panels IRP5 and 2RP5

Valves in the fire protection are supervised by either locking the valves in position or providing remote position indication. The Salem system for remote position indication uses gate valve position indicators connected in a series circuit configuration. This circuit configuration allows a single valve position change, from a set position, to light a window on the IRP5/2RP5 panel in the control room. (Reference drawing 20379d3-B9776-12 and 205222-A8760-15). When the window light is on, indicating a valve position change, the window will remain lit until the condition is cleared. Other valve position changes in this circuit would not be indicated by the panel light. During an inspection of the control rooms, safety related valve window 13 was lit on panel IRP5 but the licensee was unable to identify which of 14 valves in this circuit was indicating a valve position change. The problem was identified as a defective position indicator switch on the 1FP298 valve monitoring circuit. To assure that the valves in this system are in the proper position control room personnel verify the valve position once a shift

and record the data on a valve position check list sheet. The inspector verified that this task was performed on each shift as required by the Technical Specifications, FFOM and the IO program.

The fire protection supervisor issued a design change request on August 18, 1982 for an engineering evaluation of this monitoring design system.

This item is unresolved pending NRC review of the licensee's actions. (50-272/82--18-02 and 50-311/82-18-02).

11. Unresolved items

Unresolved items are matters about which more information is required in order to ascertain if they are acceptable, violations or deviations. Unresolved items are discussed in Paragraph 9 and 10.

12. Exit Meeting

The inspector met with licensee representatives(See Paragraph 1) at the end of the inspection on August 20, 1982. The inspector summarized the purpose and scope of the inspection and identified the inspection findings. The licensee (Managers of Salem Operations and Nuclear Services) committed to provide a date within three weeks as to when a new fire protection program would be implemented at the Salem Nuclear Units No. 1 and 2. (Reference Paragraph 9).