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

Region I

Report No. 50-333/78-21

Docket No. 50-333

License No. DPR-59 Priority -- Category C

Licensee: Power Authority of the State of New York

10 Columbus Circle

New York, New York 10019

Facility Name: James A. FitzPatrick Nuclear Power Plant

Inspection at: Scriba, New York

Inspection conducted: September 25-28, 1978

Inspectors: K. E. Plumlee, Radiation Specialist — 10/23/78 date signed

P. E. Clemons, Radiation Specialist — 10/23/78 date signed

_____ — _____ date signed

Approved by: Peter J. Knapp, Chief, Radiation Support Section, FF&MS Branch — 10/23/78 date signed

Inspection Summary:

Inspection on September 25-28, 1978 (Report No. 50-333/78-21)
Areas Inspected: Routine, unannounced inspection by regional based inspectors of the radiation protection program during refueling including: procedures; staffing; training of temporary employees; control of exposure; instruments, equipment and supplies; posting and control of work areas; control of radioactive and contaminated material; and shipping records. The initial inspection and area examination was conducted during non-regular hours (10:00 p.m., September 25, to 2:00 a.m., September 26). This inspection involved 58 inspector hours onsite by two NRC regional based inspectors.
Results: Of the eight areas inspected, no items of noncompliance were identified in six areas. Two items of noncompliance were identified in two areas (Infraction - failure to follow procedural requirements regarding air sampling and wearing dosimeters - paragraph 3.a and b; and Infraction - failure to maintain a locked high radiation area gate - paragraph 4).

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DETAILS

1. Persons Contacted

Power Authority of the State of New York (PASNY)

*R. Burns, Superintendent of Radiological and Environmental Services (RES)
*J. Leonard, Resident Manager
*A. McKeen, Assistant to the Superintendent of RES
*E. Mulcahey, Radiation Protection and Radiochemistry (RPR)
*R. Pasternak, Superintendent of Power
R. Riggleman, Nuclear Operator
W. Sanborn, Station Shift Supervisor
*R. Shropshire, Radiological Safety Engineer
D. Zimmerman, Senior Technician, RES

Rad-Services, Incorporated

E. Kalata, Site Coordinator

* denotes those present at the exit interview, 3:00 p.m. on September 28, 1978.

2. Followup on Previously Identified Items

(Closed) Inspector follow item (333/78-02-02): Review exposure record-keeping and procedures. This review did not identify any problems - paragraph 7.

(Closed) Inspector follow item (333/78-16-02): Review contract radiation protection technicians resumes. This review did not identify any problem - paragraph 5.

(Closed) Inspector follow item (333/78-16-03): Observe respirator use. Inspection of this item did not identify any problems - paragraph 6 and 7.

3. Procedures

Part of the inspection effort was to observe the licensee's compliance with the requirement of Technical Specifications Section 6.11, "Radiation Protection Program," that procedures for personnel radiation protection shall be prepared and adhered to for all plant operations. (See also paragraph 4)

a. Compacting Radioactive Waste

The radiation work permit (RWP), continuous extended RWP No. 6 for operation of the waste compactor, required, under "special instructions," that radiation protection be contacted to provide airborne monitoring as required during operation of the compactor.

The inspector observed on September 27, 1978, that radioactive waste having radiation intensities as high as 10 mr/hr on contact was compacted without contacting radiation protection. Interviews with radiation protection technicians, a radiation protection supervisor, operators and the individual in charge of the compactor operation indicated that no such contact had been made.

The inspector identified this as a noncompliance with the RWP requirement. (78-21-01)

b. Laundering of Protective Clothing

The "Radiation Protection Procedures," developed pursuant to Technical Specification 6.11, require in Section II.C, "Personnel Monitoring," that personnel who have been assigned film badges and/or TLDs and self-reading dosimeters wear these dosimeters anytime they are within the restricted areas of the plant. The laundry is within the restricted area.

The inspector observed an individual handling protective clothing in the plant laundry at 10:35 a.m. on September 27, 1978, who stated that he had inadvertently removed his security badge, film badge, TLD badge and self-reading dosimeter when he removed his shirt a short time earlier. This individual promptly recovered these dosimeters and put them on. The licensee representative reinstructed him on the requirement to wear these items continuously while in the restricted areas.

The licensee representative informed the inspector by telephone on October 3, 1978 that a review of this individual's records of TLD and self-reading dosimeter exposures and his work assignments indicated that he had received a total exposure to the whole body of less than 100 mrem during the calendar quarter ending September 30, 1978. This individual was a temporary employee who had been on the job only the last two weeks of the calendar quarter.

The inspector noted that local areas were accessible in the laundry where the exposure to the whole body could exceed 5 mr/hr but an average of one mr/hr on the job was a reasonable estimate consistent with the above.

The inspector identified the above example of failure to continuously wear the assigned dosimeters in the restricted areas as noncompliance with the procedures developed pursuant to Technical Specification 6.11. (78-21-01)

c. Procedure Changes

The inspector reviewed the licensee's "Radiation Protection Operating Procedures" for consistency with the following requirements:

-- Technical Specification 6.8, "Procedures"
-- Technical Specification 6.11, "Radiation Protection Program"
-- 10 CFR 19, "Notices, Instructions and Reports to Workers; Inspections"
-- 10 CFR 20, "Standards For Protection Against Radiation"

No items of noncompliance and no substantial changes were identified other than as described in paragraph 4.

4. Control of Radiation Areas, High Radiation Areas, and Airborne Radioactivity Areas

Part of the inspection effort was to observe the licensee's compliance with the requirements of 10 CFR 20.203 "Caution signs, labels and controls"; Technical Spections (TS) Section 6.11(A) "High Radiation Area"; and the licensee's "Radiation Protection Operating Procedures" Sections 1.3 . "Restricted Area," 1.3.2 "Radiation Area," 1.3.3 "High Radiation Area," and 2. "Roping and Tagging."

Technical Specifications Section 6.11(A)2 requires that locked doors shall be provided to prevent unauthorized entry into areas where the intensity of radiation is greater than 1,000 mrem/hr; and until September 27, 1978, the Radiation Protection Operating Procedures required locked gate access controls on any area in which an individual could receive in excess of 100 mrem dose to the whole body in any one hour.

At 11:20 p.m. on September 25, 1978, while touring the facility, a posted high radiation area gate opened without using a key when it was tested. The gate alarm operated properly. The gate did not secure until it had been closed and tried several times.

This was an unattended gate leading to the personnel airlock entrance to the drywell which is an area in which the intensity of radiation is greater than 1,000 mrem/hr. Both airlock doors were standing open.

The inspector identified the condition as found as noncompliance with the TS 6.11 requirements. The inspector noted that this was recurrent noncompliance in that failures to maintain locked high radiation area gates or doors were identified during February and May 1978 (Inspection Nos. 333/78-05 and 333/78-12). (78-21-02)

After a maintenance check was made the inspector tried the gate on September 27, 1978 and observed that it operated properly. The inspectors tried 50 gates and doors during tours of the facility between September 25 and 27, and no other problems were identified.

The inspector noted that the above requirement of TS Section 6.11(A)2 was part of a recent change. The licensee made a temporary change to the radiation protection procedures, effective September 27, 1978, to make the procedural requirement the same as the TS requirement.

The disposition of the temporary change to the procedure will be reviewed on a subsequent routine inspection. (78-21-03)

5. Radiation Protection Staffing for the Outage

Part of the inspection effort was to review the staffing and qualifications of personnel, to determine compliance with TS 6.3 and ANSI N18.1-1971 which require that technicians in responsible positions shall have a minimum of two years working experience in their specialty and a minimum of one year of related technical training in addition to their experience.

The licensee retained 35 contract radiation protection personnel to increase the available manpower during the outage.

The inspector reviewed the resumé for each individual. Those required to perform the initial surveys and evaluations of air samples to initiate Radiation Work Permits were qualified, as indicated by their resumés, for responsible positions.

Several less qualified individuals were typically acting as control point monitors and working under the direction of those who were fully qualified.

No items of noncompliance were identified.

6. Training

Part of the inspection effort was to review the licensee's compliance with regulatory and procedural requirements to train personnel who report on site.

The inspectors observed training which was conducted to comply with the requirements of 10 CFR 19.12 and to qualify personnel for unescorted access to restricted areas, for wearing of respirators, and for the responsibility of being leadman on RWP's.

The inspector also participated in a test of the fit of a respirator and reviewed selected training and qualification records.

The licensee representative stated that the temporary radiation protection technicians were provided instructions on procedures and equipment and then checked-out on the job.

The inspector interviewed several contract employees.

No items of noncompliance were identified.

7. Exposure Control

Part of the inspection effort was to observe the licensee's exposure controls and to review the records of dosimetry and in-vivo counting.

The inspector observed the cleaning and checking of respirators.

The inspectors observed work being performed on RWPs in several areas of the facility including jobs involving respiratory protection factors.

The inspectors observed the whole body counting of individuals and reviewed the records for several personnel.

Review of selected control point records indicated that personnel exposure records were updated daily. Review of computer printout did not identify any errors in updating information or any overexposures.

Review of selected forms NRC-4 and NRC-5 information did not identify any errors or omissions. Review of licensee copies of termination reports did not identify any problems.

No overexposures, uptakes of radioactive materials or record errors were identified.

8. Posted Information

Part of the inspection effort was to review the posted information required by 10 CFR 19.11 and 10 CFR 20.203.

No items of noncompliance were identified.

9. Radioactive and Contaminated Material Control

Part of the inspection effort was to review records of shipments and receipts of radioactive material and fuel and to observe the disposition of materials.

No items of noncompliance were identified.

10. Exit Interview

The inspectors met with the licensee representatives (denoted in paragraph 1) at the conclusion of the inspection.

The inspector reviewed the scope and findings of the inspection.

The licensee representative stated that a compressor was being obtained to fill breathing air cylinders on site.

The licensee representative stated that no credit is taken for any respiratory protection factor for half-mask respirators but the use of these respirators will be continued.