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U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Subject: Saxton Nuclear Experimental Corporation
Operating License No. DPR-4
Docket No. 50-146
1999 Annual Report

Gentlemen,

In accordance with Section 3.8.2 of the Saxton Nuclear Experimental Corporation (SNEC) Technical Specifications, a written report covering the status of the SNEC Facility is attached. This report covers the period beginning January 1, 1999 through December 31, 1999.

If there are any questions about the report, please contact Jim Byrne at 717-948-8461.

Sincerely,

G. A. Kuehn
Vice President SNEC

JJB/caw

Attachment: 1999 Annual Report

cc: Alexander Adams
Thomas Dragoun

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SAXTON NUCLEAR EXPERIMENTAL CORPORATION

1999

ANNUAL REPORT

FOR THE

SAXTON NUCLEAR EXPERIMENTAL CORPORATION FACILITY

January 1, 1999 - December 31, 1999

EXECUTIVE SUMMARY

During the report period January 1, 1999 through December 31, 1999, various activities were conducted at the Saxton Nuclear Experimental Corporation (SNEC) Facility to prepare for Final Status Survey (FSS) and license termination. SNEC Facility Radiological Controls personnel continued to monitor radiological conditions at the site to assure protection of the health and safety of the general public and site personnel.

This report reviews those activities as required by the Technical Specifications Section 3.8.2 and includes:

A. Information relating to changes in those management and supervisory positions designated in the Technical Specifications Section 3.1 (Organization and Responsibilities) as being responsible for decommissioning the facility.

B. A summary of decommissioning, design, and maintenance changes made to the deactivated facility.

C. Results of surveys and monitoring performed in accordance with Technical Specifications Section 3.6.2.1 (Radioactive Effluent Controls Program) and 3.6.2.2 (Radiological Environmental Monitoring Program).

D. A review of the performance of access control and surveillance measures.

ANNUAL REPORT IN COMPLIANCE WITH PARAGRAPH 3.8.2 OF THE SNEC TECHNICAL SPECIFICATIONS
JANUARY 1, 1999 - DECEMBER 31, 1999

This report was prepared in accordance with Section 3.8.2 of the Saxton Nuclear Experimental Corporation (SNEC) Technical Specifications. The reporting period covers January 1, 1999 through December 31, 1999. Each section presented corresponds to the appropriate requirements of the Technical Specifications.

A. Section 3.8.2.1 - The following is information relating to changes in those management and supervisory positions designated in Section 3.1 of the Technical Specifications:

There were no changes to SNEC Management/Supervisory staff positions as designated in Section 3.1 of the Technical Specifications.

B. Section 3.8.2.2 - The following is a summary of decommissioning, design, and maintenance changes made to the deactivated facility:

1. Three Demineralizer Tanks and associated piping were removed from the Containment Vessel (CV) Storage Well, loaded into a High Integrity Container (HIC) and shipped off-site for disposal.

2. Fuel Storage Racks and Fuel Elevator were removed from the CV Storage Well, packaged and shipped off-site for disposal.

3. A high efficiency vacuum system and scabbling tools were purchased to support concrete remediation. Additional concrete removal tools were developed and tested for on-site use. An electric air compressor was leased to support scabbling operations.

4. Hi-lifts were placed in the Primary Compartment and 818' elevation of the CV to provide access to work areas.

5. CV concrete was remediated to remove contamination. This task is expected to be complete in the year 2000.

6. Blue Grass Bit Company was contracted to provide concrete wire saw cutting and core boring services. They completed the following:

- Wire sawed a 3' x 7' block out of the 5' thick wall between the Reactor Cavity and Primary Compartment, which included the RC Pipe Cold Leg Penetration

- Removed 12 pipes through the East - West wall separating the Reactor Cavity from the other plant areas

- Removed 8 pipe penetrations through the Primary Compartment floor

7. Miscellaneous steel structures and attachments to the CV Dome at 812' elevation and above were removed in preparation for dome paint removal. Items removed included:

   - Remaining sections of the structural steel for the Teleflex/Incore Shields
   - Equipment Hatch counter weights and support steel
   - 818' Mezzanine
   - Inner Personnel Hatch Door and 1 ton monorail hoist
   - East and west ladders and platforms
   - Miscellaneous steel attachments, electrical penetrations and piping systems.

8. The concrete Weir Tank was removed.

9. Removed the remainder of the 20-ton Storage Well Shield Blocks and the 12-ton Primary Compartment Shield Block from the CV. The shield blocks were packaged and shipped offsite for disposal.

10. The original Saxton Steam Generating Station Discharge Tunnel was located and an access port was provided. Numerous entries were made into the tunnel for inspection/survey purposes.

11. Scoping/characterization surveys and investigations resulting from the Historic Site Assessment were performed in the following areas:

   - Saxton Steam Generating Station Discharge Tunnel
   - Shoup Run Shunt
   - Saxton Steam Generating Station Yard Drains
   - PENELEC Garage and Warehouse
   - GPU Energy Line Shack & Septic System
   - Weir Discharge piping to the river
   - Saxton Steam Generating Station Spray Pond and associated piping
   - Northeast Dump Site (Non-Radiological)
   - Various soil and river sediment sampling

12. Several core samples were obtained and groundwater-measuring wells were installed next to the CV in the north yard area in conjunction with an engineering study concerning CV buoyancy concerns.

C. Section 3.8.2.3 - Results of surveys and monitoring performed in accordance with Technical Specifications Sections 3.6.2.1 (Radioactive Effluent Controls Program) and 3.6.2.2 (Radiological Environmental Monitoring Program):

The results of the Radioactive Effluent Controls Program and Radiological Environmental Monitoring Program were previously submitted to the Document Control Desk via GPU Nuclear letter E910-00-002 and E910-00-003.

D. Section 3.8.2.4 - The following is a review of the performance of access control and surveillance measures:

Access Control

1. A uniformed SNEC Site Watchman (Unarmed Security Officer) continues to provide access control during normal work hours.

2. All SNEC personnel continue to display security badges during normal work hours. Visitors are issued temporary badges and require a permanent badged escort during their visit, until receiving a Radiological Site Access Briefing in accordance with 10CFR19.12.

3. SNEC Facility Management is responsible for maintaining access control to the Exclusion Area. The Exclusion Area (Decommissioning Support Facility and Containment Vessel) is maintained locked and a security alarm system is activated during non-working hours.

4. There were no break-ins or known attempted break-ins at the SNEC Facility during 1999.

Surveillances

All Technical Specification surveillances were performed in the required frequency as described in TS Section 3.5.3.1. The following surveillance inspections were reviewed for this report:

1. Verification that Exclusion Area access points are secured at the completion of each authorized entry.

   There were no surveillance deficiencies involving Exclusion Area access in 1999.

2. Verification of the operability of the Exclusion Area intrusion alarms performed quarterly.

   All surveillance inspections were performed satisfactorily in 1999.

3. The Station Ventilation System Effluent Particulate Monitor channel checks, source checks, channel test and channel calibration shall be performed at a frequency specified in the SNEC Facility Offsite Dose Calculation Manual (ODCM).

There was one deficiency involving the Station Ventilation System Effluent Particulate Monitor (RMA-1) in 1999. The following is a description of the deficiency:

A. On 10/7/99, the sample connection from RMA-1 to the CV Ventilation Exhaust Duct was found to be disconnected following system start-up after recalibration. Containment Vessel/Decommissioning Support Building Ventilation was in operation for approximately seven minutes before discovery. During this time, there was no work being performed inside the CV as all work was stopped for the calibration. Therefore, there was no potential for an environmental release. The RMA-1 system was restored to the proper configuration and daily operational checks performed satisfactorily in accordance with procedure. Several changes were made to the Daily RMA-1 Operational Check procedure to prevent this incident from repeating.

4. The Station Ventilation System HEPA filter will be tested to verify efficiencies in accordance with the requirements of the ODCM.

The Station Ventilation System HEPA filters were DOP tested in February 1999. There were no surveillance deficiencies involving Station Ventilation System HEPA filter testing in 1999.