



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555-0001

SAXTON NUCLEAR EXPERIMENTAL CORPORATION

DOCKET NO. 50-146

AMENDMENT TO AMENDED FACILITY LICENSE

Amendment No. 13  
License No. DPR-4

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for an amendment to Amended Facility License No. DPR-4 filed by the Saxton Nuclear Experimental Corporation (the licensee) on November 21, 1995, as supplemented on March 13, 1996, conforms to the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the regulations of the Commission as set forth in Chapter I of Title 10 of the Code of Federal Regulations (10 CFR);
  - B. The facility will be possessed in conformity with the application, provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance that (i) the activities authorized by this amendment can be conducted without endangering the health and safety of the public and (ii) such activities will be conducted in compliance with the regulations of the Commission;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with the regulations of the Commission as set forth in 10 CFR Part 51, and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the technical specifications as indicated in the enclosure to this license amendment, and the license is amended to read as follows:

- A. The title on page 1 of the license shall read:

GPU NUCLEAR CORPORATION  
SAXTON NUCLEAR EXPERIMENTAL CORPORATION  
DOCKET NO. 50-146  
AMENDED FACILITY LICENSE

- B. Paragraph 1.C. of the license shall read:

GPU Nuclear Corporation is technically qualified, and Saxton Nuclear Experimental Corporation is financially qualified, to engage in the activities authorized by the amended license in accordance with the rules and regulations of the Commission;

- C. Paragraph 2.A. of the license shall read:

This license applies to the pressurized water reactor (hereinafter referred to as the "Saxton facility") owned by Saxton Nuclear Experimental Corporation (hereinafter referred to as "SNEC"), located north of the Borough of Saxton in Liberty Township, Bedford County, Pennsylvania, and described in Amendment No. 5 dated April 19, 1961, and amendments thereto, including the amendment dated April 14, 1972, to the Saxton facility's license application.

- D. Paragraph 2.B. of the license shall read:

Subject to the conditions and requirements incorporated herein, the Nuclear Regulatory Commission hereby licenses GPU Nuclear Corporation (GPU Nuclear) and SNEC as follows:

- (1) GPU Nuclear, pursuant to Section 104b of the Act and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," is licensed to possess, manage, use, and maintain, but not to operate, the Saxton facility at the designated location in Liberty Township, Bedford County, Pennsylvania, in accordance with the procedures and limitations set forth in the facility license;

- (2) SNEC, pursuant to the Act and 10 CFR Part 50, is licensed to possess, but not to manage, use, maintain, or operate, the Saxton facility at the designated location in Liberty Township, Bedford County, Pennsylvania, in accordance with the procedures and limitations set forth in the facility license; and
- (3) GPU Nuclear, pursuant to the Act and 10 CFR Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material," is licensed to possess, but not to separate, such byproduct material as may have been produced by operation of the Saxton facility.

E. Paragraph 2.C.1. of the license shall read:

GPU Nuclear shall not reactivate the facility without prior approval of the Commission.

F. Paragraph 2.C.2. of the license shall read:

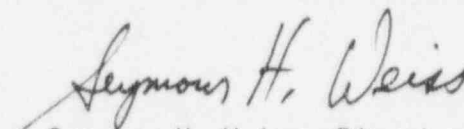
GPU Nuclear shall not dismantle or dispose of the facility or the property occupied by the facility without prior approval of the Commission.

G. Paragraph 2.C.3 of the license shall read:

The Technical Specifications contained in Appendix A, as revised through Amendment No. 13, are hereby incorporated in the license. SNEC and GPU Nuclear shall possess the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Seymour H. Weiss, Director  
Non-Power Reactors and Decommissioning  
Project Directorate  
Division of Reactor Program Management  
Office of Nuclear Reactor Regulation

Enclosure:  
Appendix A Technical  
Specification Changes

Date of Issuance: May 10, 1996

ENCLOSURE TO LICENSE AMENDMENT NO. 13

AMENDED FACILITY LICENSE NO. DPR-4

DOCKET NO. 50-146

Replace the following pages of Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove

1-9

Insert

1-8

GPU NUCLEAR CORPORATION  
SAXTON NUCLEAR EXPERIMENTAL CORPORATION  
APPENDIX A: TECHNICAL SPECIFICATIONS TO  
AMENDED FACILITY LICENSE NO. DPR-4

A. SITE

1. Location

The Saxton facility is on a 1.148 acre tract deeded from the Pennsylvania Electric Company to the Saxton Nuclear Experimental Corporation (SNEC). It is located within the property of the Pennsylvania Electric Company near the Borough of Saxton, Pennsylvania, in Liberty Township, Bedford County, Pennsylvania. The Pennsylvania Electric Company property consists of approximately 150 acres along the Raystown Branch of the Juniata River.

2. Exclusion Area Controls

- a. The exclusion area consists of that portion of the Saxton Nuclear Experimental Corporation property enclosed within the fence containing the Containment Vessel. See Figure 1.
- b. Except for authorized entry the following access points shall be maintained locked:
  - 1) the gate to the Exclusion Area fence surrounding the Containment Vessel,
  - 2) the Containment Vessel access door,
  - 3) the grating covering the Auxiliary Compartment stairwell in the Containment Vessel,
  - 4) and the Rod Room door.
- c. The Containment Vessel shall be equipped with an intrusion alarm to supplement the multiple physical barriers to intrusion.
- d. Employees of the Pennsylvania Electric Company's Line Department headquartered on the Pennsylvania Electric Company property shall report to the Program Director SNEC facility or the designated representative any observed indication of change in the facility status as shown by smoke, fire, tornado, flood, or attempted break-in and take any immediate action authorized.

3. Principal Activities

Pennsylvania Electric Company personnel associated with electric power transmission and maintaining electric power distribution equipment are headquartered on the Pennsylvania Electric Company property. Activities permitted within the Exclusion Area shall include routine and emergency inspections, maintenance associated with the possession of the Saxton facility and characterization activities associated with the decommissioning of the facility.



## B. ADMINISTRATIVE AND PROCEDURAL CONTROLS

Administrative controls relate to the organization, activities, procedures, record keeping, reporting and review and audit considered necessary to provide assurance and evidence that activities within the Exclusion Area are managed in a safe manner. Procedure controls are applicable to activities for which it is considered necessary to provide assurance that they are performed in a safe manner.

### 1. Organization

GPU Nuclear (GPUN) has the responsibility for safely maintaining the Containment Vessel and performing the characterization activities in support of its decommissioning. The organizational structure with reporting and communications lines is depicted in Figure 2.

a. The responsibilities of management and supervisory level personnel are as follows:

- 1) President GPU Nuclear is responsible for and provides full-time dedicated staff for the purpose of conducting all nuclear activities safely and effectively. The Vice President Nuclear Services Division (NSD) assures that all division and corporate activities are performed in accordance with corporate policies, applicable laws, regulations, licenses and Technical Specifications.
- 2) Program Director SNEC Facility is responsible for administration of all Saxton facility functions, for direction of all decontamination and characterization activities, and for assuring that the requirements of License No. DPR-4 and these Technical Specifications are implemented.
- 3) Radiation Safety Officer (RSO) is responsible for the conduct and oversight of all Saxton Radiation Safety Activities through implementation of the Saxton facility's Radiation Protection Plan. All radiological controls personnel shall have stop work authority in matters relating to or impacting radiation safety.
- 4) Group Radiological Controls Supervisor (GRCS) directly supervises radiation safety activities. The position reports to the RSO and will consult with the SNEC Facility Site Supervisor for production activity direction.
- 5) The SNEC Facility Site Supervisor reports to the Program Director SNEC Facility. The Supervisor provides on-site management and continuing oversight of production activities.

b. Other GPU Nuclear Division personnel provide Saxton facility management with technical support and project management capabilities.

c. Staffing requirements are as follows:

- 1) At least two individuals, one of which must be knowledgeable in radiation monitoring and the radiological hazards associated with the facility, shall perform radiological surveys necessary to support planned activities within the Containment Vessel if the Containment has been secured (Containment Vessel is sealed except for the breather opening) for a period greater than 24 hours.
- 2) The RSO or a qualified designee shall be present on site whenever entry and/or maintenance or characterization activities within Containment are in progress.

d. Personnel selection and training requirements are as follows:

- 1) Each Radiological Controls Technician/GRCS shall meet or exceed the qualifications of ANSI-N 18.1-1971, paragraph 4.5.2 and 4.3.2 respectively or shall be formally qualified through an NRC approved Radiological Controls training program.
- 2) All personnel conducting maintenance or characterization activities shall be briefed on the Saxton facility's site specific conditions and requirements of the Characterization Plan.

## 2. Review and Audit

a. Radiation Safety Committee

- 1) The Radiation Safety Committee shall report to the Vice President NSD. The Committee will consist of at least four members and membership will be on the recommendation of the Vice President NSD. Three members shall constitute a quorum. It will be responsible to review all matters with radiological safety implications relative to activities at the Saxton facility. Meetings shall be held at least annually to review and discuss the events of the preceding period.
- 2) The Committee will review License and Technical Specification changes, characterization and maintenance actions, special nuclear and radioactive material activities, facility changes, quarterly inspection results, audit and NRC Inspection reports and corrective actions for deficiencies identified.
- 3) Written minutes of all meetings shall be prepared and distributed to the Vice President NSD within 30 days of the meeting date.

b. The audit function is provided by GPU Nuclear and is independent of the Saxton facility's management. Audits shall be performed by qualified individuals, as a minimum, for those activities

designated within the scope of the Saxton facility's QA Program. Audits are generally conducted biennially, however, frequency is based on the level of activity at the Saxton facility. Audits may also be performed at the request of the GPU Nuclear President. GPU Nuclear audits are performed in accordance with the GPU Nuclear audit program procedures. The audit procedures identify areas which may be included in the audit scope. Audit reports shall be forwarded to the GPU Nuclear President within 60 days of completion of the audit.

### 3. Procedures

- a. Activities which are designated as within the scope of the Saxton facility's QA Program shall be prescribed by written, reviewed and approved procedures of a type appropriate to the circumstances. The GPU Nuclear procedure control methodology will be prescribed by an administrative procedure.
- b. Written procedures shall be established, implemented and maintained for the activities listed below:
  - 1) Characterization and maintenance activities requiring Health Physics controls consistent with 10 CFR Part 20 requirements.
  - 2) Access control, emergency actions, facility inspections and audits.
  - 3) Radiological exposure control, survey activities and radwaste shipping and handling.
  - 4) Activities which could impact containment integrity and/or could result in a measurable release to the environment.
- c. These procedures shall require that the following actions be taken:
  - 1) All maintenance and characterization work associated with the Containment Vessel under Health Physics control shall be consistent with 10 CFR Part 20 requirements to minimize the radiation exposure of personnel and to prevent the release of radioactivity to the environment.
  - 2) Entry into the controlled area of the containment requires that radiation levels and airborne activity surveys be obtained prior to beginning work.
  - 3) All radiation surveys, tests, counting work, radiation exposure control measures and all other work performed in radiologically controlled areas shall conform with the requirements of the Saxton Nuclear Facility Radiation Protection Plan.
  - 4) Facility inspections and access controls shall meet specific requirements of the Technical Specifications.



- d. These procedures and any subsequent revisions shall be prepared, reviewed and approved in accordance with the requirements of the GPU Nuclear administrative procedure for procedures prior to their initial use. |

#### 4. Inspections

- a. Facility inspections shall be performed in accordance with an established schedule at a frequency no less than quarterly. The inspections will be performed by personnel knowledgeable in radiation monitoring and the radiological hazards associated with the facility. Inspection and radiation monitoring activities will be conducted concurrently.

##### 1) The radiation monitoring activities shall include:

- a. Survey of radiation levels and surface contamination in the Containment Vessel.
- b. Replacement of the ventilation "breather" pipe filter and counting the original for activity as a measure of the activity available for release.
- c. Inspection of the Containment Vessel at the lowest level for water. If water is found, a sample shall be taken and analyzed for the isotopic concentration of all significant radionuclides and shall as a minimum include gamma spectral analysis.

##### 2) The inspection activities shall include:

- a. Verification that the locks at all entrances to the Containment Vessel exclusion area fence are locked.
- b. Verification of the operability of the Containment Vessel intrusion alarm.

#### 5. Records

In addition to the records required by applicable NRC regulations, including subpart L of 10 CFR 20, 20.2101 through 20.2110 inclusive, GPU Nuclear shall retain records of the following: |

- a. Inspections of the decommissioned facility including the results of surveys of radioactivity levels and as-found and as-left conditions of the facility.
- b. Entries into the Containment Vessel and the reason for entry.
- c. Dates of quarterly inspections and evaluation of the results.
- d. Radioactivity releases or discharges into the air or water beyond the effective control of GPU Nuclear as measured at or prior to the point of such release or discharge. |

- e. Design changes and maintenance necessary to maintain the decommissioned facility as described in the Saxton Decommissioning Plan and Safety Analysis Report as revised by SNEC letter dated May 31, 1974 and design changes and maintenance necessary to accomplish characterization activities associated with decommissioning.
  - f. Characterization study results.
  - g. Audit reports.
6. Reports

In addition to those reports required by applicable NRC regulations (ie. violation of license or technical specification condition) GPU Nuclear shall submit the following:

- a. A report of any occurrence of a possible unsafe condition relating to the facility or to the public. For each occurrence, GPU Nuclear shall promptly, within 24 hours of discovery, notify by telephone or telegraph, the Administrator of Region I, or designee, and the NRC Operations Center, and shall submit a written follow-up report to the Document Control Desk and the Administrator of Region I within 15 days, which describes the circumstances and the corrective action taken. These reports shall include:
  - 1) Any unplanned or uncontrolled release of radioactive material from the facility.
  - 2) Conditions arising from natural or man-made events that affect the integrity of the Containment Vessel.
- b. An annual report shall be submitted to the Document Control Desk and the Administrator of Region I, within 6 months after the end of the calendar year, of the status of the deactivated facility including:
  - 1) Information relating to changes in those management and supervisory positions designated in section B.1.a as being responsible for the deactivated facility.
  - 2) A summary of entries into the Containment Vessel and reasons for entry.
  - 3) A summary of maintenance and design changes made to the deactivated facility.
  - 4) Results of surveys of radioactivity levels and of water sample analyses.
  - 5) A review of the performance of access control and surveillance measures.

Figure 1  
Saxton Facility Layout

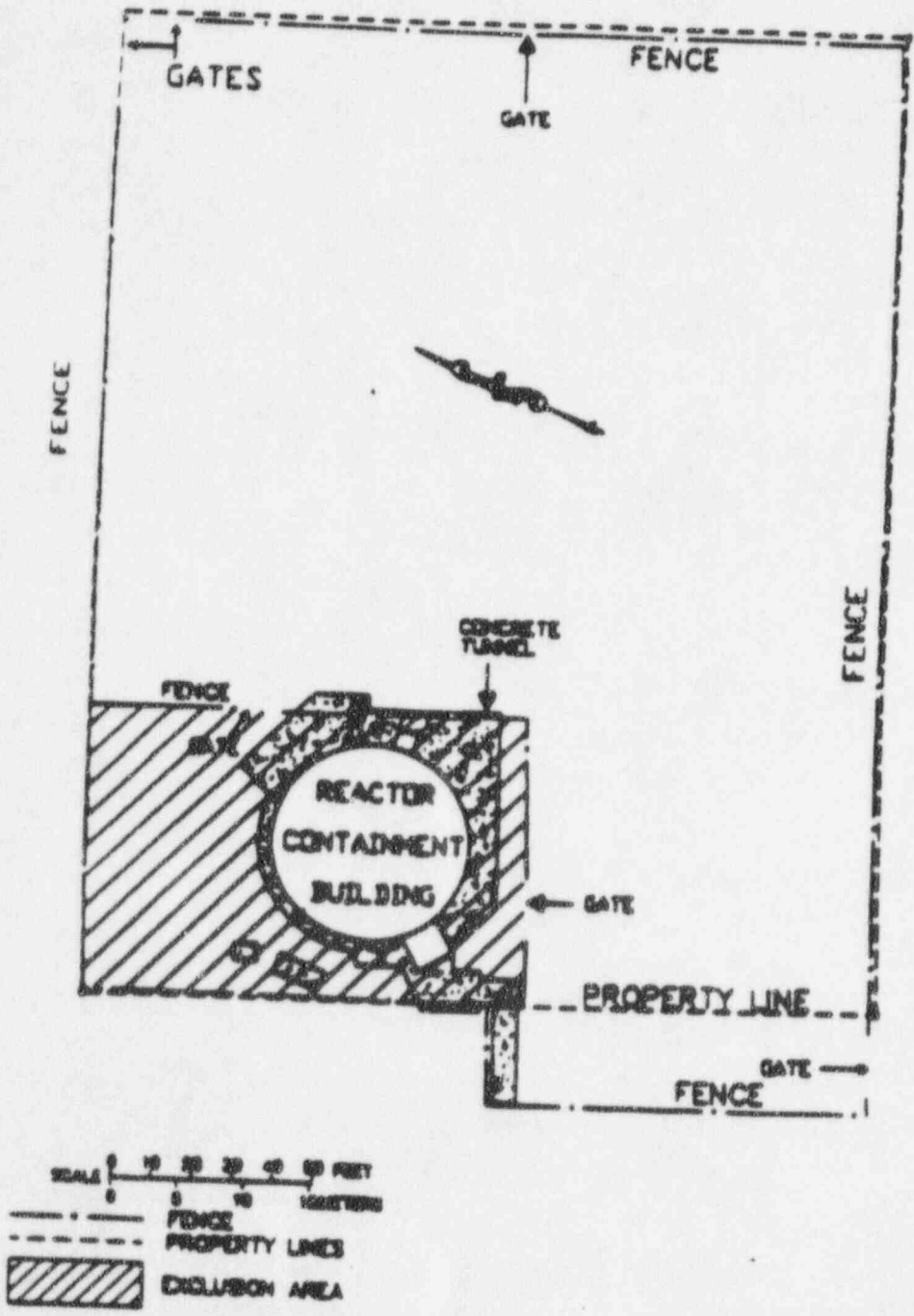


Figure 2

GPU Nuclear Organization for the Saxton Facility

