

SAXTON NUCLEAR FACILITY

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF DAUPHIN)

Notarial Seal
Suzanne C. Miklosik, Notary Public
Londonderry Twp., Dauphin County
My Commission Expires Nov. 22, 1999
Member, Pennsylvania Association of Notaries

BY:

Vice President, SNEC

Sworn and Subscribed to before me
this 2 day of February 1996.

Suzanne C. McLosid
Notary Public

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF
SAXTON NUCLEAR EXPERIMENTAL FACILITY

LICENSE NO. DPR-4
DOCKET NO. 50-146

CERTIFICATE OF SERVICE

This is to certify that Technical Specification Change Request No. 57 to Appendix A of the Operating License for Saxton Nuclear Facility has, on the date given below, been filed with executives of Liberty Township, Bedford County, Pennsylvania; Bedford County, Pennsylvania; and the Pennsylvania Department of Environmental Protection, Bureau of Radiation Protection, by deposit in the United States mail, addressed as follows:

Mr. Donald Weaver, Chairman
Liberty Township Supervisors
R.D. #1
Saxton, PA 16678

Mr. Richard Rice, Chairman
Bedford County Commissioners
County Courthouse
203 South Juliana Street
Bedford, PA 15522

Director, Bureau of Radiation Protection
PA Department of Environmental Protection
Rachel Carson State Office Building
PO Box 8469
Harrisburg, PA 17105-8469
ATTN: S. Maingi

SAXTON NUCLEAR EXPERIMENTAL CORPORATION

BY: *SAKulka II*
Vice President, SNEC

DATE: *2/2/96*

I. Technical Specification Change Request No. 57

The Saxton Nuclear Experimental Corporation (SNEC) requests that the following revision be made to the SNEC Technical Specifications (TS):

Replace pages 1 and 8 with the included revised pages and insert page 1a.
Note: the proposed revised sections are not impacted by changes to the organization which were proposed in the previously submitted License Transfer and Amendment Request for Inclusion of GPU Nuclear as a Licensee.

II. Reasons for the Proposed Changes

A. Increase scope of work permitted by the Technical Specifications:

Actions at the SNEC facility are currently limited to those specified by TS section A.3. It identifies the principal activities permitted within the Exclusion Area as "inspection and maintenance associated with the possession of the facility and characterization activities."

The proposed change to section A.3 would allow limited facility preparation for decommissioning to proceed. The proposed revised wording would expand the scope of principal activities and read: "...Activities permitted within the Exclusion Area shall include routine and emergency inspections, maintenance associated with the possession of the facility, characterization and actions preparatory to major component and facility decommissioning."

Actions considered to be permitted by this provision would be limited to asbestos removal, removal of defunct plant electrical services and associated components and installation of decommissioning support facilities and systems (for example: compressed air, electrical power, heating, ventilation and air conditioning). Any action which results in alteration of the Containment Vessel, removal of major radioactive components or results in dismantling components for shipment that contain greater than class C waste is prohibited."

B. Revision to and elimination of areas within the Containment Vessel requiring administrative access controls:

The proposed change to subsection A.2.b. would delete item 3), the grating covering the Auxiliary Compartment stairwell in the Containment Vessel and item 4), the rod room door, from the listing of access points to remain locked. These changes would relieve unnecessary and overly restrictive access controls within the Containment Vessel.

C. Revision of the facility layout diagram, Figure 1:

The proposed change to Figure 1, the Saxton Facility Layout, would clarify the figure by adding a note indicating that the "exclusion area identified by the shaded area is typical and is not meant to represent any specific area, dimensions or shape. It will consist, as a minimum, of the Reactor Containment Vessel and may extend to the SNEC outer security fence." The "footprint" of the proposed Decommissioning Support Facilities has also been included to identify the intended location of the structures. These changes facilitate construction of support facilities and other preparatory actions for decommissioning without decreasing the effectiveness of access control to the exclusion area.

III. Safety Evaluation Justifying Changes

A. Proposed Changes to TS A.3:

The proposed change to TS A.3 would allow limited facility preparation work for decommissioning to proceed. Removal of asbestos from the Containment Vessel under controlled conditions will reduce the risk to workers when decommissioning begins. Removal of defunct plant electrical services and associated components, construction of decommissioning support facilities and installation of decommissioning support systems will improve working conditions in the Containment Vessel. It will also enable crews to work more efficiently and safely when decommissioning work is authorized. All of these activities would be conducted in accordance with Commission regulations and established procedures and work practices. No work to remove major components or shipment of radioactive components containing greater than class C waste would be allowed.

The reactor core was removed in 1972 and the only accidents applicable to the site are fire, flood and radioactive hazard. None of the proposed activities has an effect on flooding or offsite radiological hazard. Therefore, none of the proposed activities would significantly affect these previously reviewed accidents.

Regarding fire, the existing fire protection provisions and procedures are sufficient to minimize the likelihood of fire from activities allowed by the limited expansion of the work scope and decommissioning support facility construction addressed by this TS change request. As additional precautions, site personnel will be trained as fire watches and be assigned those duties when appropriate, and the local volunteer fire departments will be given equipment and have been given tours of the SNEC facility to provide them knowledge to increase their effectiveness if a response to a fire event at the site becomes necessary.

B. Proposed Changes to TS A.2.b:

The proposed changes to TS A.2.b would delete two internal access points (items 3 and 4) that must remain locked in the current TS. Evaluation of needs for continuing specific administrative controls, based upon radiological conditions, determined that administrative controls for access to the two areas designated (the grating covering the Auxiliary Compartment stairwell and the rod room door) were no longer necessary and need not be specified in the TS. This conclusion is based upon the radiological characterization results that found general area radiation levels in the Auxiliary Compartment to be well below the requirements of 10 CFR Part 20 for High Radiation Areas.

Since the intent of section A.2.b is to address physical security barriers at the SNEC facility, elimination of the radiologically associated barriers from this section is appropriate. Installation of High Radiation Area barriers and access to the areas will be procedurally controlled and be in accordance with 10 CFR Part 20.

Item 3, the locked floor grate at the stairwell, controlled personnel access through this single entry point to auxiliary compartment high radiation areas below the 812.0' elevation. It is so described and is identified as an as-left condition in the report entitled "Decommissioned Status of the Saxton Reactor Facility" submitted to the AEC in 1975. Based on extensive radiological survey data from the 1995 characterization in the Containment Vessel, it was found that the average general area dose rates on the 795' and 781' elevations in the Auxiliary Compartment are less than 1 mR/hr and the average general area dose rates on the 766' elevation are less than 10 mR/hr. These results make it appropriate to move High Radiation Area barriers back to the entrance of the Primary Compartment and in closer proximity to other areas. Access to the Primary Compartment and other High Radiation Areas will be controlled procedurally and in accordance with 10 CFR 20 as required by the facility license. As radiological conditions dictate, High Radiation Area controls will be implemented.

As for item 4, the area was locked to prevent inadvertent access during reactor operation. It was determined that design of the rod room made it susceptible to neutron streaming from the control rod drive mechanisms during reactor operation. Based on the radiological survey results obtained during the Containment Vessel characterization, it was confirmed that there is no longer any need to maintain the room in a locked condition, per 10 CFR Part 20.

C. Proposed Change to Figure 1:

The proposed change would clarify the TS in that the exclusion area fence may be moved to accommodate construction of support facilities provided the same level of access control is maintained. The exclusion area is bounded by the Reactor Containment Vessel, as

a minimum, and may extend, as a maximum, to the SNEC outer security fence. With addition of the notation, the exclusion area fence may be relocated or modified (gates added) as necessary to permit entry of construction equipment and the construction of the decommissioning support facilities in the area. The level of effectiveness of the fence as relocated/modified will not be decreased. Requirements to maintain access points to the exclusion area locked, except for authorized entry (as required by section A.2.b.1), and administrative controls to provide assurance and evidence that activities within the exclusion area are managed in a safe manner (as required by section B) remain.

Addition of the proposed "footprint" for the planned decommissioning support facilities further delineates the facility layout. The Decommissioning Support Building will be constructed adjacent to the Containment Vessel. It will be a "Butler" building set on a concrete slab with integral footers. The Personnel Access Facility will be constructed inside the current exclusion area adjacent to the Containment Vessel and encompass the personnel access hatch.

IV. No Significant Hazards Consideration Analysis

SNEC has determined that this TSCR does not involve a significant hazards consideration as defined in 10 CFR 50.92. Issuance of the proposed TS changes would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated. The SNEC facility ended power operation in May 1972 and the reactor core has been removed. In its present condition, the only accidents applicable to the site are fire, flooding and radiological hazard. Activities associated with the expansion of the permissible work scope (changes to TS A.3) will not involve a significant increase in the probability or consequences of a fire. There is no effect on the probability of flooding nor would there be a significant increase in the probability or consequences of an offsite radiological hazard.

The relocation of administratively controlled accesses in accordance with the revised wording of Section A.2.b and the proposed clarification of Figure 1 of the TS would have no affect on analyzed accidents.

Activities associated with the construction of the Decommissioning Support Facilities and the existence of the completed buildings depicted on the revised figure will not involve a significant increase in the probability or consequences of a fire, flood or radiological hazard.

The proposed changes identified by this TS change request do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated. For the reasons provided in 1 above, the possibility of a new or different type of accident previously evaluated will not be created by the performance of the activities delineated in Section A.3 of proposed revised TS. There is similarly no possibility of a new or different kind of accident from any accident previously evaluated that would result from relocation of administratively controlled accesses within the Containment Vessel; from the flexibility to relocate/modify the exclusion area fence through the addition of the note to Figure 1; or from the identification of the "footprint", construction and existence of the completed decommissioning support facilities.
3. Involve a significant reduction in a margin of safety. For the reasons provided in 1 above, none of the proposed changes involve a significant reduction in a margin of safety.

V. Implementation

It is requested that the amendment authorizing this TSCR be issued expeditiously and be effective upon issuance to enable SNEC to begin the activities identified in Section II.A. and make the authorized access control changes.

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, and
 - 2) the Containment Vessel access 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 facility, characterization and actions preparatory to major component and facility decommissioning.

Actions considered to be permitted by this provision would be limited to asbestos removal, removal of defunct plant electrical services and associated components, installation of decommissioning support systems (for example compressed air, electrical power, heating, ventilation and air conditioning) and construction of decommissioning support facilities. Any action which results in alteration of the Containment Vessel, removal of major radioactive components or results in dismantling components for shipment that contain greater than class C waste is prohibited.

Figure 1
Saxton Nuclear Facility Layout

