

July 14, 2000

Mr. G. A. Kuehn, Jr.
Program Director SNEC Facility
GPU Nuclear, Inc.
2574 Interstate Drive
Harrisburg, PA 17110

SUBJECT: NRC INSPECTION NO. 50-146/2000-201

Dear Mr. Kuehn:

On June 15, 2000, the NRC completed an inspection of decommissioning activities at the Saxton Nuclear Experimental Facility. The enclosed report represents the results of that inspection.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations of activities in progress.

No violations of regulatory requirements or significant safety issues were identified during this inspection. Accordingly, no response to this letter is required.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, please contact Mr. Thomas Dragoun at 610-337-5373.

Sincerely,

/RA/

Ledyard B. Marsh, Chief
Events Assessment, Generic Communications
and Non-Power Reactors Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 50-146
License No. DPR-4

Enclosure: NRC Inspection Report No. 50-146/2000-201
cc w/enclosure: Please see next page

Saxton Nuclear
Experimental Corporation

Docket No. 50-146

cc:

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Mr. Ernest Fuller
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Saxton Borough Council
ATTN: Peggy Whited, Secretary
9th and Spring Streets
Saxton, PA 16678

Mr. David J. Thompson, Chair
Bedford County Commissioners
County Court House
203 South Juliana Street
Bedford, PA 15522

Mr. Larry Sather, Chairman
Huntingdon County Commissioners
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Huntingdon, PA 16652

Saxton Community Library
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Hopewell Township Supervisors
ATTN: Sally Giornesto, Secretary
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James Creek, PA 16657-9512

Mr. D. Bud McIntyre, Chairman
Broad Top Township Supervisors
Broad Top Municipal Building
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Mr. Don Weaver, Chairman
Liberty Township Supervisors
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The Honorable Robert C. Jubelirer
President Pro-Temp Senate of
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Ledyard B. Marsh, Chief
Events Assessment, Generic Communications
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Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

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U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION

Docket No: 50-146

License No: DPR-4

Report No: 2000-201

Licensees: GPU Nuclear Corporation and
Saxton Nuclear Experimental Corporation

Facility: Saxton Nuclear Experimental Facility

Location: Saxton, Pennsylvania

Dates: June 12-15, 2000

Inspector: Thomas F. Dragoun

Approved by: Ledyard B. Marsh, Chief
Events Assessment, Generic Communications and
Non-Power Reactors Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

EXECUTIVE SUMMARY

This routine, announced inspection included onsite review of selected aspects of the quality assurance program, industrial safety program, radiation protection programs, and change control since the last NRC inspection.

QUALITY ASSURANCE

The Quality Assurance program was conducted in accordance with licensee commitments and Technical Specification requirements.

INDUSTRIAL SAFETY

The industrial safety program was satisfactory.

RADIATION PROTECTION

The radiation protection program was properly implemented.

CHANGE CONTROL

Facility changes and impacts of parent company changes were well managed.

REPORT DETAILS

Summary of Plant Status

Scabbling of concrete surfaces in the reactor cavity and primary compartment was continuing. The abandoned steam plant cooling water intake sump was excavated for radiological characterization. The Containment Vessel (CV) exhaust stack was relocated to allow removal of the underground pipe tunnel surrounding the CV. Paint was being removed from the interior surface of the CV dome. Two 8500 gallon and one 6400 gallon high density polymer tanks were on-site for processing water prior to release to the river. The piping system and manifold for the tanks has been fabricated and was ready for hydrostatic testing. Some ground water will be disposed of on-site using a "geo-fabric" covered leech field.

1. QUALITY ASSURANCE PROGRAM

a. Scope (IP 40801)

The inspector reviewed selected aspects of:

- Quality Assurance (QA) program changes
- QA organization and staffing
- QA assessments
- resolution of findings

b. Observations and Findings

No new QA audits were performed since the biennial audit completed in May 1999. Since that time, implementation of the QA program was transferred to the GPU staff at the Oyster Creek generating station due to the sale of the Three Mile Island (TMI)-1 station to AmerGen. After the announcement that the Oyster Creek station was also to be sold to AmerGen, implementation of the program was contracted to the TMI staff who were originally responsible. This staff is qualified and has previously conducted audits and assessments on-site. However, the incoming AmerGen QA program to be adopted at TMI was reported to be significantly different from the original GPU program. Furthermore, GPU intends to cancel its nuclear QA program after the sale of Oyster Creek. To ensure program continuity, the GPU QA program policies and procedures were formalized as SNEC site documents. The licensee stated that these steps will ensure that changes in the power plant programs remain transparent to the SNEC site.

Since January 2000, six assessments of SNEC site activities were performed by the TMI QA staff. This included follow-up on the resolution of selected items entered into the Corrective Action Process (CAP) tracking system.

In addition, the Independent Inspector from The Pennsylvania State University has monitored the CAP program and radioactive waste shipments during 1999 and 2000. Findings are documented in reports to site management and the Citizens Task Force. A quarterly report of site activities is also issued. No major program weaknesses were noted.

c. Conclusions

The QA program was conducted in accordance with licensee commitments and Technical Specification (TS) requirements.

2. INDUSTRIAL SAFETY

a. Scope (IP 93001)

The inspector reviewed selected aspects of:

- program responsibilities
- oversight
- use of protective equipment

b. Observations and Findings

The Radiation Safety Officer (RSO) is responsible for the industrial safety program. Safety equipment, worker training, and program support is provided by TMI as before except there is now a contract for these services with TMI owner AmerGen. An industrial hygienist from TMI was on-site during this inspection. Noise levels in the work areas from scabbling equipment and the paint removal machine were measured and recorded on floor plan maps. Airborne lead concentrations were also measured as paint was being removed. Appropriate protective equipment was specified and available. Workers were observed properly using the required equipment. Planned safety precautions for future work, such as excavations and confined space entries to characterize the steam plant tunnels were appropriate.

c. Conclusions

The industrial safety program was satisfactory.

3. RADIATION PROTECTION

a. Scope (IP 83750)

The inspector reviewed selected aspects of:

- organization and staffing
- calibration and maintenance of portable survey meters
- final status survey preparations
- air sampling
- respiratory protection program
- Radiation Safety Committee
- effluent water processing

b. Observations and Findings

The radiation protection staff consists of the RSO, a radiological engineer, three Group Radiological Controls Supervisors (GRCSs), and 9 senior HP technicians. Except for a few technicians and an additional GRCS, the staffing level and personnel are unchanged. Personnel assignments to support the final status survey have been made.

Portable survey instruments are maintained and calibrated annually at TMI on an exchange basis. Records were well kept. The same equipment is routinely used at TMI, thereby improving supply and serviceability. Personnel contamination monitors and laboratory equipment are serviced in place. All equipment is operationally checked by site personnel daily prior to use and results recorded.

The RSO stated that the more sensitive equipment needed for the final status survey will be rented from a contractor (GTS Duratek). The contractor will maintain and calibrate the equipment. Familiarization training for technicians who will use the equipment has begun. Some equipment was available on-site for practice. Training included soil sampling techniques. Additional training is planned. The radiological engineer will review the survey results to ensure that the data quality objectives are met. Laboratory cross check of spiked samples for quality assurance has been arranged with another contractor (Analytics). These arrangements were necessitated by the projected closure of the GPU Environmental Radiation Laboratory (ERL) within a few months.

Breathing zone air samplers (BZAs) were effectively used to measure intake of airborne radioactive material by workers. Samples were properly prepared and analyzed. Assignment of Committed Effective Dose Equivalent (CEDE) doses to workers were infrequent and well below regulatory limits. An adequate supply of BZAs were available for issuance.

The respiratory protection program requirements for medical evaluation, training, and fit testing of workers, and respirator maintenance and repair are provided by TMI. A stand up fast scan whole body counter was available using vendor supplied software. These program elements were found to be acceptably implemented. However, the current GPU supervisor in charge of medical evaluations at TMI indicated that, after the takeover, AmerGen plans to use physician assistants and nurse practitioners to evaluate respirator users. Subsequent to this inspection, an AmerGen representative stated that a physician will continue to perform the medical evaluations as required by 10 CFR 20.1703(c)(5). This matter was referred to the SNEC RSO for follow-up. Issuance and collection of respirators were properly controlled at the access to the SNEC work zone. Engineering control of airborne activity in the work area appeared to be satisfactory.

The Radiation Safety Committee membership, meeting frequency, and functions were as required. Plans to revise the committee membership and reporting scheme due to the TMI and Oyster Creek sale were finalized and awaiting NRC approval of a proposed TS change.

The proposed process to store, sample and release the potentially contaminated water from the CV pipe tunnel, steam plant tunnels, and steam plant seal chambers was acceptable. The temporary tanks and equipment for this task were available on-site but not operational. The greater than 100,000 gallons of continuously pumped, non-contaminated ground water expected to be removed from the proposed CV excavations will be filtered and then absorbed on-site in a leech field. This program was formally approved by the Pennsylvania Department of Environmental Resources and reviewed with other regulatory agencies due to the flood plain designation of the area.

c. Conclusions

The radiation protection program was properly implemented.

4. CHANGE CONTROL

a. Scope (IP 37801)

The inspector reviewed selected aspects of:

- 50.59 reviews
- policy and procedure change reviews

b. Observations and Findings

The CV/Decommissioning Support Building (DSB) ventilation system was relocated and the duct work re-routed to allow excavation at the CV outside perimeter. This system is safety significant and required by the TS. The factors in the 50.59 and 50.82 reviews were effectively evaluated including the non-radiological impacts of the change. Implementing procedures and post modification testing procedures were detailed. The change was reviewed and accepted by management during meeting #36 of the Saxton Activities Review Group. The inspector walked down the system and found the as-built condition was as per the design.

A 50.59 review of the potential removal of sections of concrete walls inside the CV was supported by extensive analysis and calculations.

Due to the sale of TMI and Oyster Creek and the dissolution of the GPU Nuclear department, SNEC staff completed a review in February 2000 of the impact on SNEC policies, procedures, and contracts. The review identified policies and procedures that could be eliminated, gaps in service agreements and contracts, and corporate procedures that needed to be preserved. These corporate procedures were adopted as site procedures via a process called "Document Evaluation Book (DEB)." All required changes were incorporated into an action plan with weekly management review of progress. Records indicated that most items were complete with the remainder projected to be finished before the TMI/Oyster Creek sale is consummated.

c. Conclusions

Facility changes and impacts of parent company changes were well managed.

5. EXIT MEETING

The inspector presented the inspection results to members of licensee management at the conclusion of the inspection on June 15, 2000. The licensee acknowledged the findings presented.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

R. Case, SNEC Group Radiological Controls Supervisor
P. Carmel, SNEC Site Supervisor
G. A. Kuehn, SNEC Program Director
S. Levin, GPU Chief Nuclear Officer
R. Miller, TMI Industrial Hygienist
A. Paynter, SNEC Radiation Safety Officer
A. Rone, GPU Vice President of Engineering
M. Smith, AmerGen Human Resources
R. Thomas, SNEC D&D Engineering
D. Weimer, TMI QA Assessor
M. Williams, SNEC D&D Engineering

NRC Foreign Assignee

Takafumi Ikeda, Science and Technology Agency (Japan)

Independent Assessor

R. Granlund, The Pennsylvania State University

INSPECTION PROCEDURES USED

IP 37801	SAFETY REVIEWS, DESIGN CHANGES, AND MODIFICATIONS AT PERMANENTLY SHUTDOWN REACTORS
IP 40801	SELF-ASSESSMENT, AUDITING, AND CORRECTIVE ACTION AT PERMANENTLY SHUTDOWN REACTORS
IP 83750	OCCUPATIONAL RADIATION EXPOSURE
IP 93001	OSHA INTERFACE ACTIVITIES

ITEMS OPENED, CLOSED, AND DISCUSSED

OPENED: None

CLOSED: None

LIST OF ACRONYMS USED

BZA	Breathing Zone Air sampler
CAP	Corrective Action Process
CEDE	Committed Effective Dose Equivalent
CFR	Code of Federal Regulations
CV	Containment Vessel
DSB	Decommissioning Support Building
HP	Health Physics
GPU	General Public Utility
GRCS	Group Radiological Controls Supervisor
QA	Quality Assurance
RSO	Radiation Safety Officer
SNEC	Saxton Nuclear Experimental Corporation
TMI	Three Mile Island generating station
TS	Technical Specification