U.S. NUCLEAR REGULATORY COMMISSION REGION I

Report No. 50-354/85-02

Docket No. 50-354

License No. CPPR-120

Priority -- Category C

Licensee: Public Service Electric and Gas Company

80 Park Plaza - 17C

Newark, New Jersey

Facility Name: Hope Creek Generating Station

Inspection At: Salem, New Jersey

Inspection Conducted: January 8-10, 1985

Inspector	s: A. J. Bucher H. Bicehouse, Radiation Specialist
	H. J. Anhour For B. Carson, Radiation Specialist
Approved	11001

2685 date 2/6/35

Inspection Summary:

Inspection on January 8-10, 1985 (Inspection Report No. 50-354/85-02)

Areas Inspected: Special announced inspection of the applicant's preoperational radiation protection, chemistry and radioactive waste programs: including organization, responsibilities and authorities; selection, training and qualification; staffing; and procedures. The inspection involved 44 inspection-hours at the Salem site by two regionally-based inspectors.

Results: Within the areas inspected, no violations or deviations were identified.

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DETAILS

1. Persons Contacted

During the course of this routine preoperational inspection, the following personnel were contacted or interviewed:

1.1 Hope Creek Generating Station

- *G. Connor, Operations Manager
- *R. Donges, Lead Quality Assurance Engineer
- *A. Giardino, Manager, Quality Assurance
- *R. Griffith, Senior Supervisor, Quality Assurance
- E. Keating, Senior Chemistry Staff Engineer
- *L. Krajewski, Senior Supervisor, Radiation Protection Operations
- *S. LaBruna, Assistant General Manager Hope Creek Operations
- *J. Lovell, Radiation Protection Manager Hope Creek Operations
- *J. Nichols, Technical Manager
- *R. Salvesen, General Manager Hope Creek Operations
- L. Silvey, Senior Operating Support Supervisor
- *T. Vannoy, Senior Chemistry Supervisor

1.2 Public Services Electric and Gas (PSE&G) Nuclear Services Department

*W. Britz, Manager, Radiation Protection Services

- J. Clancy, Senior Health Physicist, Radiation Protection Services
- *J. Kotsch, Senior Health Physicist, Radiation Protection Services
- *H. Wedlick, Principal Training Supervisor, Nuclear Training

Other employees of the applicant were also contacted or interviewed.

1.3 NRC Personnel

*R. Blough, Senior Resident Inspector

*Attended the exit interview on January 10, 1985.

2. Purpose

The purpose of this special announced inspection was to review the applicant's radiation protection, chemistry and radioactive waste (radwaste) programs with respect to the following elements:

- -- Organization, Responsibilities and Authorities;
- -- Selection, Training and Qualification;
- -- Staffing; and
- -- Procedures.

In addition, the status of the development of the applicant's programs in those areas was reviewed.

3. Organization, Responsibilities and Authorities

The applicant's radiation protection, chemistry and radwaste organizations were reviewed against criteria and commitments provided in:

- -- 10 CFR 50.34(b)(6);
- -- 10 CFR 50, Appendix B, Criterion I, "Organization;" and
- -- <u>Hope Creek Generating Station Final Safety Analysis Report</u> (HCGS-FSAR), Volume 16, Section 13.1, "Organization Structure."

The following procedures were reviewed for consistency with the criteria and commitments above and to determine if specific authorities, responsibilities and spans of control had been assigned:

- -- Procedure Number VPN-POP-02, "Organization and Responsibilities", Revision 0, (3/20/84); and
- -- Procedure Number SA-AP.ZZ-02, "Station Organization and Operating Practices", Revision 0 (7/6/84).

Responsible managers and members of their staffs were interviewed to determine if specific responsibilities and authorities were understood by the incumbents.

Within the scope of this review, no violations or deviations were noted.

4. Selection, Training and Qualifications

The applicant's selection, training and qualification programs were reviewed against criteria and commitments contained in:

- -- 10 CFR 50, Appendix B, Criterion II, "Quality Assurance Program;"
- -- Regulatory Guide 1.8, "Personnel Selection and Training;"
- -- ANSI/ANS 3.1-1981, "Selection, Qualification and Training of Personnel For Nuclear Power Plants;"
- -- <u>HCGS-FSAR</u>, Volume 1, Section 1.8, "Conformance to NRC Regulatory Guides;" and
- -- HCGS-FSAR, Volume 16, Section 13.2, "Training"

The following procedures were reviewed for consistency with the criteria and commitments above and to determine if responsibilities for selection, training and qualification had been assigned:

-- Procedure Number VPN-ADP-03, "Indoctrination and Training", Revision 0 (9/20/84); and Procedure Number SA-AP.ZZ-014(Q), "Station Personnel Qualification and Training", Revision 1 (12/2/84).

Selection, training and qualification programs for each of the following were reviewed and discussed with the cognizant managers:

- -- General employees (Indoctrination and Radiation Worker Training):
- -- Radiation protection supervisors, engineers, technicians, assistants and helpers;
- -- Chemistry supervisors, engineers, technicians, assistants and helpers; and
- -- Radwaste supervisors, equipment operators and utility operators.

Within the scope of this review, the following item was noted: General employee training under 10 CFR 19.12 was scheduled for completion during the fourth quarter of 1985. However, initial fuel receipt was scheduled for September 1985. The inspectors noted that fuel receipt could be delayed if the schedule for the training remained unchanged. At the exit interview, the applicant provided a copy of a request from the Assistant General Manager - Hope Creek Operations to the Manager - Nuclear Training to initiate the training no later than July 1, 1985. The status of general employee training will be reviewed during a subsequent inspection 50-354/85-02-01.

5. Staffing

Projected staffing for radiation protection, chemistry and radwaste activities was reviewed against commitments provided in the <u>HCGS-FSAR</u>, Volume 16, Section 13.1, "Organization Structure". Performance in meeting those commitments was determined by discussions with cognizant managers and review of resume's and other documents.

5.1 Radiation Protection

Projected staffing within the Radiation Protection Department - Hope Creek Operations was compared with Figure 13.1-13 of the HCGS-FSAR. Projected staffing exceeded the commitments in the HCGS-FSAR.

Current staffing was compared to the projected staffing. The applicant had the following vacancies relative to the projected staffing:

- -- One Senior Radiation Protection Supervisor:
- -- One Senior Radiological Engineer;
- -- One Radiological Engineer;
- -- One Radiation Protection Supervisor;
- -- Two Radiation Protection Technicians;
- -- Eighteen Radiation Protection Assistants; and
- -- Eleven Radiation Protection Workers.

5.2 Chemistry

Projected staffing for the Chemistry Department was compared with Figure 13.1-11 of the <u>HCGS-FSAR</u>. Projected staffing exceeded commitments in the HCGS-FSAR.

Current staffing was compared to the projected staffing. The applicant had the following vacancies relative to the projected staffing:

- -- One Chemistry Staff Engineer;
- -- Two Chemistry Technicians;
- -- Four Chemistry Assistants; and
- -- Two Chemistry Helpers.

5.3 Radwaste

Unlicensed operators (under the direction of the shift support supervisor) perform liquid radwaste operations and provide continuous surveillance of radwaste equipment. Radiation protection workers provide solid radwaste collection and handling. Estimated staffing levels for those activities were not provided in the <u>HCGS-FSAR</u>. However, discussions with cognizant Operation. Department personnel provided the applicant's projected staffing for the radwaste activities in liquid and solid radwaste. Five supervisory level positions with responsibility for radwaste operations have been identified. Three of those positions were open during the inspection. Ten equipment operator positions were open but operators were available to fill the positions in the training classes and normal operations qualification program.

6. Procedures

The applicant's program for preparation, review and approval of procedures in radiation protection, chemistry and radwaste operations was reviewed against criteria and commitments provided in:

- -- 10 CFR 50, Appendix B, Criterion II, "Quality Assurance Program:"
- -- 10 CFR 50, Appendix B, Criterion VI, "Document Control;"
- -- Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operational);"
- -- Regulatory Guide 1.68, "Initial Test Programs For Water-Cooled Nuclear Power Plants;"
- -- ANSI/ANS 3.2-1982, "Administrative Controls and Quality Assurance For the Operational Phase of Nuclear Power Plants;
- -- HCGS-FSAR, Volume 1, Section 1.8, "Conformance to NRC Regulatory Guides;"

- -- HCGS-FSAR, Volume 16, Section 12.5.3, "Procedures:" and
- -- HCGS-FSAR, Volume 16, Section 13.5, "Plant Procedures".

The following procedures were reviewed for consistency with the criteria and commitments above and to determine the applicant's instructions and policies concerning procedural development, review and approval:

- -- Procedural No. VPN-MSP-02, "Vice President Nuclear Procedures Preparation and Control", Revision 1 (5/16/84); and
- -- Procedure No. SA-AP.ZZ-01, "Preparation and Approval of Station Procedures", Revision 1, (8/20/84).

The applicant's performance in preparing, reviewing and approving procedures identified in the <u>HCGS-FSAR</u> was reviewed. The applicant has established a goal for preparation, review and approval of plant procedures by July 1, 1985. The inspectors reviewed the listings of projected procedures and the current status of procedural preparation, review and approval in each program area.

6.1 Radiation Protection Procedures

The projected radiation protection procedures identified by the applicant were compared to the guidance provided in Appendix A of Regulatory Guide 1.33. Typical safety-related activities in radiation protection identified in Regulatory Guide 1.33 were addressed in the applicant's projected procedures.

The applicant had identified 141 radiation protection procedures for Hope Creek Operations. Of those identified procedures, 36 procedures were approved in accordance with station procedures and 76 more were in draft form.

6.2 Chemistry Procedures

The projected chemical and radiochemical procedures identified by the applicant were reviewed with respect to guidance provided in Appendix A of Regulatory Guide 1.33. The broad areas identified in Regulatory Guide 1.33 appeared to be addressed in the applicant's projected procedures.

The applicant had identified 230 chemical and radiochemical procedures for Hope Creek Operations. Of those identified procedures, none were approved in accordance with station procedures and 156 procedures were in draft form.

6.3 Radwaste Startup Procedures

The projected radwaste startup procedures identified by the applicant were reviewed with respect to guidance contained in Regulatory Guide 1.68. Solid, liquid and gaseous radwaste system startup procedures were identified by the applicant.

The applicant had identified 10 radwaste startup procedures. None of those procedures were approved in accordance with station procedures. Three procedures were in draft stage and two more were undergoing review.

6.4 Radwaste Operating Procedures

The projected radwaste operating procedures identified by the applicant were compared to the guidance provided in Appendix A of Regulatory Guide 1.33. Typical boiling water reactor radwaste operating procedural areas were addressed in projected procedures.

A total of 18 radwaste operating procedures were identified by the applicant. None of the identified procedures had been approved in accordance with station procedures. Drafts of 11 radwaste operating procedures had been prepared.

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7. Exit Interview

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The inspectors met with the applicant's representatives (denoted in paragraph 1) at the conclusion of the inspection on January 10, 1985. The inspectors summarized the purpose, scope and findings of the inspection. At no time during this inspection was written material provided to the applicant by the inspectors.