



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 28 TO FACILITY OPERATING LICENSE NO. DPR-70

PUBLIC SERVICE ELECTRIC AND GAS COMPANY,
PHILADELPHIA ELECTRIC COMPANY,
DELMARVA POWER AND LIGHT COMPANY, AND
ATLANTIC CITY ELECTRIC COMPANY

SALEM NUCLEAR GENERATING STATION, UNIT NO. 1

DOCKET NO. 50-272

Introduction

By letters dated March 17, August 22, and September 19, 1980, Public Service Electric and Gas Company (the licensee) proposed that the Technical Specifications of Salem Unit No. 1 be revised. Although the applications and the revisions relate to different subjects, none have been considered to be complex or difficult to review. Consequently, we are including three safety evaluations in this amendment so as to reduce expenditure of resources.

A. Minimum Cell Voltages for 125V and 28V Batteries

By letter of March 17, 1980, the licensee requested amendment to Facility Operating License No. DPR-70 to permit a lowering of the individual cell minimum voltages on the 125 volt and 28 volt batteries from 2.17 volts to 2.13 volts. In support of the proposed Technical Specification changes, the licensee submitted a letter from C&D, Batteries Division dated July 16, 1980.

We have reviewed the information provided by the licensee concerning the lowering of the individual cell minimum voltages on the 125V and 28V batteries from 2.17 volts to 2.13 volts. To support these Technical Specification changes, the licensee submitted a letter from the battery vendor, C&D Batteries Division, which states that a cell float voltage of 2.13 is considered the minimum acceptable operating value and should this limit be exceeded, corrective action should be initiated. The licensee states that the corrective action will be the application of an equalizing charge to the cell or battery. This action is in accordance with IEEE Standard 450-1975, "IEEE Recommended Practice for Maintenance, Testing and Replacement of Large Lead Storage Batteries for Generating Stations and Substations." Based upon the C&D letter and the licensee's compliance, as noted, we find that sufficient bases and justification have been provided to grant the requested changes.

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Based on our review of the above submittals, we conclude that the proposed Technical Specification changes to 125 volt and 28 volt battery individual cell minimum voltages are acceptable.

B. Water Level During Refueling

By letter of August 15, 1980 the staff advised the licensee of changes that had been made in Westinghouse Standard Technical Specifications 3.9.8.2, 3.9.10 and B 3/4 9.8. These changes require at least 23 feet of water over the top of the reactor pressure vessel flange during movement of fuel assemblies or control rods. This requirement assures that fuel assemblies can be transferred out of the reactor pressure vessel with sufficient water coverage to prevent exposure of fuel handlers.

The current Technical Specifications for Salem 1 require that the water depth be, as a minimum, 23 feet above the top of fuel assemblies rather than above the pressure vessel flange. Consequently, the licensee was required to make the necessary review and modifications to assure that exposure of fuel assemblies cannot occur. In a response of September 19, 1980, the licensee chose to substitute the wording and requirements of the revised Technical Specification 3.9.10 for the current version. This action is acceptable because the water level will be sufficiently high but is still within the design criteria of the reactor cavity.

The licensee has chosen not to accept the wording of the Technical Specification 3.9.8.2 at this time. Instead, these changes will be incorporated with others relating to residual heat removal capabilities when the plant is in various modes of operation, including refueling. This decision is acceptable because the limiting conditions of operation of T.S. 3.9.10 have not been affected. Also, the additional depth of water is not needed when the plant is in Mode 6 (refueling) other than when fuel assemblies are being moved.

C. Radiation Protection - Administrative Actions

By letter of August 22, 1980 the licensee proposed changes to the Salem Radiation Protection organization that provide for the separation of the radiation protection function from the Performance Department and formation of a new Radiation Protection Department. This new department will be headed by a Radiation Protection Engineer who will report directly to the station manager. It will have a Senior Supervisor - Radiation Protection (who will act as backup to the Radiation Protection Engineer), Technical Supervisors, Technicians and Technical Assistants, all of whom will be devoted to the function of radiation protection. The remainder of the Performance Department will be modified to split the Technical Assistants such that they are devoted to either the instrumentation and controls function or the chemistry function.

These proposed changes meet our positions in the draft "Criteria for Utility Management and Technical Competence" and Regulatory Guide 8.8 as follows:

1. The Radiation Protection Engineer (RPE - equivalent to the Radiation Protection Manager) reports directly to the Station Manager, independent of operational, technical or administrative groups. The RPE is a required member of the Station Operations Review Committee (SORC). Staff qualifications require that the RPE meet or exceed the recommendations of Regulatory Guide 1.8.
2. The newly formed Radiation Protection Department has an independent radiation protection function at all levels, and is separate from such functions as chemistry. A backup to the RPE, the Senior Supervisor-Radiation Protection has been designated. All Technical Supervisors, Technicians and Technical Assistants within the department are devoted to the radiation protection function.
3. A formal program to replace contractor radiation protection personnel with permanently assigned station radiation protection technicians has been implemented. Additionally, a qualification and retraining program conducted in accordance with ANSI 18.1, provides for qualification and training for the radiation protection department personnel. PSE&G anticipates the reorganization actions and programs to be fully complete by July 1, 1981. In the interim, a permanent staff is being recruited and all contractor radiation protection technicians are receiving class room and on the job training on systems, radiological fundamentals and procedures.

These actions and commitments by PSE&G for the Salem Station adequately meet the positions of NUREGs-0660/0604, NUREG-DRAFT "Criteria for Utility Management and Technical Competence" and Regulatory Guide 8.8 regarding Radiation Protection Organization and are therefore satisfactory. An evaluation of the Salem Radiation Protection Department will be performed during a routine inspection.

In addition, the licensee proposed to revise Technical Specification 6.12 so that the administrative control of people in high radiation areas would be the same for both Units 1 and 2. The new requirements increase the level of protection by requiring each individual or group of individuals to be provided with an integrating radiation monitoring device and to be accompanied by an individual who is qualified in radiation protection procedures. These changes provide the level of radiological protection and are acceptable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: December 9, 1980