



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 34 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

DUCKET NO. 50-272

Introduction

By letter dated June 11, 1980 (Reference 1) the staff requested all licensees of operating pressurized water reactors (PWRs) to amend their Technical Specifications with respect to reactor decay heat removal capability. The basis for this request was founded in a number of events that have occurred where decay heat removal capability was seriously degraded due to inadequate administrative controls when the plants were in shutdown modes of operation. This concern has also been evidenced in IE Bulletin 80-12, dated May 9, 1980, which required each licensee to immediately implement new administrative controls.

In our letter of June 11, 1980, we requested Public Service Electric and Gas Company (licensee) to propose Technical Specifications changes for Salem Unit No. 1 that provides for redundancy in heat removal capability in all modes of operation.

Evaluation

The licensee responded to our request by letter dated October 15, 1980 (Reference 2). The Technical Specifications that have been proposed are essentially identical to the model Technical Specifications that we provided with our request. The licensee's Safety Analysis was also based on the problem identified in our letter and in IE Bulletin 80-12 and the model bases that we provided as part of our guidance.

The revised Technical Specifications provide for adequate capability for removing decay heat from the reactor when the plant is in any mode of operation. This capability is ensured by requiring the following: four reactor coolant loops be operable in Modes 1 and 2; two reactor coolant loops be operable in Mode 3; two coolant loops be operable from reactor coolant loops and/or residual heat removal (RHR) loops in Mode 4; two RHR loops operable in Mode 5; and at least one RHR loop operable in Mode 6.

These revisions represent administrative control changes and do not require any plant modifications.

We find the licensee's actions to be acceptable.

While making these revisions, the licensee has also modified the wording of Technical Specification 3.9.8.2 to require 23 feet of water above the reactor pressure vessel flange when the plant is in Mode 6. This action completes the licensee's response (Reference 3) to our request (Reference 4) that the depth of water be measured from the pressure vessel flange rather than from the top of the irradiated fuel assemblies. The licensee's initial response was approved in Amendment No. 28 (Reference 5).

#### 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: March 6, 1981

#### References

1. Letter, NRC (Eisenhut) to PSE&G (Librizzi), June 11, 1980.
2. Letter, PSE&G (Librizzi) to NRC (Varga), October 15, 1980.
3. Letter, PSE&G (Librizzi) to NRC (Varga), September 19, 1980.
4. Letter, NRC (Novak) to PSE&G (L brizzi), August 15, 1980.
5. Letter, NRC (Varga) to PSE&G (Librizzi), December 9, 1980.