



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 75 TO FACILITY OPERATING LICENSE NO. DRP-75

PUBLIC SERVICE ELECTRIC & GAS COMPANY

PHILADELPHIA ELECTRIC COMPANY

DELMARVA POWER AND LIGHT COMPANY

ATLANTIC CITY ELECTRIC COMPANY

SALEM GENERATING STATION, UNIT NO. 2

DOCKET NO. 50-311

1.0 INTRODUCTION

By letter dated May 5, 1989, Public Service Electric & Gas Company requested an amendment to Facility Operating License Nos. DPR-70 and DPR-75 for the Salem Generating Station Unit Nos. 1 and 2, respectively. Salem Unit 1 was authorized to make the change, on an emergency basis on May 12, 1989. The proposed amendment would delete the requirement in the Salem Technical Specification that the measured drag force of a mechanical snubber should not increase by more than 50% from the previous test result. The licensee contends that the current drag force comparison requirement which was intended to trend increases in drag force in order to predict impending snubber failure is not valid for Pacific Scientific Mechanical Snubbers. This requirement may cause unnecessary increase in the snubber test population even if the drag force is well below the acceptance criteria and may also result in a substantial increase in worker radiation exposure.

2.0 EVALUATION

This proposed change would revise Section 4.7.9.e.1 of the Salem Unit 2 Technical Specifications. The change would delete an aspect of mechanical snubber surveillance test acceptance criteria which requires a verification that the snubber drag force has not increased more than 50% since the previous functional test.

As described in LER 272/89-015-00 dated April 19, 1989, Salem Generating Station has not, in the past, performed the subject drag force comparison. However, since drag forces were measured and documented, it was possible to review the functional test data and apply the 50% criterion. This review indicated that (prior to the Salem Unit 1 outage that began in March, 1989) four snubbers at Salem Unit 1 and nine snubbers at Salem Unit 2 had failed to meet the criterion. Only one of

these snubbers, in Unit 2, was still in use and was replaced in April, 1989. None of these nine snubbers tested have drag forces above the maximum allowable value.

The snubber manufacturer (Pacific Scientific) has generated data related to mechanical snubber drag force loading. The results of these tests indicate that an increase in drag force from one inspection period to the next does not establish a trend that can be used to predict pending snubber failure. Based on this data, PSE&G concludes that a 50% increase in measured drag force from one inspection period to the next is no cause for declaring the snubber inoperable if the load is below the maximum allowable value.

The intent of the current drag force comparison requirement is to trend increases in drag force in order to predict impending snubber failure. However, the aforementioned Pacific Scientific test report indicates that an increase in drag force is not a valid indicator of imminent snubber failure. This supports the position that a 50% increase in drag force is not sufficient cause for declaring a snubber inoperable.

The Salem test results provided by the licensee support the position that the drag force comparison is not an adequate predictor of snubber failure. The data indicates that as many snubber drag forces have decreased as have increased from previous measurements without any identifiable correlation to snubber failures. These variations appear to be within the expected statistical variation considering the techniques and equipment used.

NRC has approved the deletion of the 50% drag force change comparison requirement from the Westinghouse Standard Technical Specifications in addition to approving license changes identical to this one for other plants. This requirement has not been included in the snubber technical specifications for more recent operating licenses (such as Hope Creek). The proposed change does not affect other aspects of the snubber surveillance program and the primary acceptance criteria. Verification is required that the drag force is less than the specified allowable value. Compliance with ASME Section XI per Technical Specification 4.0.5 remains unchanged.

Based on a review of the data provided by the licensee, Staff concludes that the proposed amendment for the deletion of the Salem Generating Station Unit 2 requirement in Technical Specification 4.7.9.e.1 that the measured drag force of a mechanical snubber should not increase by more than 50% from the previous test result, is acceptable.

### 3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes to the surveillance requirements. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

### 4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (54 FR 25377) on June 14, 1989 and consulted with the State of New Jersey. No public comments were received and the State of New Jersey did not have any comments.

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) 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 nor to the health and safety of the public.

Principal Contributor: J. Rajan

Dated: July 20, 1989