APR 28 1986

Docket Nos.: 50-443
and 50-444

Mr. Robert J. Harrison
President & Chief Executive Officer
Public Service Company of New Hampshire
P.O. Box 330
Manchester, NH 03105

Dear Mr. Harrison:

SUBJECT: SEABROOK - REQUESTS FOR ADDITIONAL INFORMATION RELATED TO THE INSTRUMENTATION AND CONTROL DESIGN

The purpose of this letter is to forward the enclosed request for additional information related to the atmospheric dump valve control system design to be implemented at Seabrook.

Subsequent to staff approval of a manual control system associated with electrohydraulic actuator operated atmospheric dump valves (ADVs), the Public Service Company of New Hampshire (PSNH) elected to modify the desigr by providing air operated ADVs with safety-related backup air (gas bottles) systems and controls. PSNH provided information by letter dated February 14, 1986 to describe the latest design. However, upon review, the staff has concluded that the information is insufficient and, thus, the staff is not able to complete the review for this issue. The information identified in the enclosure is required for staff review before this item can be resolved. I would appreciate you providing me your response within a week after receipt of this letter. This expedited schedule is necessary if we are to meet a June 30 fuel load date.

Questions or additional information regarding this matter should be directed to the Seabrook Project Manager, Mr. V. Nerses, (301) 492-8535).

Victor Nerses, Project Manager
PWR Project Directorate No. 5
Division of PWR Licensing-B

Enclosure:
As stated

cc: See next page

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

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Victor Nerses

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PWR Project Directorate No. 5
Division of PWR Licensing-B

Enclosure:
As stated

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ENCLOSURE

SEABROOK

REQUEST FOR ADDITIONAL INFORMATION

The information provided to date is insufficient to allow the staff to complete its review associated with the atmospheric dump valves (ADVs). Additional information should be provided on the backup safety-related air supply system and the safety-related control system. The following should be provided as a minimum:

1. Information on the technical specification requirements to be implemented for the safety-related portion of the design (include a discussion on the provisions provided for surveillance testing of the ADVs and associated safety-related manual controls including the design features used for isolation from the nonsafety-related portion of the system).

2. Information on the failure modes and effects associated with the Train A and Train B solenoid operated valves utilized to control operation of the ADVs. This should show as a minimum:

   - That the capability of the subject valves to perform the required safety functions (open/close as required for safe plant shutdown) cannot be degraded below an acceptable level as a result of all possible circumstances (i.e., overvoltage, undervoltage, etc.) associated with the power supply to these valves. The main concern is with solenoid valves that are continuously energized during normal plant operation.

   - That the atmospheric dump valves fail to the closed position on loss of power,

   - That at least two (2) ADVs will be available for safe plant shutdown after assuming a single failure, and

   - That the nonsafety-related positioner will be isolated when required.

3. A complete set of drawings (electrical schematics, logics, switch development tables, etc.) which show the latest design implementation associated with the ADVs.

4. Information on the design criteria associated with the mechanical aspects of the backup air supply system (bottles, tubing, valves, etc.). Include details on the control room indications available for the operator to verify operability of the backup air supply system.

5. Information detailing the actuator design associated with the ADVs.

6. Information on the safety-related backup air system as related to the following concern. FSAR Section 7.3.2.3 implies that the safety-related backup air system may not have sufficient capacity to ensure that the necessary equipment is maintained in service to allow operation at hot standby for at least four hours and the additional time required for cooldown to conditions permitting operation of the RHR system. It is stated that the plant air system (nonsafety-related) can be manually loaded onto the diesel generator bus, or that local manual control will be established. Information is required to detail how this planned operation complies with the requirements of Branch Technical Position RSB 5-1, items A.1 and A. 3. Details of the operator actions necessary for the operation of the ADVs for safe plant shutdown should be provided including identification of all deviations from the subject BTP requirements. Justification information for each identified deviation should be provided.

ENCLOSURE

SEABROOK

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