Docket No. 50-443

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

Gentlemen:

Subject: Integrated Design Inspection 50-443/83-23

Dear Mr. Harrison:

This refers to your letter dated December 15, 1983, in response to our letter dated November 16, 1983.

Thank you for informing us of the corrective and preventive actions documented in your letter. Certain of the items, identified in the enclosure, require additional information, review, and/or reinspection to assess their adequacy. A close out inspection by members of the team is planned to examine these areas. Please provide additional information as requested in the enclosure to allow timely resolution of these issues.

Your responses to other Integrated Design Inspection findings not included in the enclosure have also been reviewed by the NRC. We consider your actions acceptable.

Your cooperation with us is appreciated.

Sincerely,

J. Nelson Grace, Director Division of Quality Assurance, Safeguards, and Inspection Programs Office of Inspection and Enforcement

Enclosure: Comments on Seabrook IDI Inspection

IE:DQASIP:QAB RArchitzel 9/25/84

IR: DASIP: QAB JLMilhoan 9/16/84

IE:QASIP:QAB:C IE:QASIP:DD GTAnkrum JGPartlow 9/ /54 9/ /84 IE:QASIP:D JNGrace 9/ /84 cc w/encl: Mr. William B. Derrickson Senior Vice President, Nuclear Energy Public Service of New Hampshire P. O. Box 330 Manchester, NH 03105

Mr. Wendel P. Johnson Vice President Public Service of New Hampshire P. O. Box 700 Seabrook, NH 03874

Mr. Bruce B. Beckley Manager, Nuclear Projects Public Service of New Hampshire P. O. Box 330 Manchester, NH 03105

Mr. John DeVincentis Project Manager, Seabrook Station Yankee Atomic Electric Company 1671 Worcester Road Framingham, MA 01701

Ms. Diane Tefft
Manager
Radiological Health Program
Department of Health and Welfare
Hazen Drive
Concord, NH 03301

Records Lenter
Institute for Nuclear Power Operations
1100 Circle 75 Parkway
Suite 1500
Atlanta, GA 30339

COMMENTS ON SEABROOK IDI RESPONSES

Finding

General Item

F2-2

F2-3

F2-4

F2-5, Unresolved 2-1

Comment

The forwarding letter discusses a UE&C evaluation (applying the IDI team's concern) of existing NPSH calculations for the charging pumps, spent fuel pumps, and boric acid pumps. This evaluation will be reviewed in the followup inspection.

- Please indicate why the following are "editorial" vs. technical changes:
 - a) corrected maximum fluid temperature in SAT
 - b) corrected mesh size for sump screen
 - c) clarifications to "switchover" and "closure of discharge valves"
 - d) deleted description of monitor light during normal plant operations (all dark)
 - e) added caution against returning HI temperature to RWST after refueling
- Please indicate how it was concluded, in the absence of a DCN, that updated flow rates and calculated NPSHA (item 6), deleting pump runout caution (item 9), and correction volume of solution in SAT (item 10) would not affect hardware or drawings issued for construction.
- Indicate how the review of existing design documents will ensure that DCN's were properly used for system description changes. Please address the extent of the review, the completion date, and provide the results.

This finding was a case where a System Description change did not result in a DCN and an inconsistency in the FSAR was created by the change. The corrective action (documentation via a DCN) implies that the FSAR will be corrected during DCN processing. Indicate how other system description changes, not requiring DCN's (such as the editorial changes tabulated for Finding 2-2), are evaluated for impact on the FSAR.

Reinspection scheduled to examine the calculated basis for the maximum sump water temperature.

Reinspection scheduled to examine the revised CBS pump NPSH calculation. The response states that this does not have generic implications, however, the cover letter indicates that IDI concerns were evaluated for their impact on other safety related pumps. Indicate whether this issue was addressed for other pumps taking suction from the containment

Finding Comment F2-7 Reinspection scheduled to examine Alden Letter dated May 24, 1984 and ARL Report 25-81. F2-8 Reinspection scheduled to examine the UE&C RHR pump NPSH calculation. F2-12 Reinspection scheduled to examine the calculation of approach velocity. Indicate how the calculated approach velocity for debris supports the statement that settlement is expected to occur prior to reaching screen (e.g., how was the debris trajectory from the plane at which the approach velocity was calculated to the screen addressed?). Indicate whether the approach velocity calculation considered 50% blockage of the fine inner screen. In addition, indicate how Alden confirmed the validity of interpreting the validity of interpreting the flow velocity as an approach velocity. Unresolved 2-3 This item remains open pending satisfactory resolution of Finding 2-12. F2-17 Reinspection scheduled to examine the results of the review of safety related motors. F2-18 This item remains open pending review by the NRC of acceptable torque margin for the CBS pump motor. F2-19, F2-21 Reinspection scheduled for a sample of jet impingement analyses and Pipe Whip Evaluations. F2-20 The FSAR should be revised to reflect your approach for jet impingement analysis to ensure appropriate NRC licensing review. Indicate your plans with respect to such a change. F2-22 Provide a copy of the "Moderate Energy Line Break Study." F3-12 Reinspection scheduled to examine the adequacy of the piping systems and adjoining pipe supports. Unresolved 3-3 With respect to the commitment to address other areas where significant dynamic interation may exist, specify the parameters to be employed in this review. Include the criteria which are used to determine whether a subsequent coupled analysis is required.

situations.

Reinspection scheduled to examine the calculation and to assess the scope of review for other similar

F3-20

Finding

Comment

F3-22

Reinspection scheduled to examine Bingham-Willamette's written response.

F4-2

The FSAR should be appropriately revised in Section 3.8.4 to reflect the actual design. Discuss the approach and criteria to be used in determining live load limitations proposed to be incorporated in the facility technical specifications.

F4-6

Reinspection scheduled to examine the Tank Farm Building stiffness calculation.

F4-16

The response to this finding is acceptable except that the reference to TID 7024 should only be considered valid when the tank can be assumed to be rigid. Confirm this aspect of the response.

F6-8

Provide a completion schedule for final resolution and analysis to demonstrate that applications for these devices are bounded by ITT Barton qualification reports.

F6-12

Reinspection scheduled to examine completion of associated design changes. Indicate what action you have taken with respect to generic implications of this finding, both for other applications of unqualified current to pneumatic converters and to determine if other non-safety-related equipment could be the source of common cause failure of safety-related systems.

F6-13, F6-14, F6-15, F6-17, Unresolved 6-2

These items and their associated responses are undergoing further review by the NRC and remain open. Reinspection scheduled to examine analyses.

F6-30

The response indicates that the FSAR will be revised to address deviation from the 15 foot conduit marking interval. This item remains of concern because of the increased potential for separation problems due to the lack of conduit marking. The NRC Construction Appraisal Team Inspection (Report 50-443/84-G7) noted missing or illegible conduit identification tags near the penetrations or at pull boxes of four conduit runs. Please provide additional information concerning the installation/inspection process which assures that separation problems are (were) not created during construction or later modifications.

Unresolved 6-4

The response notes that a list of accident monitoring instrumentation, including deviations from Regulatory Guide 1.97 recommendations, will be provided to the NRC. Review of this item will be performed by NRR.

Finding

Unresolved 3-1, 3-2, and F3-6, 3-7, 3-8, 3-9, 3-10, 3-11

Comment

These items are still under team member review, however, based on a brief review the actions appear responsive to the IDI findings.