APPENDIX A

NOTICE OF VIOLATION

Public Service Company of New Hampshire
Seabrook Station, Unit 1

Docket No. 50-443
License No. CPPR-135

As a result of the NRC CAT inspection of April 23 - May 4, 1984, and May 14-25, 1984, and in accordance with the NRC Enforcement Policy (10 CFR 2, Appendix C) published in the Federal Register Notice (49 FR 8583) dated March 8, 1984, the following violations were identified:

1. Contrary to 10 CFR 50, Appendix B, Criterion II, and the Seabrook Station Final Safety Analysis Report (FSAR), Section 17.1.1.2, the applicant's quality assurance program has not effectively provided control over activities involving seismic cable tray support installations. The applicant's programs have not assured that these installations are in accordance with the applicable design documents. This condition appears to exist because design activities are not appropriately coordinated with engineering and construction organizations (Section II.B.1).

   This is a Severity Level IV violation (Supplement II).

2. Contrary to 10 CFR 50, Appendix B, Criterion III, and the Seabrook Station FSAR, Section 17.1.1.3, design control has not been maintained as the applicant has:

   a. Failed to properly review design changes relative to instrument tubing installations in a manner commensurate with the original design review. This is illustrated by a number of instances in which deviations from specified slope criteria have been authorized by the construction manager, rather than the responsible design organization (Section II.B.5). The applicant has also failed to ensure that materials specified for foundation attachments for the Primary Component Cooling Water pumps were similar to those used in the seismic analysis (Section III.B.4).

   b. Not properly translated design drawings into fabrication and installation drawings in the area of rebar details around openings. Vendor rebar detailing errors have occurred and have not been identified during the drawing review or construction process (Section IV.B.1).

   c. Not properly considered design loading conditions for four hot leg restraints and one cross-over leg restraint. The seismic loading from an attached pipe support had not been considered as a separate loading case without other pipe break loads (Section IV.B.2).

   This is a Severity Level IV violation (Supplement II).

3. Contrary to 10 CFR 50, Appendix B, Criterion V, and the Seabrook Station FSAR, Section 17.1.1.5, the applicant has failed to effectively perform instructional and procedural activities in that several pieces of ASME III "safety-related" equipment were installed without instructions, procedures and quality control documentation. In addition, the procedure regarding the handling and installation of safety-related equipment did not contain adequate guidance or instructions to ensure appropriate qualitative and quantitative acceptance criteria and documentation (Section III.B.4).

   This is a Severity Level V violation (Supplement II).

4. Contrary to 10 CFR 50, Appendix B, Criterion X, and the Seabrook Station FSAR, Section 17.1.1.10, the program for inspection of activities affecting quality was not effectively implemented in that inspection programs have not assured that high strength structural steel bolted connections have the proper bolt tension (Section VI.B.2). In addition, structural steel shop weld inspections were found to be deficient with respect to the specified acceptance criteria (Section C.B.7).

   This is a Severity Level IV violation (Supplement II).

5. Contrary to 10 CFR 50, Appendix B, Criteria XV and XVI, and the Seabrook Station FSAR, Sections 17.1.1.15 and 17.1.1.16, the applicant's program has failed to assure that nonconforming conditions have been properly identified, reviewed, resolved and evaluated for corrective action in accordance with documented procedures:

   a. The program for inspection of construction activities failed to identify a number of cable installations that did not meet established criteria for physical independence of redundant electrical divisions. Most of the deficiencies identified involved cables and control panels transferred to "startup" jurisdiction (Section II.B.2).

   b. Nonconforming conditions on piping and pipe supports/restraints were documented on informal reports or memoranda, and on Engineering Change Authorizations (Sections III.B.1 and III.B.2). In addition, nonconforming conditions on pipe support/restraints were improperly corrected/resolved on Support Rework Orders and Engineering Change Authorizations (Section III.B.1 and III.B.2).

   c. Corrective measures were taken in order to maintain proper torque on Hilti concrete expansion anchor bolts. However, a significant number of mechanical and electrical anchor bolts were found to be below the minimum specified torque values (Section IV.B.4).

   d. Measures were not taken to identify nonconformances and take corrective action to provide for control of cable identification and markings in accordance with FSAR commitments and specification requirements (Section VII.B.2).

   This is a Severity Level IV violation (Supplement II).

Pursuant to the provisions of 10 CFR 2.201, Public Service Company of New Hampshire is hereby required to submit to this office within 30 days of the date of this letter, a written statement or explanation in reply, including; (1) the corrective steps which have been taken and the results achieved; (2) corrective steps which will be taken to avoid further violations; and (3) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending this response time.

APPENDIX A

EXECUTIVE SUMMARY

An announced NRC Construction Appraisal Team (CAT) inspection was performed at the Seabrook Station during the period April 23 - May 4, 1984 and May 14-25, 1984.

Overall Conclusions

Hardware and documentation for the various construction areas reviewed were generally found to be in accordance with requirements and commitments. Few deficiencies were identified in the inspection of welding for piping and piping supports/restraints, including the ASME Code radiography for these piping systems. However, deficiencies were identified by the NRC Construction Appraisal Team which indicate several Public Service Company of New Hampshire program weaknesses that imply management deficiencies. The identified program weaknesses are as follows:

1. Hardware is being installed and inspected while design changes continue. This iterative design has significantly affected the installation and inspection work thus far completed. It appears that the full impact of changes and revisions have not been properly assessed by the engineering organization for their potential impact on procured and installed hardware. While these changes may not be significant from the design standpoint, they may have significant impact on procured and installed hardware.

2. A communication problem between the applicant's various management, engineering and construction groups (utility, engineering, contractors, and QA/QC personnel) was identified. Throughout the inspection period, numerous discussions and meetings were held to provide the NRC Construction Appraisal Team (CAT) an understanding of the installation of seismic cable tray supports and the procurement classification, seismic design philosophy, and seismic qualification of the cable tray system. No consistent methods for control of design, procurement and installation were presented to NRC CAT inspectors by the applicant's representatives.

3. Weaknesses involving piping support installations have been previously identified by NRC Region I. Many of these weaknesses have existed for some time. The NRC CAT inspectors noted similar programmatic weaknesses with regard to installation activities in the mechanical construction area.

Although the individual deficiencies identified in this report are resolvable from a technical standpoint, the program weakness that they reflect requires management attention to assure that they do not adversely affect future site activities.