

June 4, 1997

Mr. Ted C. Feigenbaum  
Executive Vice President and Chief Nuclear Officer  
Northeast Utilities Service Company  
c/o Mr. Terry L. Harpster  
P.O. Box 128  
Waterford, CT 06385

SUBJECT: INSPECTION REPORT NO. 50-443/96-10

Dear Mr. Feigenbaum:

This letter refers to your January 23, 1997 correspondence, in response to our December 14, 1996 letter.

Thank you for informing us of the corrective and preventive actions documented in your letter. These actions will be examined during a future inspection of your licensed program.

Your cooperation with us is appreciated.

Sincerely,

**Original Signed By:**

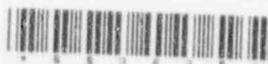
Richard J. Conte, Chief  
Projects Branch 8  
Division of Reactor Projects

Docket No. 50-443

cc: w/o cy of Licensee's Response Letter

B. D. Kenyon, President - Nuclear Group  
D. M. Goebel, Vice President - Nuclear Oversight  
F. C. Rothen, Vice President - Work Services  
J. K. Thayer, Vice President - Recovery Officer, Nuclear Engineering & Support Officer  
B. L. Drawbridge, Executive Director - Services & Senior Site Officer  
A. M. Callendrello, Licensing Manager - Seabrook Station  
W. A. DiProfio, Nuclear Unit Director - Seabrook Station  
R. E. Hickok, Nuclear Training Manager - Seabrook Station  
L. M. Cuoco, Senior Nuclear Counsel

9706160077 970604  
PDR ADOCK 05000443  
G PDR



IE:01

Mr. Ted C. Feigenbaum

2

cc: w/cy of Licensee's Response Letter

- D. C. McElhinney, RAC Chairman, FEMA RI, Boston, Mass.
- R. Backus, Esquire, Backus, Meyer and Solomon, New Hampshire
- S. Choi, Director, Nuclear Safety, Massachusetts Emergency Management Agency
- F. W. Uetman, Jr., Vice President and General Counsel - Great Bay Power Corporation
- Commonwealth of Massachusetts, SLO Designee
- R. Hallisey, Director, Dept. of Public Health, Commonwealth of Massachusetts Seacoast Anti-Pollution League
- State of New Hampshire, SLO
- D. Tefft, Administrator, Bureau of Radiological Health, State of New Hampshire
- S. Comley, Executive Director, We the People of the United States

Distribution w/cy of Licensee Response Letter

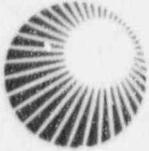
- Region I Docket Room (with concurrences)
- Nuclear Safety Information Center (NSIC)
- PUBLIC
- NRC Resident Inspector
- D. Screnci, PAO
- R. Conte, DRP
- M. Conner, DRP
- C. O'Daniell, DRP
- W. Dean, OEDO
- P. Milano, PD 1-3, NRR
- A. DeAgazio, PD 1-3, NRR
- R. Correia, NRR (RPC)
- F. Talbot, NRR
- D. Screnci, PAO, ORA
- Inspection Program Branch, NRR (IPAS)

DOCUMENT NAME: G:\BRANCH7\REPLYLTR\sb96-10.rpy

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RI/DRP		RI/DRP		/				
NAME	EConner <i>ECC</i>		RConte <i>ECC</i>						
DATE	<i>6/14/97</i>		<i>6/14/97</i>						

OFFICIAL RECORD COPY



**North  
Atlantic**

North Atlantic Energy Service Corporation  
P.O. Box 300  
Seabrook, NH 03874  
(603) 474-9521

The Northeast Utilities System

January 23, 1997

Docket No. 50-443  
NYN-97009

United States Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

Seabrook Station  
Reply to a Notice of Violation

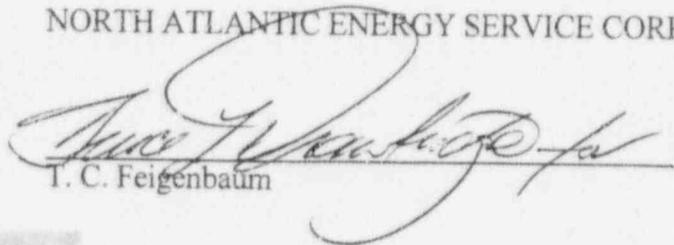
In a letter dated December 24, 1996<sup>1</sup> the NRC described a violation for failing to perform a 10 CFR 50.59 safety evaluation prior to changing a Station procedure governing operation of the startup feedwater pump. Accordingly, the enclosure provides North Atlantic Energy Service Corporation's (North Atlantic) response to this violation.

North Atlantic is making certain commitments in response to this violation. The commitments are fully described in the enclosure to this letter.

Should you have any questions concerning this response, please contact Mr. Anthony M. Callendrello, Licensing Manager, at (603) 773-7751.

Very truly yours,

NORTH ATLANTIC ENERGY SERVICE CORP.

  
T. C. Feigenbaum

cc: H. J. Miller, Regional Administrator  
A. W. De Agazio, Sr. Project Manager  
J. B. Macdonald, NRC Senior Resident Inspector

<sup>1</sup> NRC Inspection Report 96-10, dated December 24, 1996, J. F. Rogge to T. C. Feigenbaum.

9701290077 8pp

ENCLOSURE 1 TO NYN-97009

## REPLY TO A NOTICE OF VIOLATION

NRC Inspection Report 96-10 described a violation for failing to perform a 10 CFR 50.59 safety evaluation prior to changing a Station procedure governing operation of the startup feedwater pump. North Atlantic's response to this violation is described below.

### **I. Description of Violation**

The following is a restatement of the violation ViO 96-10-02:

10 CFR 50.59, Changes, tests and experiments, allows changes to be made to the facility as described in the final safety analysis report, without prior Commission approval, provided that the proposed change does not involve an unreviewed safety question or a change in technical specifications incorporated in the license. The North Atlantic Regulatory Compliance Manual Chapter 3.0, Section 3.0 contains the station specific requirements and process for performing and documenting safety evaluations to determine if an unreviewed safety question exists pursuant to the requirements of 10 CFR 50.59.

Contrary to the above, on January 27, 1994, the licensee implemented Change 1 to Revision 07 to station procedure, OS 1035.02 "Startup Feed Pump Operation," that authorized a system configuration during normal plant operations in which feedwater flow to the steam generators could be established through the emergency feedwater system, with steam generator level being maintained by throttling the emergency feedwater system flow control and isolation valves without first performing a safety evaluation as required by 10 CFR 50.59 to determine if an unreviewed safety question or a change in technical specifications was involved.

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

### **II. Reason for the Violation**

#### Background

North Atlantic agrees with this violation. The condition described in the violation was previously described in LER 96-04-00, "Emergency Feedwater System Valve Closure," which was submitted to the NRC via North Atlantic letter NYN-96049. This reply provides supplementary information to that described in the LER.

#### Root Causes

North Atlantic performed a Barrier Analysis to identify the root causes for the condition described in the violation and to develop appropriate corrective actions. Four root causes were identified:

a. Insufficient awareness of the impact of actions on safety

The preparer and reviewer of the change to procedure OS 1035.02 "Startup Feed Pump Operation," did not recognize the safety implications of operating the Emergency Feedwater (EFW) system in the subject configuration. As a result, they were reluctant to accept the need for a 10 CFR 50.59 evaluation as was requested by the Nuclear Safety Audit Review Committee (NSARC). Instead, the preparer and reviewer of the procedure change believed that the subject configuration was justified by a Technical Clarification.

b. Methods allow procedure changes without written basis for 10 CFR 50.59 applicability screening questions

Existing administrative procedures do not require the preparer of procedures or procedure changes to provide a written basis for whether 10 CFR 50.59 is applicable. This is an exception to the requirements for all other 10 CFR 50.59 applicability screenings. If the bases for the applicability review screening were documented, the need for a 10 CFR 50.59 evaluation may have been more apparent.

c. Responsibility of personnel was not well defined/personnel were not held accountable

During the resolution of this issue, the responsibility for completing the 10 CFR 50.59 evaluation was assigned to four different entities over the course of two years and the completion dates were extended each time with the concurrence of NSARC. The NSARC Chairman did not aggressively pursue closure of this matter by requesting direct involvement by senior management. The NSARC Operations Subcommittee did not enter their concern for a lack of a 10 CFR 50.59 evaluation in the corrective action program in a timely manner. An Adverse Condition Report (ACR) was eventually generated, however, this occurred approximately two years after the concern was first raised. Overall, a lack of ownership and willingness to accept responsibility was illustrated throughout the period in question.

The NSARC currently receives for review all procedures and procedure changes for which a 10 CFR 50.59 evaluation was prepared. If through the 10 CFR 50.59 applicability screening process the preparer incorrectly determines that a 10 CFR 50.59 evaluation is not necessary, then NSARC would not receive the procedure for review. Additionally, at present, the extension of due dates for NSARC action items is at the discretion of the NSARC Chairman and no formal policy exists to limit the number or duration of extensions.

d. Insufficient 10 CFR 50.59 refresher training

Although preparers or reviewers of 10 CFR 50.59 applicability screenings/evaluations are required to be trained and qualified, the fact that a Technical Clarification was used as a substitute for a thorough screening for the subject procedure change indicates that requalification or refresher training is warranted.

## II. Corrective Actions

The subject of this violation is described in LER 96-004-00 and is similar to that of one contained in NRC Inspection Report 96-08. In response to VIO 96-08-01, North Atlantic committed to certain corrective actions, some of which are germane to VIO 96-10-02. A reference is provided below to those corrective actions that are contained in other docketed correspondence.

1. North Atlantic previously revised procedure OS 1035.02, "Startup Feed Pump Operation," to eliminate the option of operating the Startup Feedwater Pump in Modes 1, 2, or 3, with the Startup Feedwater Pump aligned to the steam generators via the EFW pump discharge header. (Reference LER 96-04-00).
2. Technical Clarification TS-148 regarding operability of the EFW system was revised to clearly state that closing and/or throttling of the EFW flow control valves to feed the steam generators in Modes 1, 2, or 3, renders the EFW system inoperable.
3. North Atlantic has reviewed other Operations procedures that could potentially place the plant into a configuration similar to that of OS 1035.02. (Reference LER 96-04-00). The appropriate procedures were revised to preclude the EFW flow control valves from either being throttled or closed in Modes 1, 2, or 3. Note that North Atlantic had previously issued a Standing Operations Order stating that the EFW flow control valves should not be throttled or closed in Modes 1, 2, or 3 during normal operation. This ensured that the subject configuration was not utilized during the time that procedure reviews and revisions were being implemented.
4. The North Atlantic Regulatory Compliance Manual (NARC) will be revised to:
  - Provide additional guidance for performing the determination of applicability for 10 CFR 50.59 evaluations for manual/procedure revisions and intent changes.
  - Require the conclusions of the determination of applicability for 10 CFR 50.59 evaluations for manual/procedure revisions and intent changes to be supported by a written basis and to include a list of UFSAR chapters and/or related documents that were reviewed while performing the applicability determination.
  - Require that each 10 CFR 50.59 evaluation that includes a safety evaluation to state and provide a basis for whether or not the UFSAR requires an update to reflect the effects of the change, test or experiment.

It is anticipated that these procedure changes will be implemented by February 28, 1997. (Reference VIO 96-08-01).

5. North Atlantic will provide periodic refresher training on 10 CFR 50.59 evaluations. It is anticipated that the first periodic training session will be completed by August 31, 1997. (Reference VIO 96-08-01).

6. North Atlantic will revise administrative requirements to ensure that supervisors and managers that approve procedures and procedure changes receive 10 CFR 50.59 training. It is anticipated that the appropriate administrative requirements will be revised by February 28, 1997. (Reference VIO 96-08-01).
7. The Station Director will reinforce management's expectations to the preparers, reviewers, and approvers of 10 CFR 50.59 evaluations regarding the thoroughness of 10 CFR 50.59 applicability reviews and evaluations. It is anticipated that this will be completed by January 31, 1997. (Reference VIO 96-08-01).
8. The North Atlantic Management Manual procedure NM 11250, "NSARC Operation," will be revised to require periodic NSARC sponsored audits of 10 CFR 50.59 applicability determinations for procedures and procedure changes. It is anticipated that this procedure will be revised by February 28, 1997.
9. North Atlantic Directors will emphasize to their respective organizations in writing the need for timely and comprehensive responses to action items associated with independent oversight or third party audit organizations. It is anticipated that this will be completed by February 15, 1997.
10. The North Atlantic Management Manual will be revised to include a new directive that will provide executive management expectations regarding responses to independent oversight or third party audit organizations including resolutions to professional differences of opinion, policy regarding the number and duration of extensions for NSARC action items, and guidance on the withdrawal of procedures for which a third party issue exists. It is anticipated that this manual will be revised by March 31, 1997.
11. The NSARC Chairman has provided written expectations to NSARC members and alternate members that ACRs are to be initiated promptly for cases where NSARC reviewers have identified an issue that meets the ACR threshold criteria specified in the Seabrook Station Operating Experience Manual.

### **III. Discussion of Weaknesses Identified in Inspection Report 96-10**

The cover letter to NRC Inspection Report 96-10 requested that, in addition to the response to the aforementioned violation, North Atlantic address the following:

- Controls and processes that have been established to ensure prompt and comprehensive responses to independent oversight or third party audit bodies such as NSARC.
- Controls to ensure that changes such as procedure revisions are supported by safety evaluations based on technical and design and licensing based information.
- How corrective action processes ensure that issues of technical or safety concern are objectively evaluated while differing technical views are being addressed.

A number of corrective actions specified above address the first issue. Specifically, these include documentation of management's expectations regarding the need for timely and comprehensive responses to issues identified by independent or third party audit organizations via the management directive to be added to North Atlantic Management Manual, and the transmission of these expectations to the organization. Additionally, North Atlantic has taken actions to ensure that expectations are clear regarding the need to promptly enter those NSARC issues that meet the ACR threshold criteria into the corrective action program. Currently, North Atlantic believes that other independent oversight or third party audit action items are adequately entered into the corrective action program. North Atlantic believes that these collective actions in conjunction with the implementation of the current corrective action program will ensure prompt and comprehensive responses to independent oversight or third party audit bodies such as NSARC. Aspects of the first issue are also addressed via implementation of the current corrective action program as described in response to the third issue, below.

Regarding the second issue, North Atlantic is taking actions to provide controls to ensure that changes such as procedure revisions are supported by safety evaluations based on technical and design and licensing based information. Specifically, these actions include the new requirement to document the conclusions of the determination of applicability for 10 CFR 50.59 evaluations for manual/procedure revisions and intent changes and to include a list of UFSAR chapters and/or related documents that were reviewed while performing the applicability determination. These actions will encourage more rigorous review and verification of the applicable design and licensing bases documentation during the development of the change and during the review process. Refresher training on 10 CFR 50.59 evaluations will also be provided to appropriate personnel. This will help reinforce the need to base 10 CFR 50.59 evaluations on technical and design and licensing bases information.

Regarding the third issue, the various levels of review, wide distribution of documentation and open discussion of issues by the Management Review Team (MRT) and/or SORC inherent in the existing corrective action processes provide ample opportunity for objective evaluation of issues while differing technical reviews are being addressed. Specifically, the MRT, which is comprised of a cross-section of top Station management personnel, reviews, prioritizes, assigns a significance factor, and determines what type of evaluation is necessary for every ACR that is initiated. The goal of the MRT is to foster a self-critical and questioning attitude in reviewing ACRs to aid in the effective resolution of the causes prior to the development of an adverse trend. The MRT review includes the completed evaluations, causes, and corrective actions for each ACR. Additionally, the MRT specifies those completed ACR evaluations that should be reviewed by SORC, i.e., those that would benefit from such a technical interdisciplinary review. North Atlantic believes that the current structure of the MRT ensures that technical and safety concerns are objectively evaluated.

In the particular case of the issues involved with the violation, the corrective action processes were not effective since a resolution to the differing technical views was pursued outside of the formal corrective action program for an extended period of time and, once the formal system was used, the associated action items were not effectively managed. Several actions described above address these timeliness and effectiveness issues and also establish management's expectations

on prompt and comprehensive responses to independent oversight or third party audit bodies such as NSARC, including resolution of differing technical views. Regarding NSARC's untimely use of the corrective action program, as stated above, North Atlantic will implement actions to ensure that NSARC members promptly initiate ACRs for issues that meet the ACR threshold criteria.

**IV. Date When Full Compliance Will be Achieved**

North Atlantic is currently in compliance with regulatory requirements.