

January 3, 1997

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

SUBJECT: NRC INSPECTION REPORT 50-443/96-08

Dear Mr. Feigenbaum:

This letter refers to your December 20, 1996 correspondence, in response to our November 22, 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:

John F. Rogge, Chief
Projects Branch 8
Division of Reactor Projects

Docket No. 50-443

cc w/o cy of Licensee's Response:

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
H. F. Haynes, Director - Nuclear Training
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

JED/1

Mr. T. C. Feigenbaum

2

cc w/cy of Licensee's Response:

W. D. Meinert, Nuclear Engineer

D. C. McElhinney, RAC Chairman, FEMA RI, Boston, Mass.

R. Backus, Esquire, Backus, Meyer and Solom New Hampshire

S. Choi, Director, Nuclear Safety, Massachusetts Emergency
Management Agency

F. W. Getman, 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 ltr:

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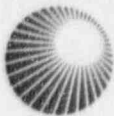
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Ted C. Feigenbaum
Executive Vice President and
Chief Nuclear Officer

December 20, 1996

Docket No. 50-443

NYN-96089

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

Seabrook Station
Reply to a Notice of Violation

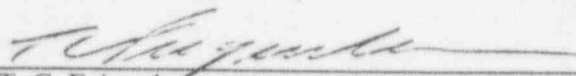
In a letter dated November 22, 1996¹ the NRC described a violation for covering floor drains in the emergency feedwater pump house during painting activities, which constituted a change to the facility as described in the UFSAR, without performance of a safety evaluation. Accordingly, the enclosure provides 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

¹ NRC Inspection Report 96-08, dated November 22, 1996, J. F. Rogge to T. C. Feigenbaum.

9701020071

ENCLOSURE 1 TO NYN-96089

REPLY TO A NOTICE OF VIOLATION

NRC Inspection Report 96-08 described a violation for covering floor drains in the emergency feedwater (EFW) pump house during painting activities, which constituted a change to the facility as described in the UFSAR, without performance of a safety evaluation. North Atlantic's response to this violation is described below.

I. Description of Violation

The following is a restatement of the violation VIO 96-08-01:

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 August 21, the inspector identified three, 4-inch floor drains in the EFW pump house were covered with tape during painting activities, which constituted a change to the facility as described in the Updated Final Safety Analysis Report (UFSAR), without performance of the required safety evaluation to determine if the change constituted an unreviewed safety question or required a change to technical specifications. UFSAR Section 9.3.3.2.b.8 indicates the EFW pump house contains five, 4-inch floor drains and two, 2.5-inch floor drains designed to accommodate 75 gallons per minute (gpm) leakage. UFSAR Section 9.3.3.3, "Safety Evaluation," indicates the equipment and floor drainage system is operable during all modes of operation.

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

II. Reason for the Violation

Background

North Atlantic agrees with this violation. As stated in the description of the violation, three, 4-inch floor drains in the EFW pump house were covered with tape during painting activities. The painters were following procedure, MS0599.45, Revision 0, Change 3, "Coating of Service Level III Surfaces," which required the covering of floor drains in the immediate work area to prevent washing solutions and/or debris from entering the floor drain system. Also in accordance with the procedure, Control Room personnel were notified of the floor drains that were plugged and when the plugs were removed. No 10 CFR 50.59 evaluation was completed for covering of the floor drains. Similarly, no 10 CFR 50.59 evaluation was completed for procedure MS0599.45, which allowed covering of the floor drains. However, a 10 CFR 50.59 applicability review had

been completed for this procedure and it was determined that a 10 CFR 50.59 evaluation was not required.

Upon identification of this condition, the Control Room was notified and the painting activities in the EFW pump house were stopped and the floor drains unplugged. Adverse Condition Report (ACR) 96-765 was initiated to investigate this event, determine the cause and develop corrective actions. This evaluation determined the apparent cause of this event to be insufficient awareness of the impact of actions on nuclear safety or reliability.

Subsequently, ACR 96-1219 was initiated to document the violation and to address the broader implications. In response, the Management Review Team (MRT) requested the completion of a formal root cause analysis, for which the Barrier Analysis technique was employed. The broader implications review was accomplished by utilizing a sufficiently broad problem statement to envelop other recently identified changes where a 10 CFR 50.59 evaluation had not been completed. These other occurrences were identified as a result of increased Station emphasis on the discovery and resolution of UFSAR discrepancies. A root cause analysis could have been limited to the occurrence cited in the violation, however, North Atlantic believes that this would have been too narrow in focus, and would not address the broader implications. The following problem statement was used for the root cause analysis:

Temporary changes to the facility are not consistently recognized as potentially affecting the design basis, i.e., meeting the requirements for a 10 CFR 50.59 evaluation.

Barrier Analysis typically begins by identifying the hazard (i.e., the undesired consequence) and the target (i.e., the desired result). In this case the hazard is making changes to the facility as described in the UFSAR without the required 10 CFR 50.59 evaluation, and the target is recognizing changes to the facility with subsequent completion of the required 10 CFR 50.59 evaluation. The next step is determining what barriers would be effective at preventing the hazard. These barriers are not necessarily limited to those that currently exist. For this evaluation, the barriers of interest are exclusively programmatic barriers, rather than physical barriers or restrictions.

The definition of root cause is the basic reason or reasons for an event which, if corrected, would prevent or minimize recurrence or consequences of the event. The event that was the subject of the violation was the result of failure of the administrative requirements barrier. Without the existence of a second person review, a single human error can result in program failure, i.e., a change to the facility as described in the UFSAR without the required 10 CFR 50.59 evaluation. However, the root causes applicable to the problem statement address the broader implications. In this regard, three primary causes and one contributing cause was identified as described below.

Primary Causes

a. Management's Expectations Were Not Well Defined

The expectations for the thoroughness of the 10 CFR 50.59 applicability screenings performed on procedures and procedure changes were not adequately communicated to North Atlantic personnel.

b. Lack of Management Review of the Adequacy of 10 CFR 50.59 Applicability Screening

There was no management review of the adequacy of 10 CFR 50.59 applicability screenings performed on procedures and procedure changes, nor was there specific reinforcement of the need for thoroughness.

c. Insufficient Refresher Training on 10 CFR 50.59

There is no periodic re-qualification required for performance of the applicability screening or the actual 10 CFR 50.59 evaluation. Field evidence indicates that most of the problems relate to recognizing that a 10 CFR 50.59 evaluation is required, rather than the quality of 10 CFR 50.59 evaluations.

Contributing Cause

One contributing cause was determined for this event:

a. Lack of Appropriate Tools

The current UFSAR electronic search tool is difficult to use.

II. Corrective Actions

The following corrective actions address both the event cited in the violation and the primary and contributing causes from the Barrier Analysis:

1. After receipt of the Notice of Violation, North Atlantic performed a 10 CFR 50.59 evaluation for covering of the floor drains in the EFW pump house. This evaluation determined that covering of the floor drains did not create an unreviewed safety question.
2. Procedures MS0559.45, "Coating of Service Level III Surfaces," and MS0517.23, "Service Preparation and Coating of Service Level I Surfaces," have been revised to require a 10 CFR 50.59 evaluation prior to plugging or blocking any floor drain. Additionally, these procedures now indicate the importance of blocking any floor drains.

3. Procedure MA 3.0, "Work Control Practices," has been revised to ensure pre-job briefings discuss work area setup and the potential impact on the plant design (e.g., doors propped open, floor drains covered, seismic impact) that may require a prior Engineering safety evaluation.
4. North Atlantic described this event, the violation, and the need for a 10 CFR 50.59 safety evaluation in the November 22, 1996 edition of "Seabrook Today," a site-wide publication. This article stressed that subtle changes in the plant, e.g., propping open doors, storing equipment or tools in seismic areas, taping over drains, etc. could violate design basis requirements.
5. Procedures ON1044.02, "Oil/Water Separation System Operation," and OS1025.01, "Floor and Equipment Drain System Operation," will be revised to add a precaution to provide awareness that in-plant drainage capability should be assessed prior to disabling portions of the plant drainage systems. It is anticipated that these procedures will be revised by January 15, 1997.
6. This event will be discussed with Operations and Engineering Support Personnel as part of continuing training. It is anticipated that this training will be completed by October 1, 1997.
7. North Atlantic will identify drains that cannot be plugged unless Engineering is notified to perform a 10 CFR 50.59 evaluation. It is anticipated that this evaluation will be completed by January 15, 1997.
8. 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.

9. 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.

10. North Atlantic will implement a new, more user friendly word search software package to perform key word searches of the UFSAR. It is anticipated that this new word search tool will be implemented by February 28, 1997.
11. 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.
12. 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.

III. Date When Full Compliance Will be Achieved

North Atlantic is currently in compliance with regulatory requirements.