



**North
Atlantic**

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The Northeast Utilities System

May 13, 2002
Docket No. 50-443
NYN-02047

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Seabrook Station
Response to NRC Bulletin 2002-01
“Reactor Pressure Vessel Head Degradation and
Reactor Coolant Pressure Boundary Integrity”

References:

- (1) North Atlantic Letter (NYN-02032) Response to NRC Bulletin 2002-01 “Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity” dated April 2, 2002
- (2) North Atlantic Letter (NYN-88076) “Response to Generic Letter 88-05” dated May 27, 1988

NRC Bulletin 2002-01, “Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity” dated March 18, 2002, requests that licensees provide information to permit the assessment of plant specific compliance with Nuclear Regulatory Commission (NRC) regulations concerning reactor coolant pressure boundary integrity. The NRC required that all addressees provide written responses to the requested information in accordance with the provisions of 10 CFR 50.54(f).

The North Atlantic Energy Service Corporation (North Atlantic) responses to item 1.A through 1.E of NRC Bulletin 2002-01 were provided in North Atlantic letter NYN-02032 on April 2, 2002. The response to item 2 will be provided to the NRC within 30 days after plant restart following the next refueling outage as identified in the bulletin. The response to item 3 is provided in Enclosure 1.

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Should you have any questions concerning this response, please contact Mr. James M. Peschel,
Manager - Regulatory Programs, at (603) 773-7194.

Very truly yours,

NORTH ATLANTIC ENERGY SERVICE CORP.



Ted C. Feigenbaum
Executive Vice President and
Chief Nuclear Officer

cc: H. J. Miller, NRC Region I Administrator
R. D. Starkey, NRC Project Manager, Project Directorate I-2
G. T. Dentel, NRC Senior Resident Inspector

STATE OF NEW HAMPSHIRE

Rockingham, ss.

DATE *May 13, 2002*

Then personally appeared before me, the above-named Ted C. Feigenbaum, being duly sworn, did state that he is the Executive Vice President and Chief Nuclear Officer of the North Atlantic Energy Service Corporation that he is duly authorized to execute and file the foregoing information in the name and on the behalf of North Atlantic Energy Service Corporation and that the statements therein are true to the best of his knowledge and belief.

Marilyn P. Sullivan

Marilyn Sullivan, Notary Public

My Commission Expires:

April 17, 2007

ENCLOSURE 1 TO NYN-02047

**North Atlantic Response to
NRC Bulletin 2002-01
“Reactor Pressure Vessel Head Degradation And Reactor Coolant Pressure
Boundary Integrity”**

BACKGROUND INFORMATION

On March 19, 2002, NRC Bulletin 2002-01, “Reactor Pressure Vessel Head Degradation And Reactor Coolant Pressure Boundary Integrity” was issued due to the discovery of a degraded reactor pressure vessel (RPV) head at the Davis-Besse Nuclear Power Station.

As a result of NRC Bulletin 2002-01, North Atlantic was requested to provide Seabrook Station Unit 1 response to items 1.A through 1.E within 15 days of the date of the bulletin. That information was provided in North Atlantic letter NYN-02032 dated April 2, 2002.

In addition, North Atlantic was requested to provide Seabrook Station Unit 1 response to item 3 within 60 days of the date of the bulletin. The following information is provided in response to that request:

ITEM 3:

3. *Within 60 days of the date of this bulletin, all PWR addressees are requested to submit to the NRC the following information related to the remainder of the reactor coolant pressure boundary:*
 - A. *The basis for concluding that your boric acid inspection program is providing reasonable assurance of compliance with the applicable regulatory requirements discussed in Generic Letter 88-05 and this bulletin. If a documented basis does not exist, provide your plans, if any, for a review of your programs.*

RESPONSE TO ITEM 3:

Generic Letter 88-05 and NRC Bulletin 2002-01 are concerned with boric acid leakage that comes in contact with and degrades low alloy carbon steel components.

North Atlantic has established a System Leakage Standard as part of its management policies and implemented a Leakage Reduction Program. The Leakage Reduction program includes the implementing procedures for detecting boric acid leakage. These procedures were identified in the response to Generic Letter 88-05 (NYN-88076, May 27, 1988).

Potential pressure boundary leakage locations that could cause degradation of carbon steel are identified and included in two Boric Acid Program procedures. Each of these procedures requires that a visual inspection of identified areas be performed once each refueling period.

Personnel familiar with observing leakage perform the inspections. The inspections are performed to the extent reasonably achievable with the insulation removed to perform the inspections when there are indications of leakage or boron precipitation. Each procedure contains specific acceptance criteria and corrective actions to be performed when boron deposits are observed. One of these requirements is that the point of origin must be determined. For wet boric acid or large amounts of boric acid crystals, a work order is written. For instances where a work order is not written, an item is added to the Health Physics (HP) boric acid cleanup repetitive task listing.

If a work order is written, corrective maintenance or an evaluation is performed. Upon completion of corrective maintenance, a VT-2 qualified individual performs an inspection. If necessary, insulation is removed to determine the point of origin.

If the item is placed on the HP boric acid cleanup repetitive task listing, a HP technician trained in degradation identification performs the cleaning. If needed, the HP technician requests a VT-2 qualified person to examine the area. Should the item require repair or further evaluation, a work order is written. Also, the system engineers periodically review, inspect, and evaluate the components on the HP list.

There are also other opportunities to identify leakage or boric acid deposits. The system engineers, during their system walk downs, and the nuclear systems operators, as part of their plant tours, may also identify leakage or boric acid deposits.

Periodic evaluation of the boric acid program is performed through the North Atlantic Oversight organization audits of the Leakage Reduction Program. The Boric Acid Program owner, Nuclear Design Engineering Mechanical Materials Department, also provides information concerning items that are repetitively cleaned to the associated system engineers. System Engineers include the leakage information in the applicable System Health Report.

Based upon the knowledge requirements for personnel performing the boric acid inspections, the documentation of each item identified, evaluations performed by VT-2 qualified personnel as required, and periodic audits, North Atlantic has reasonable assurance the regulatory requirements specified in NRC bulletin 2002-01 and the requirements of Generic Letter 88-05 are being satisfied.