

**North  
Atlantic**

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The Northeast Utilities System

April 18, 2001

Docket No. 50-443

NYN-01032

CR# 01-02330

United States Nuclear Regulatory Commission  
Attn.: Document Control Desk  
Washington, DC 20555-0001


Seabrook Station  
Inservice Inspection Program Relief Request 2IR-13

Pursuant to 10 CFR 50.55a(a)(3)(i), North Atlantic Energy Service Corporation (North Atlantic) hereby requests NRC review and approval of the enclosed Inservice Inspection (ISI) Program Relief Request, 2IR-13. This relief request proposes to utilize an alternative to the requirements of paragraph IWA-2210 of Section XI of the 1995 Edition (including 1996 addenda) of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Code (Code). IWA-2210 requires in part that illumination levels from battery powered portable lights shall be checked before and after each examination or series of examinations, not to exceed 4 hours between checks. North Atlantic proposes to perform these illumination checks by verifying that there is no discernable degradation in the visual examination resolution of the procedure demonstration test chart characters as identified in paragraph IWA-2210 of the 1998 Edition of the Code in lieu of using a light meter. North Atlantic requests that the NRC review and approve this relief request by October 31, 2001 to support on-going ISI program inspection activities.

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

Very truly yours,

NORTH ATLANTIC ENERGY SERVICE CORP.

  
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T. C. Feigenbaum  
Executive Vice President  
and Chief Nuclear Officer

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cc: H. J. Miller, NRC Regional Administrator  
V. Nerses, NRC Project Manager, Project Directorate 1-2  
NRC Senior Resident Inspector

**Enclosure to NYN-01032**

## Appendix F: Relief Requests

### Seabrook Nuclear Power Station Unit No. 1 Relief From Inservice Inspection Requirements 2IR-13, Revision 0

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#### Subject:

Visual Examination Illumination Level Verification

#### Components For Which Relief Is Requested:

This request is applicable to visual examinations required by ASME Section XI

#### ASME Code Class:

Class 1, 2, 3, MC (IWE), and CC (IWL)

#### ASME Section XI Code Requirement:

ASME Section XI, 1995 Edition through the 1996 Addenda, Paragraph IWA-2210 Visual Examinations requires in part that illumination levels from battery powered portable lights shall be checked before and after each examination or series of examinations, not to exceed 4 hr between checks. Illumination levels are specified in Table IWA-2210-1.

#### Basis and Justification for the Granting of Relief:

Pursuant to 10CFR50.55a(a)(3)(i), relief is requested from the Code requirements on the basis that the proposed alternative would provide an acceptable level of quality and safety.

Verification of illumination levels specified in Table IWA-2210-1 is performed using a light meter. North Atlantic's experience with light meters has been less than ideal. Light meters are inherently delicate instruments that at times do not withstand the environment they are subjected to in the field. Damage and/or calibration failure has led to re-examination. North Atlantic sends its light meters off-site for calibration on a periodic basis. Many examinations may be performed with the instrument between calibrations. If a light meter is determined to be out of calibration, the entire series of examinations could be void. This is burdensome especially when many of the examinations are conducted during a refueling outage.

North Atlantic feels that utilizing the procedure demonstration test chart characters specified in Table IWA-2210-1 at the maximum examination distance provides adequate verification of illumination. Paragraph IWA-2210 allows remote examination to be substituted for direct examination and states that the remote examination procedure shall be demonstrated to resolve the selected test chart characters.

## Appendix F: Relief Requests

### Seabrook Nuclear Power Station Unit No. 1 Relief From Inservice Inspection Requirements

#### 2IR-13, Revision 0

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The 1998 Edition of ASME Section XI, paragraph IWA-2210 (f) states: “The adequacy of the illumination levels from battery powered portable lights shall be checked before and after each examination or series of examinations, not to exceed 4 hr between checks. In lieu of using a light meter, these checks may be made by verifying that the illumination is adequate (i.e., no discernable degradation in the visual examination resolution of the procedure demonstration test chart characters).”

#### Alternative Examination:

Continue the practice of verifying the adequacy of illumination levels from battery powered portable lights before and after each examination or series of examinations, not to exceed 4 hr between checks. In lieu of using a light meter, these checks may be made by verifying that the illumination is adequate (i.e., no discernable degradation in the visual examination resolution of the procedure demonstration test chart characters.)

#### Applicability

This Relief Request is applicable to the Second Ten-Year Interval Inservice Inspection Program.