

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

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July 2, 1985

Docket No. 50-423

B11576

Director of Nuclear Reactor Regulation
Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Reference: (1) B. J. Youngblood letter to W. G. Counsil, Request for
Additional Information, dated March 7, 1985.

(2) J. F. Opeka letter to B. J. Youngblood, Response to Q250.12,
dated May 7, 1985.

Gentlemen:

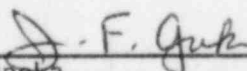
Millstone Nuclear Power Station, Unit No. 3
Response to Materials Engineering Branch Question No. 250.12.D.1

Attached is Northeast Nuclear Energy Company's (NNECO) response to Material
Engineering Branch, Inservice Inspection Section Question 250.12.D.1 concerning
the ultrasonic inspection technique used as part of Millstone Unit No. 3
Preservice Inspection program.

We trust this response will resolve the Staff's concerns regarding the ultrasonic
inspections. If you have further questions, please contact our licensing
representative.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

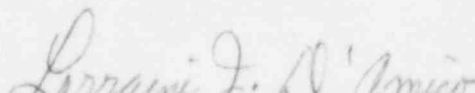


J. F. Opeka
Senior Vice President

STATE OF CONNECTICUT)
) ss. Berlin
COUNTY OF HARTFORD)

Then personally appeared before me J. F. Opeka, who being duly sworn, did state
that he is Senior Vice President of Northeast Nuclear Energy Company, an
Applicant herein, that he is authorized to execute and file the foregoing
information in the name and on behalf of the Applicants herein and that the
statements contained in said information are true and correct to the best of his
knowledge and belief.

8507110472 850702
PDR ADOCK 05000423
Q PDR



Notary Public

My Commission Expires March 31, 1988

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MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

MATERIALS ENGINEERING BRANCH
INSERVICE INSPECTION SECTION
QUESTION 250.12.D.1

D. To resolve the issue of the effectiveness of the preservice inspection of the CSS the applicant should present his conclusions regarding compliance with 10 CFR 50.55a(g) (3) on the following subjects:

1. The examination methodology; i.e., the examination procedure, instrumentation and calibration standard meet the requirements of Section XI.

Response:

Section XI requirements for ultrasonic examinations are specified in IWA-2232. Sub paragraph IWA-2232(c) which is applicable for austenitic materials, (IWA-2232(a) and (b) are applicable for ferritic materials) specifies the examinations "be in accordance with the applicable requirements of Article 5 of Section V, amended as follows".

Of the 5 amendments noted:

No. (2) requires the operator to investigate all responses greater than 100% of the reference level.

The PSI examination procedure requires the investigation of all responses greater than 20% of the reference level.

No. (3) requires reflectors be measured to 100% reference points.

The PSI Examination procedure requires measurements to 50% reference points.

No. (4) requires the material for the calibration block be from

(a) a dropout (b) a prolongation or; (c) the same material specification, product form and heat treatment as one of the materials being joined.

The PSI calibration block material is in accordance with amendment (4)(c) (Ref. Response to C.3).

Within Article 5 of Section V, T-542 specifies that T-548 is applicable for welds in austenitic materials.

T-548 provides no specific requirements or techniques. It provides discussion and the consideration that "it may therefore be necessary to modify and/or supplement the provisions of this Article in accordance with T-110(c) when examining such welds".

T-110(c) recognizes the need and provides the mechanism by which modified procedures are to be developed and submitted to the INSPECTOR, where required. This "where required" is Section XI, IWA-2240 ALTERNATIVE EXAMINATIONS - which allows new methods and techniques, provided the INSPECTOR is satisfied.

Paragraph 1.0 of the applicable PSI examination procedure (ISI-206, Rev. 0) states in part "Technical contents are based on the ASME Code, including Section XI, IWA 2240...". This procedure was demonstrated to the satisfaction of the ANII and was accepted for use by the ANII.

All of the written requirements of Section XI have therefore been satisfied.

Additionally, the ability of ISI-206 to produce interpretable results and to detect significant flaws was demonstrated to the NRC on November 8, 1984 and again on June 5, 1985 utilizing cracked specimens from the previously mentioned WCAP-9894, Reliability of Ultrasonic Test Method for Detecting Natural Fatigue Cracks in Centrifugally Cast Stainless Steel Pipe.