

April 22, 1983

Docket No. 50-245
LS05-83-04-053

Mr. W. G. Council, Vice President
Nuclear Engineering & Operations
Northeast Nuclear Energy Company
P. O. Box 270
Hartford, Connecticut 06101

Dear Mr. Council:

SUBJECT: RESPONSE TO GENERIC LETTER 81-04 ON IMPLEMENTATION OF
NUREG-0313, REV. 1

Re: Millstone Unit No. 1

Our Generic Letter 81-04 to all BWR licenses dated February 26, 1981 requested you to review all ASME Code Class 1 and 2 pressure boundary piping, safe ends and fitting material at your BWR facilities to determine if it meets the material selection, testing and processing guidelines set forth in NUREG-0313, Rev. 1, a copy of which was enclosed with the generic letter. This letter requested that you propose a schedule to: 1) identify any materials that do not meet the guidelines, 2) implement the augmented inservice inspection requirements specified in Section IV of NUREG-0313, Rev. 1, 3) discuss your plans to replace (to the extent practicable) nonconforming materials and 4) install more sensitive, diverse leak detection systems. Our generic letter offered the option of providing a description, schedule and justification for alternative actions that would reduce the susceptibility of pressure boundary piping and safe ends to intergranular stress corrosion cracking (IGSCC) or increase the probability of early detection of leakage from pipe cracks.

Based on our review of your response to our Generic Letter 81-04 dated August 30, 1982, we have determined that we need the additional information identified in the enclosure to this letter. In view of recent developments regarding pipe cracking in BWRs, we request that you respond within 30 days of receipt of this letter. We also request that you send a copy of your response directly to our contractor:

EG&G Idaho, Inc.
P. O. Box 1625
Idaho Falls, Idaho 83415
ATTN: Mr. Wayne Roberts

*SEOL
DSU USE EX(27)*

8304260430 830422
PDR ADOCK 05000245
P PDR

OFFICE	.....	.....	.....	.....	.....	.....
SURNAME	.....	.....	.....	.....	.....	.....
DATE	.....	.....	.....	.....	.....	.....

Mr. W. G. Council

-2-

April 22, 1983

This request for information is specific to one licensee. Therefore, OMB clearance is not required for this request under P. L. 96-511.

If you have any questions, please contact your Project Manager, Jim Shea at 301-492-7231.

Sincerely,

Original signed by WAPaulson for/

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Enclosure:
Request for Additional
Information

cc w/enclosure:
SSee next page

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WAP

OFFICE	DL:ORB#5	DL:ORB#2	DL:ORB#5	DL:ORB#5	
SURNAME	HSmith	RCIark/cab	JShea	DCrutchfield	
DATE	12/10/82	12/10/82	4/15/82	4/22/82	

April 22, 1983

cc

William H. Cuddy, Esquire
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State of Connecticut
Office of Policy & Management
ATTN: Under Secretary Energy
Division
80 Washington Street
Hartford, Connecticut 06115

Ronald C. Haynes, Regional
Administrator
Nuclear Regulatory Commission
Region I Office
631 Park Avenue
King of Prussia, Pennsylvania 19406

Northeast Nuclear Energy Company
ATTN: Superintendent
Millstone Plant
P. O. Box 128
Waterford, Connecticut 06385

Mr. Richard T. Laudonat
Manager, Generation Facilities Licensing
Northeast Utilities Service Company
P. O. Box 270
Hartford, Connecticut 06101

Resident Inspector
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P. O. Box Drawer KK
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First Selectman of the Town
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Hartford, Connecticut 06101

U. S. Environmental Protection Agency
Region I Office
ATTN: Regional Radiation Representative
JFK Federal Building
Boston, Massachusetts 02203

REQUEST FOR ADDITIONAL INFORMATION
IMPLEMENTATION OF NUREG-0313, REV. 1
MILLSTONE UNIT NO. 1
DOCKET NO. 50-245

References:

- a. Letter, W. G. Council to D. M. Crutchfield, August 30, 1982, Response to Generic Letter 81-04
- b. Meeting between Northeast Nuclear Energy Company and NRC staffs on October 29, 1982 on inspections of core spray system, recirculation piping system and isolation condenser piping system.
- c. Letter, W. G. Counsel to Ronald C. Haynes, November 5, 1982, Response to IE Bulletin 82-03.

1. NUREG-0313, Rev. 1, requires that unidentified leakage be limited to 5 gpm total and to a 2 gpm increase in 24 hours. In the W. G. Council letter to D. M. Crutchfield dated August 30, 1982, you indicated that the Millstone 1 Technical Specifications require that reactor coolant leakage into the primary containment not exceed 2.5 gallons per minute (gpm). Therefore, no change in your Technical Specifications was necessary.

- a. Please provide technical justification for there being no change in your Technical Specifications.
- b. If your unidentified leakage was less than 0.5 gpm and an IGSCC-induced leak caused the leak rate to increase 2 gpm in 24 hours, your leak rate would then be less than 2.5 gpm. It would not initiate a shutdown by your present Technical Specifications, but would if the Technical Specifications included the 2 gpm increase in 24 hour provision of NUREG-0313, Rev. 1. To further characterize your leak detection system, please fill out the attached table.

2. The following questions refer to the IGSCC Susceptibility Matrix which is included as Figure 1 in the W. G. Council letter to D. M. Crutchfield dated August 30, 1982.

- a. Please identify the specific frequencies (e.g., every refueling, every 80 months, etc.) at which the welds in Table 2 of the above letter will be inspected.
- b. Low temperature sensitization can make an initially lightly sensitized austenitic stainless steel more sensitized over time. Thus a weld heat affected zone (HAZ) whose initial IGSCC susceptibility is low can become more highly susceptible to IGSCC.
 - Provide the augmented ISI plan for those HAZs which in the low susceptibility region of Figure 1 but which are close to the high susceptibility region.

- If there is no augmented ISI for the HAZs described above, provide technical justification for there being no augmented ISI plan.

3. LPCI welds CCAJ-1 and CCBJ-1 are characterized as not being wholly inspectable by UT. Please identify what proportion of those welds can be UT inspected.
4. Please indicate if there are any welds designated by you as nonservice sensitive in piping systems designated as service sensitive by NUREG-0313, Rev. 1. Also, please indicate if there are any welds designated by you as service sensitive in piping systems designated as nonservice sensitive by NUREG-0313, Rev. 1.
5. Augmented ISI of Service Sensitive Welds
 - a. Please identify the methods for augmented ISI of the service sensitive welds (IV.B.3 of NUREG-0313 Rev. 1).
 - b. Provide a copy of the specifications for the augmented ISI method or methods (IV.B.3 of NUREG-0313 Rev. 1).
 - c. Identify each of the augmented ISI methods used and the training and certification levels the individuals using those methods received. Indicate if cracked specimens are used in your training (IV.B.3 of NUREG-0313 Rev. 1).
 - d. Identify the proportion represented of each respective piping system by the welds in Table 2 of the W. G. Council letter to D. M. Crutchfield (August 30, 1982).
 - e. Identify the inspection interval of each of the service sensitive welds (IV.B.2.b of NUREG-0313 Rev. 1).
 - f. Identify the Stress Rule Index Numbers for each of the service sensitive welds (IV.B.1.b (6) of NUREG-0313 Rev. 1).
6. Augmented ISI of Nonservice Sensitive Welds
 - a. Please identify the methods for augmented ISI of the nonconforming nonservice sensitive piping (IV.B.3 of NUREG-0313 Rev. 1).
 - b. Please provide a copy of the specifications for the augmented ISI method or methods (IV.B.3 of NUREG-0313 Rev. 1).
 - c. Identify each of the augmented ISI methods used and the training and certification levels the individuals using those methods received. Indicate if cracked specimens are used in your training (IV.B.3 of NUREG-0313 Rev. 1).
 - d. Identify the proportion represented of each respective piping system by the welds in Table 2 of the W. G. Council letter to D. M. Crutchfield (August 30, 1982).

- e. Identify the proposed inspection interval for each system of nonconforming nonservice sensitive piping (IV.B.1.b of NUREG-0313 Rev. 1).
- f. Identify the Stress Rule Index Numbers for each of the nonservice sensitive welds (IV.B.1.b(6) of NUREG-0313 Rev. 1).

7. On page 3 of the W. G. Council letter to D. M. Crutchfield dated August 30, 1982, you state:

Technical Specification changes to implement NUREG-0313, Revision 1, are not deemed necessary. However, the ISI manual for Millstone Unit No. 1 Class 1 and 2 components will be revised accordingly. Our ISI Program is already incorporated into our Technical Specification Section 4.13.

- a. Please enumerate the items mentioned and the paragraph(s) in NUREG-0313, Rev. 1, to which the items refer.
- b. Please identify the revisions to which you refer in the ISI manual for Millstone Unit 1, Class 1 and 2 components.

INFORMATION REQUESTED ON LEAK DETECTION SYSTEM

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Type of System	Is System Operable (yes/no)	Leak Rate Sensitivity (gpm)	Time Required To Achieve Sensitivity (hours)	Is System Functional After SSE (yes/no)	Control Room Indications (alarms) (recorders)	Calibration or Testing During Operation (yes/no)	Documentation Reference for (1) Thru (6)
