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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

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BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:)	
Northeast Nuclear Energy Company)	Docket No. 50-423-LA-3
(Millstone Nuclear Power Station, Unit No. 3))	ASLBP No. 00–771–01–LA

NORTHEAST NUCLEAR ENERGY COMPANY'S RESPONSE TO CONNECTICUT COALITION AGAINST MILLSTONE AND LONG ISLAND COALITION AGAINST MILLSTONE'S FIRST SET OF DOCUMENT PRODUCTION REQUESTS

Northeast Nuclear Energy Company ("NNECO") hereby files its second response to the Connecticut Coalition Against Millstone ("CCAM") and the Long Island Coalition Against Millstone's ("CAM") (collectively, "Intervenors") "First Set of Interrogatories and Requests for Production" ("Intervenors' First Discovery Requests"), a facsimile of which was served on NNECO on March 21, 2000. The initial response, filed on April 4, 2000, was directed to the Intervenors' interrogatories and was filed within 14 days of service, consistent with 10 CFR § 2.740b(b). In this second response, NNECO responds to Intervenors' document production requests in accordance with the schedule set forth in 10 CFR § 2.741(d).

I. GENERAL OBJECTIONS

These general objections apply throughout NNECO's responses to Intervenors' First Discovery Requests.

A. NNECO objects to Intervenors' document production requests to the extent that they request discovery of information or documents protected under the attorney-

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client privilege, the attorney work product doctrine, and limitations on discovery of trial preparation materials and experts' knowledge or opinions set forth in 10 CFR § 2.740 or as otherwise provided by law. *See Hickman v. Taylor*, 329 U.S. 495 (1947), and *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), LBP-82-82, 16 NRC 1144, 1162 (1982). Many of the document production requests are overbroad and would encompass privileged material prepared or being prepared in anticipation of litigation in this proceeding.

- B. NNECO objects to Intervenors' document production requests that essentially ask NNECO to perform research beyond Millstone Unit 3 and the specific license amendment at issue, and encompassing the nuclear industry generally. These discovery requests exceed the scope of this proceeding and exceed the scope of NNECO's obligations herein. To the extent Intervenors wish to rely on industry operating experience, that information is available to the Intervenors and its consultants through public sources. While NNECO may have access to this information, NNECO is not required to prepare the Intervenor's case.
- C. NNECO objects to Intervenors' document production requests to the extent they seek discovery beyond the scope of Intervenors' three contentions, as admitted by the Atomic Safety and Licensing Board ("Licensing Board") in this proceeding. Intervenors are permitted only to obtain discovery on matters that pertain to the subject matter with which Intervenors are involved in this proceeding. 10 CFR § 2.740(b).

II. GENERAL INTERROGATORIES

A. Interrogatory G-2

For each admitted contention, identify each person whom NNECO expects to provide sworn affidavits and declarations for the written filing for the Subpart K proceeding, and each person who would testify in any subsequent evidentiary hearing. For each person identified, describe that person's professional affiliation, address, area of professional expertise, qualifications, and educational and scientific experience. Also, describe the general subject matter on which each person is expected to provide sworn affidavits or testimony in the proceeding.

NNECO's Response: The information requested in Interrogatory No. G-2 is currently being developed and will be provided by NNECO by April 28, 2000.

B. Interrogatory G-3

For each person identified under Interrogatory G-2, provide a list of all publications authored by the expert within the proceeding 10 years, and a listing of any other cases in which the expert has testified as an expert at a trial or hearing, or by deposition within the preceding four years.

NNECO's Response: The information requested in Interrogatory No. G-3 is currently being developed and will be provided by NNECO by April 28, 2000.

III. SPECIFIC INTERROGATORIES

A. <u>Contention 4: "Undue and Unnecessary Risk to Worker and Public Health and Safety"</u>

Interrogatory No. 4-1: Please identify any and all documents on which NNECO intends to rely in support of its position regarding Contention 4.

NNECO's Response: Interrogatory No. 4-1 is effectively a document production request and is addressed in NNECO's response to Document Production Request 4-1 below. In addition, NNECO cannot fully respond to this request until the Intervenors respond to NNECO's outstanding requests for discovery from Intervenors. NNECO will supplement this response, if necessary.

B. Contention 5: "Significant Increase in Probability of Criticality Accident"

Interrogatory No. 5-1: Please identify any and all documents on which NNECO intends to rely in support of its position regarding Contention 5.

NNECO's Response: Interrogatory No. 5-1 is effectively a document production request and is addressed in NNECO's response to Document Production Request 5-1 below. In addition, NNECO cannot fully respond to this request until the Intervenors respond to NNECO's

outstanding requests for discovery from Intervenors. NNECO will supplement this response, if necessary.

IV. GENERAL DOCUMENT PRODUCTION REQUESTS

A. Request No. G-1

All documents that are identified, or referred to, in responding to all of the above interrogatories.

NNECO's Response: NNECO is providing document Nos. 1-48 identified in Attachment A with this response. This includes all documents identified in NNECO's prior responses to the interrogatories. In addition, for operating experience identified in NNECO's response to Interrogatory No. F-1, NNECO is providing at least one document describing this operating experience (document Nos. 38-47, Attachment A). Production here, however, does not mean that NNECO believes the experience is relevant to the issues in this proceeding.

B. Request No. G-2

All documents (including experts' opinions, work papers, affidavits, and other materials used to render such opinion) supporting or otherwise relating to the written filing and oral argument that NNECO intends to use in this Subpart K proceeding on each admitted contention.

NNECO's Response: Documents responsive to this request are identified in Attachment A and are being provided. NNECO objects to any further production in response to this request in that it requests discovery of information or documents protected under the attorney-client privilege, the attorney work product doctrine, and limitations on discovery of trial preparation materials and experts' knowledge or opinions set forth in 10 CFR § 2.740 or as otherwise provided by law. See Hickman v. Taylor, 329 U.S. 495 (1947), and Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-82-82, 16 NRC 1144, 1162

With regard to NNECO's response to Interrogatory No. F-1, the operating experience of 10/3/96 and 1/17/97 refer to the same event. Also, the MNP-2 event described as occurring on 10/12/95 actually occurred on 10/2/85.

(1982). Documents responsive to this request would constitute privileged material prepared or being prepared in anticipation of litigation in this proceeding.

V. SPECIFIC DOCUMENT PRODUCTION REQUESTS

A. <u>Contention 4: "Undue and Unnecessary Risk to Worker and Public Health and Safety"</u>

Document Production Request No. 4-1: All documents (including industry event reports, deviation reports and the like) that NNECO will rely on as a basis to object to the contention that the proposed administrative controls will result in an increased probability of a criticality accident in the Millstone Unit 3 SFSP.

NNECO's Response: Document Nos. 1 - 17 as identified in Attachment A are being provided to the Intervenors with this response. Regulatory documents (Nos. 19 - 36, Attachment A) provided in NNECO's response to Document Production Request No. 6 - 1 below may also be responsive to this request. Two additional responsive documents, Holtec International, Proprietary Report No. HI-981909, "Criticality Evaluation for Region 1 & 2 Storage Racks in Millstone Unit-3 Spent Fuel Pool" (June 30, 1998), and Holtec International, Proprietary Report No. HI-981875, "Criticality Evaluation for Region 3 Storage Racks in Millstone Unit-3 Spent Fuel Pool" (July 15, 1998), are proprietary. NNECO will provide copies of these Holtec International proprietary reports only if Intervenors will sign an appropriate nondisclosure agreement. The assumptions for these criticality analyses, however, are discussed in non-proprietary Millstone Nuclear Power Station, Unit No. 3, "Proposed Revision to Technical Specification, Spent Fuel Pool rerack (TSCR 3-22-98)," dated March 19, 1999 (document No. 1, Attachment A). In addition, NNECO may request Holtec International to prepare an additional criticality analysis to support testimony in this proceeding. If such an analysis is prepared, NNECO will supplement this response as appropriate.

Document Production Request No. 4-2: All documents that refute the increased likelihood that NNECO will violate $k_{\rm eff}$ of 0.95 or 1.00 if the proposed administrative controls are implemented.

NNECO's Response: NNECO is providing document No. 1 as identified in Attachment A to the Intervenors with this response. Two additional responsive documents, Holtec International, Proprietary Report No. HI-981909, "Criticality Evaluation for Region 1 & 2 Storage Racks in Millstone Unit-3 Spent Fuel Pool" (June 30, 1998), and Holtec International, Proprietary Report No. HI-981875, "Criticality Evaluation for Region 3 Storage Racks in Millstone Unit-3 Spent Fuel Pool" (July 15, 1998), are proprietary. NNECO will provide copies of these Holtec International proprietary reports only if Intervenors will sign an appropriate non-disclosure agreement. The assumptions for these criticality analyses, however, are discussed in non-proprietary Millstone Nuclear Power Station, Unit No. 3, "Proposed Revision to Technical Specification, Spent Fuel Pool rerack (TSCR 3-22-98)," dated March 19, 1999 (document No. 1, Attachment A). In addition, NNECO may request Holtec International to prepare an additional criticality analysis to support testimony in this proceeding. If such an analysis is prepared, NNECO will supplement this response as appropriate.

B. Contention 5: "Significant Increase in Probability of Criticality Accident"

Document Production Request No. 5-1: All documents that NNECO will rely on to object to the contention that changing the Millstone Unit 3 Technical Specification to require 800 parts per million of soluble boron in the SFSP only during fuel movements increases the probability of a criticality accident.

NNECO's Response: Documents responsive to this request are the same as those identified in response to Document Production Request 4-1 above.

Document Production Request No. 5-2: All documents that support NNECO's objection that the mispositioning of fuel in the Millstone SFSP is a "likely event."

NNECO's Response: Documents responsive to this request are the same as those NNECO identified in response to Document Production Request 4-1 above.

Document Production Request No. 5-3: All documents concerning the potential for boron dilution in the Millstone Unit 3 SFSP, including the:

- (a) mechanism to accomplish boron dilution, including, but not limited to, the source and quantity of water required to accomplish the dilution;
- (b) basis for assumptions that boron dilution could not credibly occur, including whether such an event would be noticed and terminated; and
- (c) criticality analyses identifying boron dilution limits required to achieve criticality.

NNECO's Response: NNECO is providing document Nos. 7 - 14, and 17 of Attachment A to the Intervenors as responsive to this request. Regulatory documents (Nos. 19 – 36, Attachment A) identified in NNECO's response to Document Production Request No. 6 – 1 below may also be responsive to this request. Two additional responsive documents, Holtec International, Proprietary Report No. HI-981909, "Criticality Evaluation for Region 1 & 2 Storage Racks in Millstone Unit-3 Spent Fuel Pool" (June 30, 1998), and Holtec International, Proprietary Report No. HI-981875, "Criticality Evaluation for Region 3 Storage Racks in Millstone Unit-3 Spent Fuel Pool" (July 15, 1998), are proprietary. NNECO will provide copies of these Holtec International proprietary reports only if Intervenors will sign an appropriate non-disclosure agreement.

C. <u>Contention 6: "Proposed Criticality Control Measures Would Violate Nuclear Regulatory Commission Regulations"</u>

Document Production Request No. 6-1: All documents that NNECO will rely on to object to the contention that the use of enrichment and burnup limits for criticality control in spent fuel pools, implemented in part by administrative controls, is not permitted by GDC 62.

NNECO's Response: Document Nos. 18 - 36 identified in Attachment A are responsive to this request and are being provided to the Intervenors with this response.

Document Production Request No. 6-2: All documents relied upon by NNECO concerning the interpretation of GDC 62 regarding the use of enrichment and burnup limits for criticality control in spent fuel pools.

NNECO's Response: Documents responsive to this request are contained within those documents NNECO is providing in response to Document Production Request No. 6-1.

Document Production Request No. 6-3: All documents that state, imply or infer that the NRC agrees or disagrees with the NRC Staff's position on the use of burnup credit for criticality control in SFSPs, including the NRC Staff's position on the use of burnup credit in Reg. Guide 1.13.

NNECO's Response: Documents responsive to this request are contained within those documents NNECO is providing in response to Document Production Request No. 6-1.

Document Production Request No. 6-4: All documents that state, imply or infer that the NRC might be uninformed or unaware of the NRC Staff's position on the use of burnup credit for criticality control in SFSPs, including the NRC Staff's position in Reg. Guide 1.13.

NNECO's Response: NNECO is not aware of any documents responsive to this request other than those provided in response to Document Production Request No. 6-1.

Document Production Request No. 6-5: All documents that state, imply or infer that the NRC might be informed or aware of the NRC Staff's position on the use of burnup credit for criticality control in SFSPs, including the NRC Staff's position in Reg. Guide 1.13.

NNECO's Response: NNECO is not aware of any documents responsive to this request other than those provided in response to Document Production Request No. 6-1.

Respectfully submitted,

David A. Repka
Donald P. Ferraro

WINSTON & STRAWN

1400 L Street, NW

Washington, D.C. 20005-3502

Lillian M. Cuoco NORTHEAST UTILITIES SERVICE COMPANY 107 Selden Street Berlin, Connecticut 06037

ATTORNEYS FOR NORTHEAST NUCLEAR ENERGY COMPANY

Dated in Washington, D.C. this 20th day of April 2000

NNECO Document Production Master List

No.	Document	Pages
1.	Millstone Nuclear Power Station, Unit No. 3, "Proposed Revision to Technical Specification, Spent Fuel Pool rerack (TSCR 3-22-98)" (March 19, 1999) (non-proprietary version)	340
2.	Millstone Unit 3 surveillance procedure SP 31022, "Spent Fuel Pool Criticality Requirements"	21
3.	Millstone Unit 3 engineering procedure EN 31001, "Supplemental SNM Inventory and Control"	20
4.	Millstone station procedure MC-5, "Special Nuclear Material Inventory and Control"	59
5.	Millstone Unit 3 engineering procedure EN 31026, "New Fuel Assembly and Insert Receipt and Inspection"	68
6.	Millstone Unit 3 engineering procedure EN 31007, "Refueling Operations"	34
7.	Millstone Unit 3 engineering procedure EN 31013, "Spent Fuel Pool Operations"	22
8.	Millstone Unit 3 surveillance procedure SP 3863, "Reactor Coolant and Reactor Vessel Refueling Cavity Analysis for Boron"	7
9.	Millstone Unit 3 surveillance procedure SP 3866, "Spent Fuel Pool Boron Concentration"	7
10.	Millstone Unit 3 chemistry procedure CP 3802C, "Balance of Plant Chemistry Control"	23
11.	Millstone Unit 3 operations procedure OP 3305, "Spent Fuel Pool Cooling and Purification System"	78
12.	Millstone Unit 3 emergency operating procedure EOP 3505A, "Loss of Spent Fuel Pool Cooling," Attachment A, "Recover from Low Spent Fuel Pool Level"	28
13.	Millstone Unit 3 alarm response procedure OP 3353.MB1A, "Main Board 1A Annunciator Response," Alarm No. 3-4, "Fuel Pool Level Low"	10
14.	Millstone Nuclear Power Station, Unit No. 3, "Modification of Proposed Revision to Technical Specification - Spent Fuel Pool rerack (TSCR 3-22-98)" (April 17, 2000)	9
15.	NUREG-1431, Vol. 1, Rev. 1, "Standard Technical Specifications – Westinghouse Plants," Technical Specification 3.7, Plant Systems"	8
16.	Millstone Nuclear Power Station, Unit No. 3, Final Safety Analysis Report, Chapter 9, "Auxiliary Systems"	34
17.	Chart Illustrating Millstone Unit 3 SFSP Boron Concentration as a Function of Time	1
18.	Affidavit of Stanley E. Turner, Ph.D., P.E., senior vice president and chief nuclear scientist, Holtec International ("Exhibits Supporting the Summary of Facts, Data, and Arguments on Which Applicant Proposes to Rely at the Subpart K Oral Argument," <i>Carolina Power & Light Co.</i> (Shearon Harris Nuclear Power Plant), ASLBP No. 99-762-02-LA (filed January 4, 2000)) "Guidance on the Regulatory Requirements for Criticality Analysis of Fuel	26
	Storage at Light-Water Reactor Power Plants," U.S. Nuclear Regulatory Commission (August 1998)	11

No.	Document	Pages
20.	Draft Regulatory Guide 1.13, "Proposed Revision 2 to Regulatory Guide 1.13, 'Spent Fuel Storage Facility Design-basis," U.S. Nuclear Regulatory Commission (December 1981)	18
21.	Final Rule, "General Design Criteria for Nuclear Power Plants," 36 Fed. Reg. 3,255 (1971)	6
22.	Notice of Proposed Rulemaking, "General Design Criteria for Nuclear Power Plants," 32 Fed. Reg. 10,213 (1967)	6
23.	Letter from William B. Cottrell, Oak Ridge National Laboratory, to H. L. Price, Atomic Energy Commission (September 6, 1967)	11
24.	Final Rule, "Criticality Accident Requirements," 63 Fed Reg. 63,127 (1998)	4
25.	Withdrawal of Direct Final Rule, "Criticality Accident Requirements," 63 Fed. Reg. 9,402 (1998)	2
26.	Proposed Rule, "Criticality Accident Requirements," 62 Fed. Reg. 63,911 (1997)	2
27.	Direct Final Rule, "Criticality Accident Requirements," 62 Fed. Reg. 63,827 (1997)	4
28.	SRM to SECY 97-155 (August 19, 1997)	8
29.	SECY 97-155, "Staff's Action Regarding Exemptions from 10 CFR 70.24 for Commercial Nuclear Power Plants" (July 21, 1997)	6
30.	"Review and Acceptance of Spent Fuel Storage and Handling Applications," U.S. Nuclear Regulatory Commission (April 1978)	21
31.	Note from AEC secretary (SECY-R 143), concerning amendment to General Design Criteria 62 (January 28, 1971)	50
32.	Letter from Edson G. Case, Atomic Energy Commission, to Dr. Stephen H. Hanauer, Advisory Committee on Reactor Safeguards (July 23, 1969)	28
33.	Note from W.B. McCool, AEC secretary, to AEC Commissioners, "Proposed Amendment to 10 CFR 50: General Design Criteria for Nuclear Power Plant Construction Permits" (June 16, 1967)	38
34.	Letter from J. J. DiNunno, AEC, to Nunzio J. Palladino, Advisory Committee on Reactor Safeguards (February 8, 1967)	6
35.	Letter from J. J. DiNunno, AEC, to David Okrent, Advisory Committee on Reactor Safeguards (October 25, 1966)	5
36.	Atomic Energy Commission press release, "AEC Seeking Public Comment on Proposed Design Criteria for Nuclear Power Plant Construction Permits" (November 22, 1965)	9
37.	NNECO Calculation No. 97-ENG-1322 M3, "Spent Fuel Pool Boron Concentration Following Makeup From Non-Borated Water Sources" (April 4, 1997)	7
38.	MNP-1 Adverse Condition Report M1-97-0082, "Irradiated Fuel Assembly Stored in Damaged Fuel Container in Control Rod Storage Rack" (January 14, 1997)	22
39.	Adverse Condition Report M1-96-0646, "Spent Fuel Assembly Not Fully Seated in SSFSP Storage Rack," Operability Determination MP1-208-96 for (October 7, 1996)	15

No.	Document	Pages
40.	Licensee Event Report 96-023-00 (MNP-1), "Movement of New Fuel Assemblies Over the Spent Fuel Pool Resulted in a Condition Outside of the Design Basis of the Plant" (April 19, 1996)	17
41.	Adverse Condition Report ACR 06385, "Fuel Assembly Placed in MNP-1 Fuel Pool in Wrong Orientation" (November 17, 1995)	15
42.	MNP-2 Plant Incident Report 85-101, "Fuel Assembly Lowered Onto Fuel Assembly in SFP" (October 4, 1985)	5
43.	Adverse Condition Report ACR 0710, "SFP Crane Operator Went to Wrong Location/Stopped by Checker" (April 27, 1995)	13
44.	MNP-3 Plant Information Report 3-94-079, "Fuel Misplacement" (April 27, 1994)	16
45.	Licensee Event Report 87-019-00 (MNP-1), "Misoriented Fuel Assembly" (July 8, 1987)	3
46.	MNP-2 Plant Incident Report 85-39, "Fuel Handling Incident" (March 18, 1985)	3
47.	MNP-1 Abnormal Occurrence Report AO 50-245/74-5, "Inadvertent Drop of an Unchanneled Fuel Assembly" (September 27, 1974)	4
48.	Licensee Event Report 92-003-01 (MNP-2), "Error in ABB-Combustion Engineering Spent Fuel Criticality Analysis" (June 25, 1992)	4
49.	MNP-2 Adverse Condition Report M2-99-0304, "Approximately 2,370 Gallons of SFP Water Transferred to CW System" (January 28, 1999)	
50.	MNP-2 Adverse Condition Report M2-97-0914, "1-Week SFP Boron Concentration Drop of 45 PPM Not Explained by PMW Addition Sampling Accuracy" (June 2, 1997)	32

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

DOCKETED

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD APR 26 A9:23

In the Matter of:)	O^{n}
Northeast Nuclear Energy Company)	Docket No. 50-423-LA-3
(Millstone Nuclear Power Station, Unit No. 3)))	ASLBP No. 00–771–01–LA

CERTIFICATE OF SERVICE

I hereby certify that copies of "NORTHEAST NUCLEAR ENERGY COMPANY'S RESPONSE TO CONNECTICUT COALITION AGAINST MILLSTONE AND LONG ISLAND COALITION AGAINST MILLSTONE'S FIRST SET OF DOCUMENT PRODUCTION REQUESTS" in the above–captioned proceeding, have been served on the following by deposit in the United States mail, first class, this 20th day of April 2000. Additional e-mail service has been made this same day as shown below.

Nancy Burton, Esq. 147 Cross Highway Redding Ridge, CT 06876 (e-mail to: nancyburtonesq@hotmail.com)

Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555
Attn: Rulemakings and Adjudications Staff
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