

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE NUCLEAR REGULATORY COMMISSION

In the Matter of

NORTHEAST NUCLEAR ENERGY COMPANY

(Millstone Nuclear Power Station,  
Unit 2)

Docket No. 50-336

AFFIDAVIT

1. I, Raymond A. Crandall, being duly sworn, hereby state that I am employed by Northeast Utilities as a Supervisor, Radiological Engineering and am responsible for Radiological Engineering. My business address and phone number are:

P.O. Box 270  
Hartford, CT 06141-0270  
(203) 665-5863

2. I received a MSNE from MIT in 1972, and have practiced engineering in the field of Nuclear Engineering for 20 years. A detailed curriculum vitae is attached.

3. In my opinion, the total radiation dose to any individual at a distance of about 40 miles from Millstone Unit 2 as a result of a postulated design basis spent fuel pool accident will be less than 1 millirem. This is less than the annual variability of background radiation. By way of perspective, this postulated dose would also be less than plausible normal operating release dose consequences allowed at the site boundary under 10 CFR, Part 20 and 10 CFR Part 50, Appendix I.

4. My opinion is based on calculations of the effects of a postulated fuel handling accident and a postulated cask drop accident. These are the most limiting design bases fuel pool accidents and are described in Unit 2 FSAR Section 14.7.4.3.1. The dose resulting from these accidents at 40 miles from Unit 2 was calculated by multiplying the Unit 2 FSAR accident doses by a ratio of X/Q for the FSAR accident dose (calculated by Regulatory Guide 1.145 methods at distances close to the plant) to a X/Q for the worst case meteorology with G stability (calculated using Regulatory Guide 1.111 methods at a distance of 40 miles).

5. The foregoing statements, including the results of the calculations described above are true and correct to the best of my knowledge and belief.

Raymond A. Crandall  
Raymond A. Crandall

Subscribed and sworn to before me this 4th day of Dec, 1992.

Jacqueline A. Crier  
Notary Public

My commission expires: 12/31/95

Jacqueline A. Crier  
Notary Public  
My Commission Expires Dec. 31, 1995

RESUME

NAME: *Raymond A. Crandall*

EMPLOYER: Northeast Utilities Service Company

TITLE: Supervisor, Radiological Engineering Section

BIRTH DATE: September 22, 1949

EDUCATION: *(Chronological past to present)*

1967 A. Henninger High School, Syracuse, NY

1971 BS - Physics, Massachusetts Institute of Technology, Cambridge, MA

1972 MS - Nuclear Engineering, Massachusetts Institute of Technology, Cambridge, MA

WORK EXPERIENCE: *(Chronological past to present)*

<u>FROM/TO YEARS</u>	<u>JOB TITLE</u>	<u>COMPANY</u>	<u>RESPONSIBILITIES</u>
06/72-06/75	Health Physics Engineer	Commonwealth Edison	Worked at Dresden Nuclear Power Station (3 operating units) as a Health Physics Engineer. Responsibilities included all aspects of radiological protection including occupational exposure, effluent and process system monitoring, emergency planning, shielding calculations, etc.
09/75-02/81	Engineer	NUSCo	Corporate engineering position in Radiological Assessment. Involved in all aspects of radiation assessment associated with the operation of Millstone and CY.
02/81-Present	Supervisor, Radiological Engineering Section	NUSCo	Supervisor of the Radiological Engineering Section at the Corporate office. Supervised individuals in the areas of shielding calculations, design basis accident assessments, process and effluent systems evaluations, offsite dose assessments, environmental monitoring, occupation exposure ALARA programs, solid radwaste, PRA, etc.

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USNRC

BEFORE THE NUCLEAR REGULATORY COMMISSION

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In the Matter of )  
NORTHEAST NUCLEAR ENERGY COMPANY )  
(Millstone Nuclear Power Station, )  
Unit No. 2) )

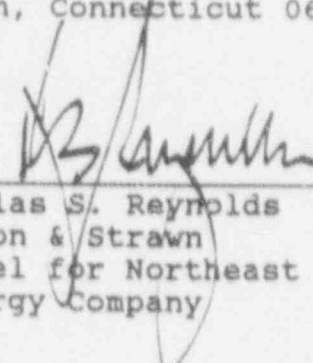
Docket No. 50-336

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DOCKETING & SERVICE  
BRANCH

NOTICE OF APPEARANCE

Notice is hereby given that the undersigned attorney herewith enters an appearance in the captioned matter. In accordance with 10 C.F.R. § 2.713(b), the following information is provided:

Name	-	Nicholas S. Reynolds
Address	-	Winston & Strawn 1400 L Street, N.W. Washington, D.C. 20005
Telephone Number	-	Area Code 202-371-5717
Admissions	-	U.S. Supreme Court Court of Appeals of the D.C. Circuit Supreme Court of Virginia District of Columbia Court of Appeals
Name of the Party	-	Northeast Nuclear Energy Company 107 Selden Street Berlin, Connecticut 06037-0218

  
\_\_\_\_\_  
Nicholas S. Reynolds  
Winston & Strawn  
Counsel for Northeast Nuclear  
Energy Company

Dated at Washington, District of Columbia  
this 10th day of June, 1992

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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USNRC

BEFORE THE NUCLEAR REGULATORY COMMISSION

'92 JUN 15 11:08

In the Matter of )  
NORTHEAST NUCLEAR ENERGY COMPANY )  
(Millstone Nuclear Power Station, )  
Unit No. 2) )

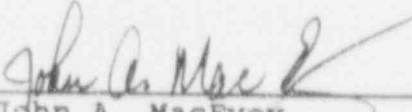
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BRANCH

NOTICE OF APPEARANCE

Notice is hereby given that the undersigned attorney herewith enters an appearance in the captioned matter. In accordance with 10 C.F.R. § 2.713(b), the following information is provided:

Name	-	John A. MacEvoy
Address	-	Winston & Strawn 1400 L Street, N.W. Washington, D.C. 20005
Telephone Number	-	Area Code 202-371-5769
Admissions	-	Supreme Court of Pennsylvania District of Columbia Court of Appeals
Name of the Party	-	Northeast Nuclear Energy Company 107 Selden Street Berlin, Connecticut 06037-0218

  
\_\_\_\_\_  
John A. MacEvoy  
Winston & Strawn  
Counsel for Northeast Nuclear  
Energy Company

Dated at Washington, District of Columbia  
this 10th day of June, 1992

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NUCLEAR REGULATORY COMMISSION

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BEFORE THE NUCLEAR REGULATORY COMMISSION

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In the Matter of

NORTHEAST NUCLEAR ENERGY CO.

(Millstone Nuclear Power Station,  
Unit No. 2)

Docket No. 50-336

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

CERTIFICATE OF SERVICE

I hereby certify that copies of "Northeast Nuclear Energy Company Reply to Requests for Hearing and Petitions to Intervene by M.E. Marucci and Earthvision, Inc.," dated June 11, 1992 and the accompanying Affidavit and Notices of Appearance have been served on this 11th day of June, 1992, as follows:

Secretary of the Commission  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555  
Attention: Chief, Docketing and Service Section

By first class mail  
Original plus 2 copies

Office of the General Counsel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

By first class mail  
1 copy

B. Paul Cotter, Jr.  
Chief Administrative Judge  
Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

By first class mail  
1 copy

Richard M. Kacich  
Northeast Utilities  
P.O. Box 270  
Hartford, Connecticut 06101

By first class mail  
1 copy

Mary Ellen Marucci  
104 Brownell Street  
New Haven, CT 06511

By first class mail  
1 copy

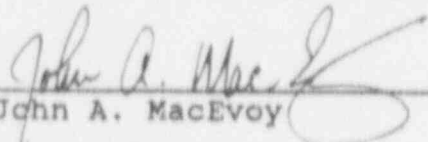
Patricia R. Nowicki  
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South Windsor, CT 06074

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By first class mail  
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NORTHEAST NUCLEAR ENERGY CO.

  
\_\_\_\_\_  
John A. MacEvoy

WINSTON & STRAWN,  
ATTORNEYS FOR NORTHEAST NUCLEAR  
ENERGY CO.

June 11, 1992