

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE COMISSION

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In the Matter of: :Docket Nos. 50-336-LA and 50-423-LA-2

NORTHEAST NUCLEAR ENERGY COMPANY :ASLBP No. 00-783-09-LA OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

(Millstone Nuclear Power Station, Units 2 and 3) :
:
:April 9, 2001

**CONNECTICUT COALITION AGAINST MILLSTONE
AND STAR FOUNDATION
PETITION FOR REVIEW OF LBP-01-10**

Introduction

Pursuant to 10 C.F.R. Section 2.786(b), the Connecticut Coalition Against Millstone ("CCAM") and STAR Foundation (collectively, "Petitioners") hereby petition the Commission for review of LBP-01-10, Memorandum and Order (Denying Petitioners' proffered contention, denying the petition and terminating the proceeding)(March 29, 2001)(Ann Marshall Young, Chair, dissenting). The Commission should take review of clearly erroneous rulings in LBP-01-10 and remand these proceedings for hearing.

I. SUMMARY OF DECISION

A. Factual Background

This petition concerns the license amendment application of the licensee, Northeast Nuclear Energy Company ("NNECO"),¹ filed on February 22, 2000 to amend Operating License DPR-65 for Millstone Unit 2, and Operating License NPF-49 for

¹ On March 31, 2001, ownership of the Millstone Nuclear Power Station was transferred to Dominion Nuclear Connecticut, Inc. ("DNC"), according to newspaper accounts. The validity of the transfer remains subject to legal challenge. In Connecticut Coalition Against Millstone v. Department of Public Utility Control et al, CV 01 0506963, the present Petitioner, appealed the January 24, 2001 decision of the Connecticut Department of Public Utility Control approving the Millstone sale to DNC. Following proceedings on the Coalition's motion for stay of the decision, a judge of the Superior Court (Wiese, J.) The decision is being appealed to the Connecticut Appellate Court. The appeal will raise substantive issues which challenge the legitimacy of the sale. For example, the DPUC refused to permit the 200-member Millstone Station Employees Association to intervene or participate as a party in the proceedings. The Association itself appealed the DPUC decision and moved for a stay to block the Millstone sale. At hearing before Judge Wiese, a member of the Association accused NNECO management and the auction agent, J.P. Morgan Securities, Inc., of making false statements to Millstone employees. The witness

Millstone Unit 3. The application requests approval to "relocate selected radiological effluent technical Specifications and the associated bases to the Millstone Radiological

characterized Millstone Station employees as a "hornet's nest" of disgruntlement over the sale and its feared impacts on Millstone employees. The CCAM appeal also raises the issue of apparent misconduct on the part of the DPUC in improperly altering its decision after its vote at the request of DNC and NNECO's parent company.

In that the Millstone sale was contingent upon DNC obtaining transfer of NNECO's National Pollution Discharge Elimination System permit, which permits discharges of radioactive and toxic waste effluent to the Long Island Sound, a pending legal challenge to such transfer also has potential to jeopardize the sale. On March 7, 2001, the Petitioner Connecticut Coalition Against Millstone, joined by petitioner STAR Foundation, New York State Assemblyman Fred Thiele and the North Fork Environmental Council, filed a complaint in the Connecticut Superior Court seeking a declaratory judgment that the Connecticut Commissioner of the Department of Environmental Protection lacked legal authority to transfer the NPDES permit from NNECO to DNC in that the permit had expired on December 14, 1997 and had not been renewed. Connecticut Coalition Against Millstone et al. v. Arthur J. Rocque, Jr., Commissioner of the Department of Environmental Protection et al., CV 01 0805868. In addition, the suit alleges that the Connecticut DEP Commissioner has issued emergency waivers to the NPDES permit routinely, knowing that he lacks legal authority to do so. Such emergency waivers include the allowance of discharges of hydrazine, a known carcinogen in fish and humans, which discharges are otherwise prohibited. On September 25, 1999, NNECO pleaded guilty to illegally discharging hydrazine in criminal violation of the NPDES permit in proceedings before the U.S. District Court in Connecticut. On March 19, 2001, Connecticut Superior Court Judge Carl J. Schuman twice ordered that a hearing on the plaintiffs' application for temporary restraining order occur prior to the projected closing date of the Millstone transfer, April 1, 2001, because of the apparent importance of the case. Nevertheless, NNECO attorney Elizabeth C. Barton and other defendants' counsel met *ex parte* with Hon. John Langenbach, chief administrative judge of the State of Connecticut, following which Judge Langenbach cancelled the hearing. Following the plaintiffs' protests, Judge Langenbach ordered the hearing reinstated. The hearing was conducted on March 27. Plaintiffs presented as an expert witness Dr. Christopher C. Busby, a consultant to the Irish Government in its investigation of cancer clusters in the human population residing near nuclear facilities on the Irish Sea. Dr. Busby testified that the International Committee for Radiological Protection (ICRP) model understates the true risk by 100-fold. Dr. Busby also testified that the radioactive and toxic wastes associated with Millstone operations are known to cause genetic damages in all living cells and that, in his opinion, such genetic damage constitutes irreparable harm to the environment. Dr. Busby also testified that information obtained from the United Nations establishes that Millstone alone accounts for a third of total releases of cobalt-60 and cesium-137 by similar reactors in the United States. The plaintiffs also presented the expert testimony of Dr. John Harshbarger, Director of the Tumor Registry of Lower Animals, George Washington University Medical Center, who testified that hydrazine and other toxic chemicals associated with Millstone discharges have been tested and been found to cause cancer in fish and human populations. During the hearing Judge Schumer precluded the testimony of DEP Commissioner Rocque as well as other DEP witnesses under subpoena, including David R. Cherico. On April 4, 2001, Mr. Cherico was discovered crushed to death under a boat trailer supporting a 12-foot aluminum boat at his home. At the March 27 hearing, Commissioner Rocque presented no witnesses. NNECO and DNC presented financial officers to testify about their shareholders' concerns about the Millstone sale taking place on schedule. DNC's financial representative testified that, since March 19, when Judge Schumer ordered an immediate hearing and defendants' counsel met *ex parte* with Judge Langenbach, and March 27, NNECO and DNC had moved the closing date forward to March 30. On March 29, 2001, Judge Schuman issued a decision denying the plaintiffs' application for temporary restraining order. The plaintiffs filed an emergency petition to the Connecticut Supreme Court to stay Judge Schuman's order. However, apparently, while the Supreme Court petition was pending and despite notice, Commissioner Rocque transferred the expired permit and emergency waivers to DNC. Thereafter, the Supreme Court denied the emergency petition. The plaintiffs' challenge to the Commissioner's acts remains pending in the Connecticut Superior Court.

Effluent Monitoring and Offsite Dose Calculation Manual in accordance with the Nuclear Regulatory Commission's Generic letter 89-01."

The Radiological Liquid and Gaseous Effluent Monitoring Instrumentation monitors routine radioactive releases from Millstone Units 1 and 2. The instrumentation provides a surveillance of potential release points and initiates automatic and trip functions which are intended to terminate the release prior to exceeding the limits of 110 CFR Part 20 (1993 version). (Statement of NNECO)

In its cover letter accompanying the application to the NRC, NNECO stated in part: "relocating requirements to NNECO-controlled documents will reduce costs by allowing NNECO to change the requirements without necessarily amending the license." The letter further states that the proposed changes "will not significantly increase the type and amounts of effluents that may be released off site. In addition, this amendment will not significantly increase individual or cumulative occupational radiation exposures."

The cover letter requests issuance of the license amendment by August 31, 2000. "The approval of this amendment is needed by this date to support the ongoing effort to eliminate Millstone Unit Nos. 2 and 3 dependence on the Millstone Unit No. 1 Stack Gas High Range Radiation Monitor."

B. Procedural Background

The Connecticut Coalition Against Millstone and STAR Foundation ("Petitioners") timely filed an intervention petition in response to the agency's notice of opportunity for hearing, 65 Fed. Reg. 48,744, 48,754 (Aug. 9, 2000). NNECO and NRC Staff filed answers to the intervention petition and, in response to the Board's scheduling order, October 27, 2000, Petitioners filed an Amended Petition on October 27, 2000 setting forth their contention as follows:

"Relocating" the selected radiological effluent Technical Specifications and the associated Bases to the Millstone Radiological Effluent Monitoring and Offsite Dose Calculation Manual will deprive the public, and the membership of the Connecticut Coalition Against Millstone and STAR Foundation, of notice of proposed changes to the Millstone radiological liquid and gaseous effluent monitoring instrumentation. It will deprive them of the opportunity for hearing and to comment and object to changes,

which can only be projected to lower standards of radiological effluent monitoring in the era of deregulation and electric restructuring. The amendment request is particularly objectionable in light of the levels of radiological effluent released to the environment by the Millstone reactors.

This amendment will degrade protection of the public health and safety from radiological effluents. Even according to the applicant, NNECO, the amendment opens the door to increases in the type and amounts of effluents that may be released offsite as well as individual and cumulative occupational radiation exposures. NNECO's amendment request states that such increases will not be "significant." (Application, February 22, 2000, cover letter, page 3.) However, as there will be no opportunity for hearing or public comment, the public will be exposed to greater risk of radiation doses from the routine operation of the Millstone nuclear reactors if NNECO obtains the amendment requested. The Petitioners are prepared to establish through expert testimony that any increase in routine radiological effluent to the air and water by the Millstone reactors will expose the public to greater risk of cancer, immunodeficiency diseases and other adverse health effects.²

The Board conducted a telephone prehearing conference on December 7, 2000, during which the Board heard oral argument on the issues of standing and the admissibility of the contention in this case.

On March 29, 2001, the Board issued a 20-page decision dismissing the petition without addressing the issue of standing and terminating the proceeding. LBP-01-10. Judge Ann Marshall Young, Chair, dissented in a 42-page opinion, in which she concluded that (a) the Petitioner CCAM on behalf of its members has demonstrated standing in this proceeding under 10 CFR Section 2.714(d)(1)³ and (b) the Petitioners have made the necessary minimal showing under 10 CFR Section 2.714(b)(2), (d)(2) and relevant case law, of the admissibility of their contention to demonstrate that further inquiry would be appropriate in this case.

II. Statement of Matters of Fact or Law

The matters of fact or law raised in this petition were previously raised in the Petitioners' Petition, Amended Petition and during oral argument conducted by telephone conference on December 7, 2000.

² The Amended Petition also incorporated the Declaration of Joseph Mangano dated October 27, 2000, a copy of which is annexed hereto.

III. The Board's Decision Denying the Intervention Petition Was Erroneous

A. The Petitioners Established Standing

The majority of the Board determined that it was not necessary to determine whether the Petitioners have established standing to participate in these proceedings because it proceeded to rule that Petitioners' single contention was inadmissible.⁴ However, the dissenting member correctly found Petitioner CCAM to have standing in this proceeding under 10 CFR section 2.714(d)(1).⁵

B. The Board Erred in Rejecting the Petitioners' Contention

The majority of the Board ruled that the Petitioners' proffered contention fails to meet the requirements of 10 CFR Section 2.714(b) and, accordingly, ruled it inadmissible.⁶ The dissenting member, in contrast, ruled the contention admissible.⁷

Petitioners' contention satisfies the criteria of 10 CFR Section 2.714(b), which provides in pertinent part as follows:

- (2) Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide the following information with respect to each contention:
- (i) A brief explanation of the bases of the contention.
 - (ii) A concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing, together with references to those specific sources and documents of which the petitioner is aware and on which petitioner intends to rely to establish those facts or expert opinion.
 - (iii) Sufficient information (which may include information pursuant to paragraphs (b)(2)(i) and (ii) of this section) to show that a genuine dispute exists with the applicant on a material issue of law or fact. This showing must include references to the specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute . . .

³ Petitioners continue to assert their claim that Petitioner STAR Foundation has also demonstrated standing on behalf of its members in these proceedings.

⁴ Memorandum and Order at 7.

⁵Id. at 35-42.

⁶ Id. at 2.

⁷ Id. at 62.

The Petitioners' contention does provide a specific statement of the issue of law or fact to be raised or controverted, as required by Section 2.714(b)(2). The specific statement is set forth in the first paragraph of the contention. The majority so concluded.⁸

The Petitioners' contention does provide the information required by Sections 2.714(2)(i), (ii) and (iii). The information is provided in the second paragraph of the contention. The Board majority agreed that the second paragraph "sets out the bases for the contention in an attempt to comply" with such requirements.⁹

On its face, while admittedly somewhat minimal, the contention satisfies the criteria of 20 CFR Section 2.714(b) and Section 2.714(b)(i), (ii) and (iii).

Nevertheless, the Board majority has ruled the contention inadmissible on grounds that it lacks a specific statutory or regulatory reference.¹⁰ However, it is clear that the majority has simply impermissibly by administrative fiat tacked requirements onto 10 CFR Section 2.714(b) which are not otherwise there. The dissenting member correctly addresses this issue, finding that "there is no requirement in the contention rule or SOC [Statement of Considerations] that a contention include a specific allegation or citation of a regulatory violation."¹¹

C. The Petitioners Have Established a Genuine Dispute on a Material Issue And Are Entitled to a Hearing.

The Petitioners present a substantive issue addressed to the public health and safety. Petitioners contend that, should the license amendment be granted, the door will be opened to "increases in the type and amounts of effluents that may be released offsite" which will lead to greater risk of radiation doses harmful to health from routine operations of the Millstone reactors.

NNECO and the NRC Staff dispute petitioners' contention. According to NNECO, its application does "not involve any change to plant operation, radiation monitoring, or

⁸ Id. at 10.

⁹ Id.

¹⁰ Id. at 12.

¹¹ Id. at 47.

radiological effluent releases." Nor, NNECO asserts further, if future changes did occur, would accidental releases result.¹²

However, the dissenting member has correctly noted that NNECO's counsel acknowledged during the December argument a potential increased risk to the public from radiation doses if this amendment is allowed.

The dissenting ruling states:

"The Applicant's Counsel acknowledged that 'a surveillance requirement [relating to a monitoring instrument] might conceivably be changed down the road,' which, if something else failed and surveillance were somehow to become unduly lax, 'because of the reduced surveillance, fails to pick up [a] release.' Tr. 41-42."¹³

NNECO's counsel also acknowledged that an increased release of radiological effluent that could lead to an immediate danger to public health or safety - as a result of a failure to "catch" a result because of a reduced surveillance schedule, for example - "could not be categorically discounted."¹⁴

NRC Staff's expert, Stephen Klementowicz, postulated various changes which could occur if the amendment were granted which would not be subject to public notice or a hearing, including a change in setpoint levels, a reduction in surveillance frequency or a reduction in the frequency of checking monitor readouts.¹⁵

Thus, as the dissenting member noted, a less frequent monitoring could possibly result in a failure to detect and address an accidental abnormal release of radiological effluent as quickly or effectively as on an unchanged, more frequent schedule.

As the dissenting member correctly summarized:

"The relevant area that appears to be in question in this proceeding is that area in which effluents that are not in the high range of possible effluent releases might still increase to the point that they would exceed the limits of Appendix I to 10 CFR Part 50, resulting not from the sort of major accident that would produce high-range releases but rather from some other cause, such as a relatively minor accidental or other failure of equipment, accompanied by a failure to detect and correct as quickly the increased

¹² NNECO Answer to Petition at 12; NNECO Answer to Amended Petition at 3, 8, 12-13.

¹³ Id. at 28.

¹⁴ Id.

¹⁵ Id.

release, by virtue of changed surveillance schedules or setpoints (or placement of monitors at inappropriate release points) as well as failure of whatever redundant systems exist to detect and/or stop such "moderately excessive" releases."¹⁶

D. The Majority Erred In Failing To Address Millstone Realities

The majority erroneously accepts on their face NNECO's statements that the application does not involve any change to plant operation, radiation monitoring, or radiological effluent releases. The decision refuses to speculate what the applicant intends to achieve if the application is granted.

Cleverly, NNECO has sought permission to make future changes without providing a glimpse into what the future is expected to hold in store.

However, it would appear that much more is contemplated than simply shifting paper.

That "approval of this amendment is needed . . . to support the ongoing effort to eliminate Millstone Unit Nos. 2 and 3 dependence on the Millstone Unit No. 1 Stack gas High Range Radiation Monitor," as NNECO stated in its cover letter, suggests that other substantive issues concerning high range radiation monitoring - potentially an issue of great significance to the surrounding community - are at issue.

Of further interest is NNECO's statement in its cover letter that a motivating factor in its pursuit of the present license amendment is a presumed cost-cutting benefit. Cost-cutting and reduced or ineffective radiation monitoring go hand-in-hand.¹⁷

III. The Commission Must Review LBP-01-10

In the view of the Board majority, the Petitioners should be precluded from participating in this license amendment application because the application contains no concrete forecast of future harm.

If allowed to stand, the Board's decision would leave the surrounding community to the good graces of Millstone's owners not to violate standards of radiation releases.

¹⁶ Id. at 35.

¹⁷ In an earlier era of flagrant cost-cutting at Millstone, sample points were wilfully changed in the mid-1990s so that reports of chemical discharges would show only negligible traces of pollution. This practice was only interrupted after public disclosures were made by former Millstone chemistry technician James Plumb. Plumb's allegations - not reports of NRC or DEP inspectors - led to state and federal enforcement actions and criminal penalties under the Clean Water act after years of criminal misconduct.

However, the Petitioners are not prepared to allow the new owners of Millstone the benefit of a doubt with regard to their radiation emissions.¹⁸ The petitioners' expert, who has studied health records of residents of the affected community, is prepared to testify that Millstone radiological emissions are associated with an epidemic of cancers and other serious health disorders in the surrounding area.

The Petitioners wish to preserve the right to protest proposed changes in radiological effluent monitoring and instrumentation beforehand in a meaningful way to **avoid** increased doses. They can only have a role if notice and opportunity for a hearing are available in the license amendment process.

Accordingly, this petition presents issues of the highest significance to the affected community.

As in Perry I, "[a]lthough future changes to the [radiological effluent monitoring instrumentation] are by no means certain, the likelihood of changes cannot be discounted, particularly when a goal of the license amendment is to ['reduce costs by allowing NNECO to change the requirements without necessarily amending the license']." (Citing the dissenting opinion, at 39)

As in Perry I, a "fair reading of the petitioners' claims indicates that, at bottom, [they] fear that if they are deprived of the opportunity to challenge future proposals to alter the [radiological effluent monitoring instrumentation], the surveillance of [routine radiological releases] may become lax and prevent detection of [increased releases] of radioactive fission products into the environment [that could endanger their health and safety.]," (Citing the dissenting opinion, at 39-40)

The Board majority erred in denying the Petitioners their opportunity to invoke a hearing in this matter by dismissing their contention without proper cause.

For the foregoing reasons, the petitioners respectfully request that the Commissioners grant their petition for review.

¹⁸ In a revealing moment recently at a meeting at the Waterford Town Hall, the new owner's chief operating officer was invited by a young mother in the community to pledge that he would provide advance notice of planned releases of radiation to the air so that those mothers who wished to take special precautions would have time to do so. The company man simply said, "No."

THE PETITIONERS

By: 
Nancy Burton, Esq.
147 Cross Highway
Redding Ridge CT 06876
Tel. 203-938-3952
Fax 203-938-3168

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

In the Matter of: : Docket No. 50-336
: Docket No. 50-423
NORTHEAST NUCLEAR :
ENERGY COMPANY :
(Millstone Nuclear :
Power Station, :
Unit Nos. 2 and 3) : **April 9, 2001**

CERTIFICATE OF SERVICE

This is to certify that a copy of the "**Connecticut Coalition Against Millstone and STAR Foundation Petition for Review of LBP-01-10**" was emailed to the Office of the Secretary, U.S. Nuclear Regulatory Commission (HEARINGDOCKET@nrc.gov) and sent via U.S. Mail, postage pre-paid to the following on April 9, 2001:

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

Office of Commission Appellate Jurisdiction
U.S. Nuclear Regulatory Commission
Washington DC 20555

Ann P. Hodgdon, Esq.
Office of the General Counsel
Mail Stop – O-15 D21
U.S. Nuclear Regulatory Commission
Washington DC 20555
(E-Mail copy to: aph@nrc.gov)

Administrative Judge
Ann Marshall Young, Chairman
Atomic Safety and Licensing
Board Panel
Mail Stop – T-3 F23
U.S. Nuclear Regulatory Commission
Washington DC 20555-0001

Administrative Judge

Thomas S. Moore
Atomic Safety and Licensing
Board Panel
Mail Stop – T-3 F23
U.S. Nuclear Regulatory Commission
Washington DC 20555-0001

Administrative Judge
Charles N. Kelber
Atomic Safety and Licensing
Board Panel
Mail Stop – T-3 F23
U.S. Nuclear Regulatory Commission
Washington DC 20555-0001

David A. Repka, Esq.
Winston & Strawn
1400 L Street NW
Washington DC 20005-3502
(E-Mail copy to: drepka@winston.com)

Lillian M. Cuoco, Esq.
Senior Nuclear Counsel
Northeast Utilities Service Company
107 Selden Street
Berlin CT 06037

A handwritten signature in black ink, appearing to read "Nancy Norton", is written over a horizontal line.

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:
Ann Marshall Young, Chair
Dr. Charles N. Kelber
Thomas S. Moore

In the Matter of : **Docket Nos. 50-336-LA**
: **and 50-423-LA**
NORTHEAST NUCLEAR
ENERGY COMPANY :
: **ASLBP No. 00-783-09-LA**

(Millstone Nuclear Power Station,
Units 2 and 3) : **October 27, 2000**

DECLARATION OF JOSEPH MANGANO

- 1. I, Joseph Mangano, submit this declaration in support of the petition to intervene and for hearing filed on behalf of the Connecticut Coalition Against Millstone and STAR Foundation in this matter.**
- 2. I am a research associate with the Radiation and Public Health Project in New York City. I am the author of numerous technical studies, books and reports related to radiation and health effects of radiation. A copy of my resume is attached hereto.**
- 3. I am familiar with the application which is the subject of these proceedings.**
- 4. The application seeks to amend Operating Licenses DPR-65 and NFP-49 "to relocate selected radiological effluent Technical Specifications and the associated Bases to the Millstone Radiological Effluent Monitoring and Offsite Dose Calculation Manual in accordance with the Nuclear Regulatory Commission's Generic Letter 89-01."**
- 5. I am familiar with official reports of radiological effluent from the Millstone Nuclear Power Station as have been submitted by the licensee herein to governmental agencies.**

- 6. I am familiar with the fact that the applicant herein pleaded guilty in the United States District Court for the District of Connecticut in September 25, 1999 to felonies under the Atomic Energy Act, including its submission of falsified records to the United States Nuclear Regulatory Commission, and to felonies under the Clean Water Act involving illegal discharges of toxins to the environment.**
- 7. I am familiar with epidemiological records pertaining to the incidence of diseases in the region of the Millstone Nuclear Power Generating Station, which diseases are scientifically associated with radiological emissions from nuclear power generating plants such as Millstone.**
- 8. The Millstone Nuclear Power Generating Station has released radiological effluent to the air during the operations of its three nuclear reactors at excessive levels, according to information compiled and released by the licensee herein.**
- 9. The present application, if granted, will eliminate the opportunity for public notice, hearing and comment regarding changes to the Millstone radiological liquid and gaseous monitoring instrumentation.**
- 10. Such instrumentation is critical in the prevention of radiological effluent releases to the environment and the monitoring of such releases**
- 11. The surrounding community is a residential neighborhood with elementary schools and other facilities for young children who are especially vulnerable to adverse health consequences from exposure to Millstone radioactive emissions.**
- 12. Although the Nuclear Regulatory Commission monitored radiation emissions from all commercial nuclear reactors following the Three Mile Island partial core meltdown accident in 1979, the NRC has eliminated independent monitoring within the past two years at the request of the nuclear industry and over the objection of public officials in the subject communities.**
- 13. There is virtually no independent monitoring of Millstone radiological effluent releases carried out by the municipality of Waterford, Connecticut, nor the State of Connecticut.**
- 14. The people of the State of Connecticut and Long Island are at risk of adverse health effects from radiological discharges by the Millstone reactors.**
- 15. Standards of effluent monitoring instrumentation should be tightened, rather than loosened, given the abundance of scientific**

evidence which has developed linking radiological discharges from commercial nuclear reactors, including Millstone, to adverse health effects, since the present standards were adopted.

16. Should the present application be approved, it is virtually certain that standards of effluent monitoring instrumentation, as such exist, will be lessened without notice to the public or public representatives and with no opportunity for hearing or comment.
17. Should such be the case, the licensee herein will be permitted to further endanger the health and safety of its resident communities of Connecticut and Long Island without an opportunity to participate in the process.
18. My declaration is informed by several professional studies:
 - (a) An article "A Survey of Childhood Malignancies" by Alice Stewart et al., in the June 28, 1958 British medical Journal, which linked low-level radiation exposure with increased risk of cancer death.
 - (b) An article "Prenatal X-ray Exposure and Childhood Cancer" by Brian MacMahon, in the May 1962 Journal of the National Cancer Institute, which corroborated Alice Stewart's findings.
 - (c) Testimony to Senate Subcommittee on Labor, health and Human Services and Education, Appropriations Committee, by Richard D. Klausner, director of the National Cancer Institute, October 1, 1997, estimating that exposure to low levels of fallout (radioactive iodine) from Nevada nuclear weapons tests resulted in up to 75,000 additional cases of thyroid cancer in the U.S.
 - (d) A report "Estimated Exposures and Thyroid Doses Received by the American People from Iodine-131 in Fallout Following Nevada Atmospheric Nuclear Bomb tests," from the National Cancer Institute, October 1997, which provides the factual evidence for Klausner's estimates in (c).

I hereby declare that the statements presented herein are true to the best of my knowledge, information and belief, under penalty of perjury.

Joseph Mangano

JOSEPH J. MANGANO, MPH, MBA
786 CARROLL ST. #9
BROOKLYN, NY 11215

718-857-9825

RESEARCH ASSOCIATE, RADIATION AND PUBLIC HEALTH
PROJECT, NEW YORK CITY, 1989-PRESENT

BOOKS:

Author, *Low-Level Radiation and Immune System Damage: An Atomic Era Legacy*. CRC Press/Lewis, 1998.

Co-author, *The Enemy Within*. Four Walls Eight Windows, 1996.

Acknowledged in *Deadly Deceit*. Four Walls Eight Windows, 1990.

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(response to comment).

"Thyroid Cancer in the United States Since Accident at Chernobyl," *BMJ*, 8/19/95.