

DOCKETED
USNRC

'82 NOV 22 A10:32

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

James P. Gleason, Chairman
Frederick J. Shon
Dr. Oscar H. Paris

OFFICE OF SECRETARY
OF ENERGY & SERVICE

In the Matter of)	
)	
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. (Indian Point, Unit No. 2))	Docket Nos.
)	50-247 SP
)	50-286 SP
POWER AUTHORITY OF THE STATE OF NEW YORK (Indian Point, Unit No. 3))	Nov. 19, 1982
)	

LICENSEES' RESPONSES TO WEST BRANCH CONSERVATION
ASSOCIATION'S INTERROGATORY ON QUESTION 2, CONTENTION 2.2

Pursuant to 10 C.F.R. §§ 2.740b and 2.741 (1982), the Consolidated Edison Company of New York, Inc. and the Power Authority of the State of New York, licensees, hereby submit these responses to West Branch Conservation Association's interrogatories and document requests concerning the Nuclear Regulatory Commission's Question 2.

Brent L. Brandenburg

Charles Morgan, Jr.
Paul F. Colarulli
Joseph J. Levin, Jr.

CONSOLIDATED EDISON COMPANY
OF NEW YORK, INC.
4 Irving Place
New York, New York 10003
(212) 460-4600

MORGAN ASSOCIATES, CHARTERED
1899 L Street, N.W.
Washington, D.C. 20036
(202) 466-7000

TABLE OF CONTENTS

I. PRELIMINARY MATTERS.....1
II. RESPONSES TO INTERROGATORIES.....2

PRELIMINARY MATTERS

In several instances the West Branch Conservation Association (WBCA) has made requests for documents. In accordance with 10 C.F.R. Part 2, the licensees are prepared, while reserving any claims of privilege or other objections to such production, to produce for inspection and copying documents requested under Commission Question 2 at a time mutually convenient to the licensees and WBCA.

In addition, because the Atomic Safety and Licensing Board has rejected its contentions 2.2(c) and 2.2(d), see Memorandum and Order (Restating contentions and establishing procedures based on Commission guidance) at 41 (Oct. 1, 1982), the licensees have declined to respond to the WBCA interrogatories which pertain to these contentions.

RESPONSES TO INTERROGATORIES

WBCA Interrogatory No. 2.2 a) - 1:

What is the status of the Hudson River Study on eliminating the use of Hudson River water for cooling? Refer to letter of John O'Toole of ConEd [sic] to Victor Stello of NRC of January 27, 1981.

Response to Interrogatory No. 2.2 a) - 1:

The study referred to was for the purpose of identifying feasible alternatives for Indian Point Unit 2 to the present direct, river water-cooled containment cooling system. Its purpose was not to eliminate the use of Hudson River water for plant cooling, but rather to study a "closed" cooling water system for the containment fan coolers.

The status of the study is as follows.

1) The study by our consultant is completed and identified a preferred alternative, the so-called "hybrid" closed cooling system. See Attachment to Letter from John D. O'Toole to Victor Stello (Jan. 27, 1981).

2) The company evaluated this alternative in comparison to the presently-installed system.

3) Our conclusion is that the hybrid system as proposed, although possessing the advantage of a "closed" system during normal plant operation, is complex in

comparison to the present system. See Letter from John D. O'Toole to Victor Stello (Feb. 11, 1982).

4) We are continuing our studies of alternatives. Our future actions will be guided by the performance of the present system and the results of our surveillance program of the fan cooler units and service water piping.

WBCA Interrogatory No. 2.2 a) - 2:

If not ready, or in draft form, give date when the report will be available.

Response to Interrogatory No. 2.2 a) - 2:

See Response to WBCA Interrogatory No. 2.2 a) - 1.

WBCA Interrogatory No. 2.2 a) - 3:

If complete, provide a copy for our use.

Response to Interrogatory No. 2.2 a) - 3:

See Preliminary Matters.

WBCA Interrogatory No. 2.2 a) - 4:

Beside [sic] the replacement of the fan cooler coils and nearby piping, have any other changes been made to mitigate the corrosion of the river water systems?

Response to Interrogatory No. 2.2 a) - 4:

Indian Point Unit 2

Yes. Average water velocities in fan cooler units (FCU's) are being maintained at higher levels than they were prior to the fan cooler replacement. This reduces the tendency for silt to accumulate in the tubing. Pits in the tubing of the removed FCU's were observed to be related to

silt accumulations on the lower inner surfaces of the tubing. In addition, flow distribution baffles are being installed in each fan cooler unit inlet header to improve velocity distribution in the tubes. A performance surveillance program is also in place. The cement lining of carbon steel service water piping was repaired and an inspection and preventative maintenance program has been implemented.

Indian Point Unit 3

The fan cooler coils and nearby piping have been replaced with corrosion-resistant materials.

WBCA Interrogatory No. 2.2 a) - 5 to PASNY only:

What are the materials used in replacement work for the fan cooler units, alloy designation and nominal analysis:

- a. cooler tubes
- b. coil fins
- c. coil casings
- d. coil tube sheets
- e. coil water box covers
- f. external piping
- g. welding rod if different from base metal.

Response to Interrogatory No. 2.2 a) - 5:

- a. ASTM B676, Class 2 -- Alloy UNSN08336 plus ASME Code Case 1871 requirements.
- b. ASTM B152 Alloy CDA 122.
- c. Not applicable.

d. ASME SB620.

e. ASME SB620.

f. ASME SB619 Alloy UNS N08320 (Haynes Alloy 20 Mod.)
or SB625 Alloy UNS N08904. (904L) Rolled into pipe per
ANSI B31.1 or ASME Section VIII, Division 1, or in
accordance with ASTM B673.

g. ASME SFA 5.11 Classification E Ni Cr Mo-1 and 5.14
Classification ER Ni Cr Mo-1. For the nominal analysis of
these materials, see the American Society of Mechanical
Engineers Boiler and Pressure Vessel (ASME B&PV) Code.

WBCA Interrogatory No. 2.2 a) - 6 to PASNY only:

What are the welding methods used for shop and field
fabrication of coils and related piping?

Response to Interrogatory No. 2.2 a) - 6:

Weld procedures are in accordance with the ASME B&PV
Code Sections III, IX and XI, which are proven industry
standards used by both equipment manufacturers and various
utilities for field repairs of heavy walled pressure
vessels.

WBCA Interrogatory No. 2.2 b) - 1:

Provide a copy of recent Oak Ridge National Laboratory
study on radiation embrittlement of reactor vessels.

Response to Interrogatory No. 2.2 b) - 1:

A copy of the Oak Ridge National Laboratory study on
radiation embrittlement of reactor vessels may be obtained
from Oak Ridge National Laboratory.

WBCA Interrogatory No. 2.2 b) - 2:

What action is planned to mitigate the problem of embrittlement of the reactor vessels at Units 2 and 3?

Response to Interrogatory No. 2.2 b) - 2:

See Response to Staff Interrogatory Nos. 2 and 7 under Contention 2.2(b), Licensees' Responses to NRC Staff First Set of Interrogatories Concerning the Commission's Questions 1 and 2 (June 25, 1982).

WBCA Interrogatory No. 2.2 b) - 3:

When will mitigating measures be started?

Response to Interrogatory No. 2.2 b) - 3:

See Response to WBCA Interrogatory No. 2.2 b) - 2.

AS TO ANSWERS:

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

BY Richard P. Lemshaw
Richard P. Lemshaw
Project Manager - Indian Point Hearings

POWER AUTHORITY OF THE STATE OF NEW YORK

BY Herschel Specter
Herschel Specter
Project Manager - Indian Point Hearings

AS TO OBJECTIONS:

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

BY Brent L. Brandenburg
Brent L. Brandenburg
Assistant General Counsel

POWER AUTHORITY OF THE STATE OF NEW YORK

MORGAN ASSOCIATES, CHARTERED

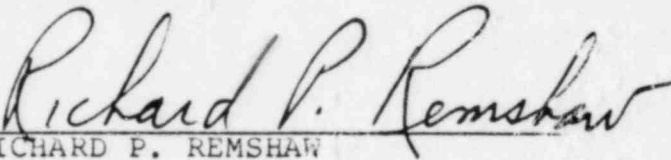
BY Paul F. Colarulli
Paul F. Colarulli
Attorney for Power Authority of the
State of New York

VERIFICATION

STATE OF NEW YORK)
 : SS.:
COUNTY OF NEW YORK)

I, RICHARD P. REMSHAW, being duly sworn, depose and say:

That I am the Manager, Indian Point Hearings for Consolidated Edison Company of New York, Inc., licensee of the Indian Point Nuclear Generating Station, Unit No. 2; that I am authorized to make this verification on behalf of said corporation; and that the foregoing answers to interrogatories were prepared under my direction and supervision and are true and correct to the best of my knowledge, information and belief.


RICHARD P. REMSHAW

Sworn to before me this
17th day of November, 1982


Notary Public


My Commission Expires June 14, 1987

VERIFICATION

STATE OF NEW YORK)
 : SS.:
COUNTY OF NEW YORK)

I, HERSCHEL SPECTER, being duly sworn, depose and say:

That I am the Manager, Indian Point 3 Hearings, Technical Support for Power Authority of the State of New York, licensee of the Indian Point 3 Nuclear Power Plant; that I am authorized to make this verification on behalf of said corporation; and that the foregoing answers to interrogatories were prepared under my direction and supervision and are true and correct to the best of my knowledge, information and belief.

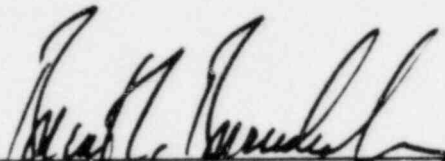

HERSCHEL SPECTER

Sworn to before me this

17th day of November, 1982

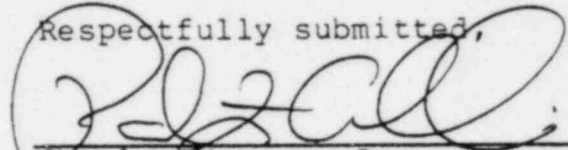

Notary Public

My Commission Expires June 14, 1987


Brent L. Brandenburg

CONSOLIDATED EDISON COMPANY
OF NEW YORK, INC.
Licensee of Indian Point
Unit 2
4 Irving Place
New York, New York 10003
(212) 460-4600

Respectfully submitted,


Charles Morgan, Jr.
Paul F. Colarulli
Joseph J. Levin, Jr.

MORGAN ASSOCIATES, CHARTERED
1899 L Street
Washington, D.C. 20036
(202) 466-7000

Stephen L. Baum
General Counsel
Charles M. Pratt
Assistant General Counsel
POWER AUTHORITY OF THE STATE
OF NEW YORK
Licensee of Indian Point Unit 3
10 Columbus Circle
New York, New York 10019
(212) 397-6200

Bernard D. Fischman
Michael Curley
Richard Czaja
David H. Pikus

SHEA & GOULD
330 Madison Avenue
New York, New York 10017
(212) 370-8000

Dated: November 19, 1982

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

James P. Gleason, Chairman
Frederick J. Shon
Dr. Oscar H. Paris

In the Matter of)

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.)
(Indian Point, Unit No. 2))

POWER AUTHORITY OF THE STATE OF NEW YORK)
(Indian Point, Unit No. 3))

Docket Nos.

50-247 SP

50-286 SP

Nov. 19, 1982

CERTIFICATE OF SERVICE

I hereby certify that on the 19th day of November, 1982, I caused a copy of the Licensees' Responses to West Branch Conservation Association's Interrogatory on Question 2, Contention 2.2 to be served by first class mail, postage prepaid on the following:

James P. Gleason, Chairman
Administrative Judge
Atomic Safety and Licensing Board
513 Gilmore Drive
Silver Spring, Maryland 20901

Mr. Frederick J. Shon
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Dr. Oscar H. Paris
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Docketing and Service Branch
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Joan Holt, Project Director
Indian Point Project
New York Public Interest Research
Group
9 Murray Street
New York, New York 10007

Jeffrey M. Blum, Esq.
New York University Law School
423 Vanderbilt Hall
40 Washington Square South
New York, New York 10012

Charles J. Maikish, Esq.
Litigation Division
The Port Authority of New York
and New Jersey
One World Trade Center
New York, New York 10048

Charles M. Pratt, Esq.
Stephen L. Baum, Esq.
Power Authority of the
State of New York
10 Columbus Circle
New York, New York 10019

Janice Moore, Esq.
Counsel for NRC Staff
Office of the Executive
Legal Director
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Brent L. Brandenburg, Esq.
Assistant General Counsel
Consolidated Edison Company
of New York, Inc.
4 Irving Place
New York, New York 10003

Ellyn R. Weiss, Esq.
William S. Jordan, III, Esq.
Harmon and Weiss
1725 I Street, N.W., Suite 506
Washington, D.C. 20006

Charles A. Scheiner, Co-Chairperson
Westchester People's Action
Coalition, Inc.
P.O. Box 488
White Plains, New York 10602

Alan Latman, Esq.
44 Sunset Drive
Croton-On-Hudson, New York 10520

Ezra I. Bialik, Esq.
Steve Leipzig, Esq.
Environmental Protection Bureau
New York State Attorney
General's Office
Two World Trade Center
New York, New York 10047

Alfred B. Del Bello
Westchester County Executive
Westchester County
148 Martine Avenue
White Plains, New York 10601

Andrew S. Roffe, Esq.
New York State Assembly
Albany, New York 12248

Marc L. Parris, Esq.
Eric Thorsen, Esq.
County Attorney
County of Rockland
11 New Hempstead Road
New City, New York 10956

Pat Posner, Spokesperson
Parents Concerned About Indian
Point
P.O. Box 125
Croton-on-Hudson, New York 10520

Renee Schwartz, Esq.
Paul Chessin, Esq.
Laurens R. Schwartz, Esq.
Margaret Oppel, Esq.
Botein, Hays, Sklar and Hertzberg
200 Park Avenue
New York, New York 10166

Honorable Ruth W. Messinger
Member of the Council of the
City of New York
District #4
City Hall
New York, New York 10007

Greater New York Council
on Energy
c/o Dean K. Corren, Director
New York University
26 Stuyvesant Street
New York, New York 10003

Geoffrey Cobb Ryan
Conservation Committee Chairman
Director, New York City
Audubon Society
71 West 23rd Street, Suite 1828
New York, New York 10010

Lorna Salzman
Mid-Atlantic Representative
Friends of the Earth, Inc.
208 West 13th Street
New York, New York 10011

Stanley B. Klimberg, Esq.
General Counsel
New York State Energy Office
2 Rockefeller State Plaza
Albany, New York 12223

Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Atomic Safety and Licensing
Appeal Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Honorable Richard L. Brodsky
Member of the County Legislature
Westchester County
County Office Building
White Plains, New York 10601

Zipporah S. Fleisher
West Branch Conservation
Association
443 Buena Vista Road
New City, New York 10956

Mayor George V. Begany
Village of Buchanan
236 Tate Avenue
Buchanan, New York 10511

Judith Kessler, Coordinator
Rockland Citizens for Safe Energy
300 New Hempstead Road
New City, New York 10956

David H. Pikus, Esq.
Richard F. Czaja, Esq.
330 Madison Avenue
New York, New York 10017

Amanda Potterfield, Esq.
Johnson & George
528 Iowa Avenue
Iowa City, Iowa 52240

Ruthanne G. Miller, Esq.
Atomic Safety and
Licensing Board Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Mr. Donald Davidoff
Director, Radiological Emergency
Preparedness Group
Empire State Plaza
Tower Building, Rm. 1750
Albany, New York 12237

Craig Kaplan, Esq.
National Emergency Civil
Liberties Committee
175 Fifth Avenue, Suite 712
New York, New York 10010

Michael D. Diederich, Jr., Esq.
Fitzgerald, Lynch & Diederich
24 Central Drive
Stony Point, New York 10980

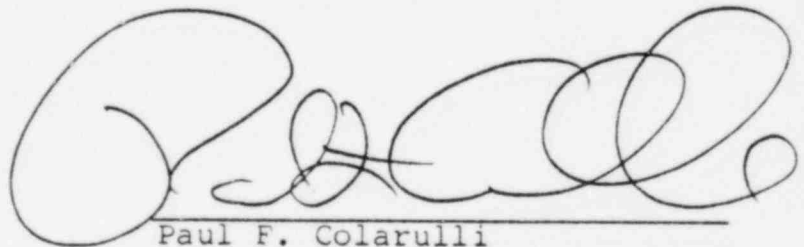
Steven C. Sholly
Union of Concerned Scientists
1346 Connecticut Avenue, N.W.
Suite 1101
Washington, D.C. 20036

Spence W. Perry
Office of General Counsel
Federal Emergency Management Agency
500 C Street, S.W.
Washington, D.C. 20472

Stewart M. Glass
Regional Counsel
Room 1349
Federal Emergency Management Agency
26 Federal Plaza
New York, New York 10278

Melvin Goldberg
Staff Attorney
New York Public Interest
Research Group
9 Murray Street
New York, New York 10007

Jonathan L. Levine, Esq.
P. O. Box 280
New City, New York 10958



Paul F. Colarulli