

EDWARD I. KOCH
18TH DISTRICT, NEW YORK

50-286

NEW YORK OFFICE:
ROOM 3139
26 FEDERAL PLAZA
NEW YORK, NEW YORK 10007
PHONE: 212-254-1066

COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEES:
FOREIGN OPERATIONS
TRANSPORTATION

Congress of the United States
House of Representatives
Washington, D.C. 20515

WASHINGTON OFFICE:
1125 LONGWORTH OFFICE BUILDING
PHONE: 202-225-2435

June 15, 1976

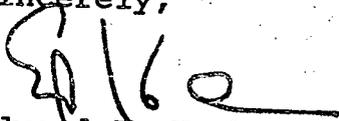
Mr. Carlton Kammerer
Director
Office of Congressional Liaison
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Kammerer:

Enclosed you will find a letter I received from a constituent of mine, Alex Stavis, in which he expressed his desire to see that hearings regarding Indian Point are moved from Maryland to New York City.

I would greatly appreciate your looking into the matter, subject to your regular rules and procedures, and letting me know of your findings.

Sincerely,


Edward I. Koch

EIK/abs

8110310067 760615
PDR ADOCK 05000286
H PDR

SEARCHED
Date 6/21/76
File 2115

ALEX STAVIS
70 EAST 57th STREET
NEW YORK, NEW YORK 10022

May 25, 1976

Congressman Koch,

I urge you to do everything in your power to see to it that the hearings regarding Indian Point are moved from Maryland to New York City so that more people who will be affected by the hearings will be able to attend these hearings. Thank You very much in advance.

Sincerely Yours,

Alex Stavis
Alex Stavis

PDR
LPDR

CA
EDO #00381
ELD r/f
HKShapar
CKNissl
MWGrainey
JLee, 116C
TFEngelhardt
MGrossman
JScinto
MKarman
Chron
SHLewis
PERickson, 321
RGeckler, N/L

June 15, 1976

The Honorable Benjamin A. Gilman
United States House of Representatives
Washington, D. C. 20515

Dear Congressman Gilman:

Thank you for your letter of May 6, 1976, enclosing letters from Ms. Maria Luisa Valdemi, dated April 23, 1976 and May 2, 1976. In her letters Ms. Valdemi urges that the Indian Point Station, Unit Nos. 1, 2 and 3 seismic show cause proceeding be held in New York instead of in Bethesda, Maryland.

As you know, the first three days of the proceeding (April 21-23, 1976) were held in White Plains, New York. The second week of the hearing was held in Bethesda, Maryland. The presiding Atomic Safety and Licensing Appeal Board then solicited the views of all the parties as to where subsequent weeks of the hearing should be held. After taking into consideration the positions of the parties in favor of a New York site for the hearing as against the protracted absence of the Appeal Board members from their offices, which would necessarily curtail their activities on a number of appeals pending in other proceedings, the Appeal Board ruled that the May sessions of the Indian Point proceeding would be held in Bethesda, Maryland.

If I can be of further assistance in this matter, please do not hesitate to contact me.

Sincerely,

KS/

Carlton Kammerer, Director
Office of Congressional Affairs

Enclosures:
Incoming letters fm
Ms. Valdemi

RETYPE IN

OFFICE >	OELD	OCA				
SURNAME >	MKarman:jdt	CKAMMERER:awp				
DATE >	6/2/76	6/15/76				

JUN 11 1976

DISTRIBUTION

Docket Nos. 50-3

(Files) 50-247

50-286 ✓

Docket Nos. 50-3
50-247
50-286

The Honorable Jacob K. Javits
United States Senate
Washington, D. C. 20510

Dear Senator Javits:

PDR (3)	
LPDR	
D&SS (3)	BRusche
OCA (3)	EGCase
EDO #00458	TFEngelhardt
NRC Central Files	MGrossman
OELD Reading File	JFS cinto
OELD FF (2)	MKarman
HKShapar	Chron
CKNissl	SHLewis
MWGrainey	PERickson 321
JLee 116C	R X Geckler N/L

Your letter of May 20, 1976, enclosing a letter from Ms. Maria L. Valdemi dated May 12, 1976, has been referred to me for reply. In her letter, Ms. Maria L. Valdemi urges that the Indian Point Station, Unit Nos. 1, 2 and 3, seismic show cause proceeding be held in New York instead of in Bethesda, Maryland.

As you know, the first three days of the proceeding (April 21-23, 1976) were held in White Plains, New York. The second week of the hearing was held in Bethesda, Maryland. The presiding Atomic Safety and Licensing Appeal Board then solicited the views of all the parties as to where subsequent weeks of the hearing should be held. After taking into consideration the positions of the parties in favor of a New York site for the hearing as against the protracted absence of the Appeal Board members from their offices, which would necessarily curtail their activities on a number of appeals pending in other proceedings, the Appeal Board ruled that the May sessions of the Indian Point proceeding would be held in Bethesda, Maryland. To date, no specific site has been designated for subsequent sessions of the hearing.

If I can be of any further assistance in this matter, please do not hesitate to contact me.

Sincerely,

William J. Dircks
Assistant Executive Director
for Operations

See previous yellow for concurrences

Enclosure

Incoming ltr. fm Ms. Valdemi

OFFICE	dtl. 5/12/76	OELD	OELD	OCA	EDO
SURNAME		MKarman:jdr	TFEnglehardt		
DATE		6/4/76	6/4/76	6/ /76	6/ /76



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JUN 9 1976

Docket Nos.: 50-3
50-247
50-286 ✓

Anthony Z. Roisman, Esq.
Roisman, Kessler and Cashdan
1712 N Street, N. W.
Washington, D. C. 20036

Dear Mr. Roisman:

While I do not believe that it would serve any purpose to make a detailed, point-by-point response to your May 18, 1976 letter, I do wish to respond to several statements and to answer the one specific question which you raise.

With regard to the differing recollections about what Mr. Case said to you in his April 14 telephone conversation, I can only state that I have checked again with Mr. Case and that he informs me that my May 12, 1976 letter accurately sets forth what he told you during that conversation and that your April 19 letter did not do so accurately in several important respects. Accordingly, I must stand by the account of that conversation in my May 4 letter. On page 2 of your letter you inquire as to why I offered no explanation of what you perceive to be a difference between Mr. Case's telephone explanation of USGS's reason for not participating in the Indian Point seismic review and the explanation set forth in Mr. Coulter's April 16, 1976 letter. I have reviewed Mr. Coulter's letter and I am unable to perceive any discrepancy or significant omission in what Mr. Case told you over the telephone. The substance of Mr. Coulter's letter is precisely in accordance with what Mr. Case told you, i.e., that the NRC staff and USGS concluded that the NRC hearing schedule would not allow the time which USGS regarded as necessary to conduct its review.

Your letter suggests that the staff witnesses who testified in the Seabrook proceeding violated their oath to tell the whole truth by failing to disclose the contents of the December 21, 1976 and February 11, 1976 USGS reports with the degree of detail you deem to have been required. I regard such an accusation as wholly without substance. As you are completely aware, the staff witnesses who testified at the Seabrook hearing made reference to the USGS analyses in a spontaneous, open and truthful manner; they stood ready to provide as much detail about those analyses as any participant in the hearing might have been

Anthony Z. Roisman, Esq.

2.

interested in receiving. I think it is unfair to accuse them of withholding information because you subsequently developed a more detailed interest in the content of those reports than that shown by the representative of your firm who was participating in the hearings. I can inform you unequivocally that there was no staff policy, formulated by me or any other staff member, to withhold from the Seabrook hearing any information as to the existence or content of the USGS analyses.

Finally, I wish to answer the question contained in the first paragraph of page 3 of your letter. The "we" refers to Mr. Case, Harold Denton and William Gammill, and the decision was made shortly after the receipt of the USGS draft report on December 12, 1975.

In short, I am still unable to find any information in your series of letters which would fairly support a charge of lack of candor on the staff's part, as alleged in your letter of April 9.

Sincerely,

Original Signed by
Ben C. Rusche

Ben C. Rusche, Director
Office of Nuclear Reactor
Regulation

- cc: All parties on the service lists for:
 Boston Edison Co., et al., (Pilgrim Nuclear Generating Station, Unit No. 2)
 Public Service Co. of New Hampshire, et al., (Seabrook Station, Units 1 and 2)
 Consolidated Edison Co. of New York, Inc. and Power Authority of the State of New York (Indian Point, Units 1, 2 and 3)

DISTRIBUTION

- | | | |
|------------------------|------------|------------------------|
| L.Gossick | K.Goller | OELD |
| W.Dircks | R.Reid | G.Ertter (EDO 222 408) |
| E.Case | W.Gammill | M.Groff |
| J.Miller | C.Stepp | Secy Mail Facility (3) |
| R.Boyd | P.Erickson | (76-1583) |
| H.Denton | R.Ingram | David Okrent, ACRS |
| R.Heineman | J.Lee | |
| V.Stello | M.Aycock | |
| PDR(3) w/c incoming | FF(2) | |
| LPDR w/c incoming | | |
| Docket Files (3) | | |
| EDO Reading | | |
| NRR Reading | | |

OFFICE >	OELD	NRR	NRR	DSE	DSE
SURNAME >	M. Grossman	E. Case	B. Rusche	H. Denton	W. Gammill
DATE >	6/7/76	6/7	6/7	6/7/76	6/7/76

DISTRIBUTION:

Docket Files 50-3

50-247

50-286 ✓

JUN 8 1976

Docket Nos. 50-3

50-247

50-286

The Honorable Benjamin A. Gilman
United States House of Representatives
Washington, D. C. 20515

Dear Congressman Gilman:

Your letter of May 17, 1976, enclosing a letter from Mrs. Robert W. Pugh, dated April 28, 1976, has been referred to me for reply. In her letter Mrs. Pugh urges that financial assistance be given to the Citizens Committee for Protection of the Environment (CCPE), intervenor in the Indian Point seismic hearings.

Attached to Mrs. Pugh's letter to you were copies of CCPE formal filings before the Commission for such assistance.

Enclosed herewith is a copy of the NRC Staff Response to CCPE Request for Financial Assistance, dated April 13, 1976. It is the Staff's position that since requests for financial assistance are currently the subject of a Commission rulemaking proceeding, any decision concerning such requests should be deferred until the proceeding is completed and final action taken by the Commission. The CCPE request for financial assistance is pending before the Commission.

If I can be of any further assistance in this matter, please do not hesitate to contact me.

Sincerely,

William J. Dircks
Assistant Executive Director
for Operations

Enclosures

- 1. Incoming ltr. fm. Mrs. Pugh, dtd. 4/28/76.

OFFICE	2. NRC Staff Response to CCPE.	OELD	OELD <i>JK</i>	OCA	
SURNAME		MKarman: jdr	TFEngelhardt		
DATE		6/4/76	6/4/76	6/ /76	

DISTRIBUTION:

Docket Files 50-3

50-247

50-286 ✓

JUN 8 1976

Docket Nos. 50-3

50-247

50-286

The Honorable James L. Buckley
United States Senate
Washington, D. C. 20510

Dear Senator Buckley:

PDR (3)

LPDR

D&SS

OCA (3)

EDO #00435

NRC Central Files

OELD Reading File

OELD FF (2)

HKShapar

CKNissl

MWGrainey

JLee 116C

BRusche

~~TF~~

TFEngelhardt

MGrossman

JFScinto

MKarman

Chron

SHLewis

PERickson 321

RGeckler N/L

EGCase

Your letter of May 18, 1976, enclosing a letter from Ms. Maria L. Valdemi dated May 12, 1976, has been referred to me for reply. In her letter, Ms. Maria L. Valdemi urges that the Indian Point Station, Units Nos. 1, 2 and 3, seismic show cause proceeding be held in New York instead of in Bethesda, Maryland.

As you know, the first three days of the proceeding (April 21-23, 1976) were held in White Plains, New York. The second week of the hearing was held in Bethesda, Maryland. The presiding Atomic Safety and Licensing Appeal Board then solicited the views of all the parties as to where subsequent weeks of the hearing should be held. After taking into consideration the positions of the parties in favor of a New York site for the hearing as against the protracted absence of the Appeal Board members from their offices, which would necessarily curtail their activities on a number of appeals pending in other proceedings, the Appeal Board ruled that the May sessions of the Indian Point proceeding would be held in Bethesda, Maryland. To date, no specific site has been designated for subsequent sessions of the hearing.

If I can be of any further assistance in this matter, please do not hesitate to contact me.

Sincerely,

William J. Dircks
Assistant Executive Director
for Operations

Enclosure

Incoming ltr. fr. Ms. Valdemi

OFFICE	dd. 5/12/76	OELD	OELD <i>in</i>	OCA
SURNAME		MKarman: jdr	TFEngelhardt	
DATE		6/2/76	6/ /76	

JUN 4 1976

Docket Nos. 50-247
and 50-286

Honorable James L. Buckley
United States Senate

Dear Senator Buckley:

This letter is in reply to your request of May 10, 1976 asking for our comments and views on the Mayor of Buchanan's comments on the Draft Environmental Statement (DES) for Selection of the Preferred Closed Cycle Cooling System at Indian Point Unit No. 2.

The staff's initial position of need for a closed cycle cooling system for Indian Point Unit No. 2 became public knowledge when the Final Environmental Statement was issued in September 1972. That document went into considerable detail on the basis of the staff's position and it was found, on balance, that the closed cycle cooling system would be required. Subsequently, a similar evaluation for Indian Point Unit No. 3, after a more detailed and up-to-date review, arrived at the same conclusion. Both conclusions have since been litigated before the Atomic Safety and Licensing Board, in public hearings, reviewed by the Atomic Safety and Licensing Appeal Board, and confirmed in the Nuclear Regulatory Commission Memorandum and Order of December 2, 1975.

All of the points raised in Mayor Begany's comments have been discussed in considerable detail at the Indian Point Unit No. 2 public hearings and reassessed in detail in the Indian Point Unit No. 3 Final Environmental Statement. As a result of the public hearings, subsequent appeals and Commission Order, the remaining question in both Indian Point Unit No. 2 and Unit No. 3, is the selection of the Preferred Closed Cycle Cooling System.

The applicant, as required by the Indian Point Unit No. 2 license, submitted to the staff its assessment and basis for selection of a natural draft cooling tower as the preferred closed cycle cooling system. The staff is preparing an assessment of the alternative closed cycle cooling systems in the form of a Draft Environmental Statement (allowing Federal agency, State agency, local agencies, and public comment) and Final Environmental Statement. The staff made a very determined effort to evaluate as many viable alternative cooling systems as possible in order

OFFICE >					
SURNAME >					
DATE >					

to assure an optimum selection of the preferred closed cycle system. In addition, it was the staff's objective to provide sufficient technical information in their assessment to permit the parties to any subsequent public hearing on the subject and commentators to review and weigh the subjective aesthetic impact against the varying environmental impacts such as salt deposition, fog, and noise. Every effort was made to produce an optimum selection of the preferred system recognizing the impacts on the local population and biota.

The comments made by Mayor Begany and his staff had been received by the NRC staff by a separate letter. They raise no issue not previously litigated; however, these comments are being considered in the preparation of the Final Environmental Statement.

Pursuant to the request of an intervening party, a public hearing on the selection of the optimum closed cycle cooling system has been granted. The Village of Buchanan may participate in this proceeding through a "limited appearance" and thereby, bring its views to the attention of the presiding Atomic Safety and Licensing Board.

Thank you for the opportunity of responding to the comments of Mayor Begany. Enclosed is the material which you requested be returned. Also enclosed for your information is a copy of the Draft Environmental Statement for Selection of the Preferred Closed Cycle System at Indian Point Unit No. 2.

Sincerely,

William J. Dircks
Assistant Executive Director
for Operations

Enclosures:

- 1. Ltr fr George V. Begany with attachments
- 2. DES for Selection of the Preferred Closed Cycle Cooling System at Indian Point Unit No. 2 dtd 2/76

DISTRIBUTION

Docket Files (ENVIRON)	PERickson	WRegan
NRC PDR	CA(3)	GDicker
Local PDR	BHarless	TIC-OR
NRR Reading	GERTter (00386)	
DSE Reading	IE (5)	VMoore
EP-1 Reading	MGroff	RBoyd
BCRusche	RGeckler	
ECase	MSlater	
JMiller	GKnighton	
RHeineman	BYoungblood	
DMuller		
VStello		
MGrainey, OELD		

OELD *

*See previous yellow for concurrences

OFFICE	DSE:EP-1	DSE:EP *	DSE *	NRR*	EDO	CA
SURNAME	RPGeckler:mh	VMoore	HDenton	ECase	LVGossick	
DATE	6/1/76	5/28/76	DMuller 5/28/76	BCRusche 5/30/76		

United States Senate

5/10/76

Respectfully referred to:

Congressional Liaison
Nuclear Regulatory Commission
1717 H Street NW
Room 1047
Washington, D.C. 20555

Because of the desire of this office to be responsive to all inquiries and communications, your consideration of the attached is requested. Your findings and views, in duplicate form, along with return of the enclosure, will be appreciated by

James L. Buckley

U.S.S.

Form #2 *ed*

SEARCHED
SERIALIZED
MAY 18 1976
FBI - WASH DC
2.15



Mayor
GEORGE V. BEGANY

Trustees:

WILLIAM DURR
JAMES EDGAR
JACK LOEBER
WILLIAM McNALLY

Village of Buchanan

MUNICIPAL BUILDING, BUCHANAN, N. Y. 10511

PHONE: (914) 737-1083-4

Clerk & Treasurer
FRANK R. COLACINI

Village Attorney
CARL D'ALVIA

Village Consulting Engineer
HUGH GREGORY

Building & Plumbing Inspector
CHARLES WHITE

May 3, 1976

Senator James L. Buckley
United States Senate
Washington, D. C. 20510

Dear Senator Buckley:

It is the desire of the City of Peekskill, the Town of Cortlandt and the Village of Buchanan to encourage the Nuclear Regulatory Commission to forego their decision that a cooling tower is a necessity for the continued operation of the Con Edison Nuclear Plant #2 at Indian Point.

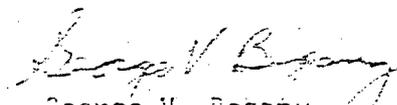
It must be pointed out to the N.R.C. that their decision is wrong, and I believe that such information is available to do this.

In order to develop a course of action, it has been decided by Cortlandt Town Supervisor Muriel Morabito, Mayor F. Jay Bianco of Peekskill and myself to hold a meeting on Saturday, May 8, 1976, at 10:00 a.m. at the Buchanan-Verplanck School on Westchester Avenue in Buchanan, New York, for which your presence, or that of a representative from your office, would be appreciated.

In answer to the Draft Environmental Statement for the Selection of the Preferred Closed Cooling System at Indian Point Unit #2, Docket No. 50-247, published February 1976 by the U. S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, I am enclosing for your review the comments and reactions of Hugh S. Gregory, Buchanan's Consulting Engineer and Dr. William E. Shuster, P.E., Director of Environmental Programs, Rensselaer Polytechnic Institute. Dr. Shuster is our consulting engineer regarding the cooling towers. Also enclosed is my cover letter to the Nuclear Regulatory Commission.

I am looking forward to seeing you on May 8, 1976.

Sincerely yours,


George V. Begany
MAYOR

GVB/dsm
Enclosure



Mayor
GEORGE V. BEGANY

Trustees:
WILLIAM DURR
JAMES EDGAR
JACK LOEBER
WILLIAM MCNALLY

Village of Buchanan

MUNICIPAL BUILDING, BUCHANAN, N. Y. 10511

PHONE: (914) 737-1033-4

Clerk & Treasurer
FRANK R. COLACINI

Village Attorney
CARL D'ALVIA

Village Consulting Engineer
HUGH GREGORY

Building & Plumbing Inspector
CHARLES WHITE

April 14, 1976

U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Director, Division of Site Safety
and Environmental Analysis

Gentlemen:

On the 29th of March 1976 we received two copies of the Draft Environmental Statement prepared by your Agency, regarding the selection of the closed cycle cooling system for Con Edison Indian Point Unit No. 2 bearing Docket No. 50-247.

This matter is of deep concern to me as the Chief Executive Officer of the Village.

After reviewing the contents of this report I am convinced that the proposed installation will be even more detrimental to the Village and its inhabitants than I originally conceived. It is unbelievable that a superior governmental unit would consider enforcement of the recommendations made therein, which could and may result in the death of our Village, or at best, will result in vastly depressed living standards for our citizens.

At my request, our Village Consulting Engineer, Hugh S. Gregory, has reviewed the Statement, and has prepared a report setting forth in detail his comments and conclusions.

I have also requested our Environmental Consultant, Dr. William H. Shuster, Professor of Environmental Engineering at the Rensselaer Polytechnic Institute, to examine your Statement and prepare his own report of the effects of the recommended tower installation on the Village.

Both reports are attached hereto for your examination and consideration. I emphatically support the substance and conclusions

April 14, 1976

stated therein.

In addition, I add the following comments of my own for your consideration.

First of all the Village neither wants nor needs a grotesque land mark, towering almost 500 feet above our highest ridge and some 450 feet in width, to identify it as an industrial site, making our citizens ashamed of their origin and heritage. There is no doubt that the long term effects on our "native" population will be catastrophic.

Regardless of the statement that the installation is short term, this short term comprises a period of some forty years. Unquestionably, forty years of the abhorrent conditions anticipated in the report, plus the overpowering visual assault of the tower, will result in an abandoned community.

It must be realized, too, that the native wildlife in the area will be annihilated, first by construction, ultimately and completely by the environmental effects of the tower. The fauna will never seek nor find refuge in Blue Mountain Park or other areas.

It is completely unrealistic to assume that outsiders can judge fairly the feelings of and the effects of this proposal on our Village residents. After their decisions these outsiders can return to their own clean atmosphere, flowering dogwoods, green hemlocks and green lawns. We will remain with our bare dogwoods, browned hemlocks and browned lawns, our eternal cloud, gasping for breath, all in the shadow of the overwhelming monster.

It is my opinion that so far the decisions have been based on hastily made conclusions; that the impact on the whole environment of our Village has not been properly weighed; and that the conclusions have been unduly influenced by certain pressure groups.

It must be added that if all data contained in your report is as carefully documented as the mis-information set forth regarding the Buchanan planning "effort", there is ample reason to doubt the reliability of the entire presentation.

It is obvious that the proposed installation is improper. Likewise, it is obvious that the "once through" system is the least objectionable until the proper solution is found.

It is my judgement that, if this proposed tower is constructed, it will be a monument to unsound reasoning, insufficient research, political pressures, and lack of just plain common sense.

Yours very truly,

George V. Begony
(59)

Mayor

GVB/sg

Atts: Report - Village Consulting Engineer (1)
Report - Village Environmental Consultant (1)

Village of Buchanan

BUCHANAN, NEW YORK 10511

Tel. PEekskill 7-1033

GEORGE V. BEGANY, Mayor
FRANK R. COLACINI, Clerk & Treasurer
CARL D'ALVIA, Village Attorney
HUGH GREGORY, Village Consulting Engineer
CHARLES WHITE, Building &
Plumbing Inspector



Trustees:

WILLIAM DURR
JAMES P. EDGAR
JACK LOEBER
WILLIAM MCNALLY

13 April 1976

Re: Draft Environmental Statement
Closed Cycle Cooling System Selection
Indian Point Unit No. 2
Docket No. 50-247 (Published February 1976)

U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Director, Division of Site Safety
and Environmental Analysis

Gentlemen:

Under date of 24 March 1976, one copy of the subject Draft Environmental Statement was directed to Mayor Begany of the Village of Buchanan, New York. It was received on 29 March 1976.

The Mayor has requested that I review this material and set forth my own findings and opinions in a direct report to you. This letter constitutes such report. It is additional to the Mayor's own statement which is being sent herewith.

My review constituted the general perusal of the NRC report, with extraction of the items deemed of major consequence to our community, as well as those items in which inaccuracies, untrue and unsupported statements of fact occur.

The information extracted is set forth and referenced hereinafter, with appropriate comments, factual data and opinions immediately following each item. The items appear in numerical page order, not necessarily in order of significance to us.

Page 3-9.

Lent's Cove Beach use for disposal of materials.

Lent's Cove Beach and adjacent land is at present the property of the Village, having been deeded thereto by Con Edison. The origi-

nal State grant to Con Edison allowed filling of the entire cove within the grant limits. The dedication deed from Con Edison to the Village provides that the area be used for Village Recreational purposes. The Village is presently proceeding with installation of Boat Launching and Landing Facilities and other improvements. The use of the beach for disposal is not permissible. It is also unreasonable that the recreational use be restricted during construction.

Page 3-13.

Discharge of Sulphuric Acid, Chlorine and other pollutants.

The total design discharge to the river comprises 15M gpm of polluted effluent, diluted by 30M gpm of service water, and 318M gpm from Unit 1, or about 1/3 of the combined discharge from "once through" cooling systems for Units 1 and 2. It is to be noted that Unit 1 has been "off line" since October 1974, and will remain so at least until 1978, with the probability of complete abandonment. Therefore the discharge of properly diluted effluent meeting State Standards seems difficult of achievement.

Page 5-1.

Relative merits of two additional closed cycle systems warrant further investigation.

I concur with this opinion.

Page 5-4, 5-5.

Drift: Wetting of vertical surfaces of structures and Biota downwind can cause damage or corrosion to structures as well as disease to plants.

The Village is within the area of maximum deposition of salt. It has approximately 550 dwellings, 60-80% of which have tilled gardens, with the larger garden areas on Bleakley Avenue and Broadway, in the area of major contamination. Most of the remaining gardens are between Westchester Avenue and Henry Street, the area directly in the path of the major drift. The drift would not only destroy the gardens and landscaping, but have a devastating effect on the dwelling units as well. Although it is pointed out that the salt deposit will have no accumulative effect, which may be true on impervious surfaces, it is obvious that on cultivated garden land it will be 100% accumulative, and will result in severe damage to or destruction of food vegetable crops.

Page 5-8, 5-14, 5-28, 5-31.

Estimates have been predicated on the use of models.

Such estimates are inaccurate at best, and could well be in error on the lower side, rather than be considered conservative. The analyses and assumptions of the Con Edison report are equally as valid as those in this report. Without question a safety factor of two or more should be a requirement, using the higher estimates rather than the lower. Use of the latter minimizes all effects. In my judgment, the element of error should rather favor the maximum estimated effects.

Page 5-34.

Defoliation and destruction of Plantings.

Disagreement is taken to the statement that "the threshold chosen appears unnecessarily conservative". Possibly, the dogwood, hemlock, and white ash will be the most affected. However, it is obvious that there are many other species of common landscaping plants which are incompatible with even minor salt dosage. In my own experience, English boxwood, several varieties of ilex, and lilacs have been seriously affected on my own property from the drift from the salt applications to the public roadway. Defoliated dogwoods and browned hemlocks, with recovery a year away, then a repeat performance, is hardly a condition to be tolerated by any householder. To replace such plantings under the same conditions of imminent destruction is asinine, totally unsatisfactory to both owner and utility.

It is to be noted that our Village has a history of complaints of damage to resident's trees and shrubs, especially where any liability whatever can be attached to the Village or other public authorities. It is emphasized that our citizen's pride in their homes and grounds is exceptional. The impact of such a condition, both actual and psychological, would be tremendous.

Some suitable, simple means of indemnification for damages must be established, including incontestible joint responsibility by both Con Edison and the New York State Power Authority.

Page 5-37.

The effect of towers for both Units 2 and 3 can be approximated at twice the drift levels for Unit 2 alone.

This means simply a doubling of the destructive effects above-

13 April 1976

mentioned.

Reference must be made at this point to the wooded area of 80 acres to the north of the plant center site. Among the conditions under which the Site Plan received Planning Board approval was the requirement that this area be forever maintained in its natural in its natural, wooded state. Since this is directly in the path of maximum salt drift, its maintenance as natural woods seems impossible. The visualization of this area as a greenless, barren stretch is terrible to contemplate.

Page 5-44 to 5-60.

Noise.

Basically, the conclusion relating to noise effects has been based on the erroneous assumption that there have been "no complaints and threats of legal action."

Actually, since the start of construction there has been a history of complaints of noise and smoke and particle emissions. These complaints have been made mainly at Village Board meeting appearances, or informally to Village Board members. The traffic noise has been tolerated on the assurance that there will be a major reduction on completion of construction.

Other complaints registered were as follows:

1. Steam blow-off from Unit 2. This is being alleviated by the design and installation of mufflers for the blow-off. (Unit 3 installed. Unit 2 in process).
2. Operation of Gas Turbines. Enclosures and other measures being taken to reduce this most disturbing noise.

A background noise increase resulting from the cooling towers is projected to affect most seriously the Lent's Cove area. Unquestionably this will be objectionable for the present and planned uses by Village residents.

Again, there will be double the noise nuisance from the addition of the cooling tower for Unit 3.

Page 5-74.

Conclusion - "none of these factors (environmental effects) are likely to be of sufficient magnitude to cause rejection of any

of the cooling tower types".

I must disagree. A summary of the five various types investigated, attached hereto as Exhibit A, indicates that the natural draft type selected is the most objectionable from the standpoint of visible intrusion, towering to elevation 610 or 470 feet above the Broadway Ridge of elevation 140, a non-esthetic monstrosity visible from as far south as Yonkers. The alternate selection of the fan-assisted natural draft type is some 183 feet lower, still at objectionable, monstrous height. The remaining types have top elevations below the Broadway Ridge. It is to be noted that the ND type selected ranks number three in plume effect, and number one in only drift, noise and cost. It is my understanding that the relative differences of the latter effects between all types are inconsequential, with reductions in the alternate types possible. It is difficult to understand the statement that the low profile MD towers do not present appreciable esthetic advantages over the ND types.

Page 6-6.

Installation of gas turbines.

In my opinion the installation of additional gas turbines is objectionable on the basis of noise and atmospheric pollution, as well as being completely impracticable economically.

Page 6-31.

Major Employers.

Standard Coated Products of Buchanan no longer operational, and Standard Brands of Peekskill greatly reduced.

Page 6-35.

Future Development and Planning.

Contrary to the mis-information contained in the report, the Village of Buchanan has both a Planning Board and has retained Planning Consultants since 1951. There is not, and never has been an Industrial Development Authority. The Zoning Ordinance was adopted in 1951 and the preparation of a Village Master Plan authorized in 1964, but never completed. The Zoning Map, prepared in 1969 has served as the Master Plan to the present. Due to the fact that Village development was virtually complete except for the Industrial Area, the Planning Board, established by the Zoning

Ordinance in 1951, has jurisdiction over all site development plans. It made the determination that a Master Plan with pre-planned road network was unfeasible, undesirable and unnecessary, since Con Edison and Georgia-Pacific owned the major portion of undeveloped land. Ultimate use of the remaining land will determine criteria for such subdivision and planning. Also most of the remaining undeveloped land can be improved without construction of additional roads and utilities. In the few instances in which such construction may be required, the particular situation dictates the planning, which is controlled by the Zoning Ordinance and subject to approval by the Planning Board.

Site development and building construction of the Con Edison and Georgia-Pacific parcels was controlled by the Planning Board. It was required that all buildings constructed therein maintain a low profile, well below the crest of the Broadway Ridge, to insure their exclusion from the view of the remainder of the Village. The proposed cooling towers violate this fundamental planning principle established and maintained by the Planning Board.

The Village of Buchanan has been and is the leading community in the area in providing sewers serving 100% of its residential population. The Village operates its own Sewage Treatment Plant which maintains the highest standards of treatment and operation in the region.

The Village Consulting Engineer has prepared comprehensive studies for improvements to the Water Distribution System, the Sewerage System, the Sewage Treatment Plant, the Drainage Facilities, and the Highway System, for which implementation programs have been continuing each year.

Page 6-38.

Impacts on Terrestrial Biota.

It is my opinion that there is sufficient doubt, as pointed out hereinbefore, to question the conclusion that the level of damage to Terrestrial Biota (Human, Animal and Plant) is non-existent, both on-site and off-site. These doubts are sustained by the recommendation that the drift and salt deposition, as well as sensitive plant species be monitored to determine their significance. This, of course, after the fact.

Page 6-44.

Visual characteristics of plumes.

The conclusions relating to plume formations from plume-tower

13 April 1976

combinations are unacceptable. Much discussion has been devoted to rating the various types of towers in more or less degree of de-traction. The simple truth is they are all obnoxious. The shadow over the Village from a plume continually changing shape will create intolerable living conditions, with constant changes from light to darkness. Doubtless it will cause a complete change in family living modes, with residents avoiding the use of natural light. This, of course, will increase the use of energy, and the cost to the residents.

Page 6-51, 6-52.

Real Estate Values.

Again I disagree with the conclusions set forth. The Buchanan situation is unique in that the entire Village is within the radius designated as "on-site" in most of the cases used for comparison. In other words, in those cases the nearest dwelling was remote from the station. The example most nearly comparable to the Buchanan case is that of the Bochum Station in West Berlin. In this case the value of the abutting properties was depressed.

Page 7-1,2.

Evaluation of Proposed Action.

It seems to me that the conclusions reached have been based upon insufficient and inaccurate data. There is little of fact, much of speculation, with many variables of wind, weather and other indeterminate conditions.

The Village is not satisfied that the proposed closed cycle cooling system is the best solution, compared either to the "once-through" system or to other closed cycle systems. Much further research and study must be devoted to improving the effectiveness and reducing the hazards and objectionable features of any system considered.

The overall environmental effect of the closed cycle system seems much greater than that of the "once-through" system, with the latter limited to affecting the river and aquatic biota only. However, the chemical discharge from blowdown of the closed cycle system may more seriously affect the aquatic life and result in other serious problems.

In the original study it was pointed out that the "once-through" system resulted in a heat level in the Hudson exceeding the limit by only a slight margin. With Unit 1 non-operative and with heat discharge limited to Unit 2, such heat discharge to the River would be reduced to about 77% of that from Units 1 and 2, and with Units 2 and 3 on line reduced to about 88% of that from the three units. Thus, the plant could operate within the specified heat limit, pro-

13 April 1976

vided Unit 1 remains inoperable.

It is to be noted that the thermal effect on the aquatic life is still under study. Results of the present moratorium on fishing in the Hudson may well reverse the original conclusions attributed to present cooling methods, considering also the improvements made to reduce impingement. More fish are killed during winter than in summer due to the lower water temperature making the fish slower and less active. This is controlled to the extent that the plant river water intake is reduced to 60% of normal, with a corresponding reduction in power output. When the water temperature drops to 40°, consideration might be given to discharging a portion of the heated effluent into the river at a pointsome distance from the intake, thus raising the river temperature and attracting fish activity in areas remote from the intake. Also consideration is warranted to study the possibility of discharging the higher temperature effluent into the river at several remote points to provide distribution of the heat into a larger volume of river water.

An additional hazard to terrestrial biota with the closed cycle system is the possibility of accidental contamination, including radioactive pollution, of the condenser cooling water by failure in the circulating water system. This could result in released aerosol contamination with greater potential danger to terrestrial biota, particularly humans.

It is also to be noted that due to the thin shell concrete in the superstructure, the Village Building Department will require special concrete design precautions to insure against structural failure from salt and acid attack.

The final conclusion must be drawn that, in the interests of preventing the destruction of the Village and seriously affecting adjoining neighborhoods, construction must be deferred until all doubts of the potential damages are resolved.

Yours very truly,



Village Consulting Engineer

HSG/sg

Atts: Exhibit A - Summary of CT Types (1)

Summary of Cooling Tower Types
(from NRC Report - Docket #50-247)

<u>Type Tower</u>	<u>Hght (ft)</u>	<u>Elevation</u>		<u>Preference Rank*</u>				
		<u>Base</u>	<u>Top</u>	<u>Visual Intrus.</u>	<u>Plume</u>	<u>Drift</u>	<u>Noise</u>	<u>Cost</u>
CMDCT	74	32	106	2	1	3	3	3
FANDCT	382	45	427	4	2	2	2	2
NDCT**	565	45	610	5	3	1	1	1
LMDCT	68	32	100	3		Not	Rated	
W/DCT	74	32	106	1		"	"	

The Elevation of the Broadway Ridge is 140 ±

* Ranking by NRC.

** NRC Recommended Type.

Extracted from NRC Report by Hugh S. Gregory, Village Consulting Engineer,
to accompany Report to NRC.

WILLIAM W. SHUSTER, D. CH. E.
ENVIRONMENTAL ENGINEERING CONSULTANT

RENSSELAER POLYTECHNIC INSTITUTE
TROY, NEW YORK 12181
518-270-8363

April 12, 1976

To: Mayor and Board of Trustees
Village of Buchanan
218 Westchester Ave.
Municipal Building
Buchanan, New York 10511

Gentlemen:

In response to your recent request, I have reviewed the Draft Environmental Statement for Selection of the Preferred Closed Cycle Cooling System at Indian Point Unit No. 2, Docket No. 50-247, published February 1976 by the U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation. I would like to offer a number of reactions to this statement.

The Draft Environmental Statement is based on the assumption that the present method of once-through cooling will be disallowed and that some type of closed cycle cooling system will be preferable. I have stated previously, and I would like to reiterate that I strongly disagree with this position because of the particular features of the situation at Indian Point, perhaps not found typically at any other location. My reasons for this opinion are summarized in the following paragraphs.

The principal arguments which have been presented against the use of once-through cooling include the following:

1. The withdrawal of cooling water from the river will result in the killing of substantial numbers of fish by impingement on the intake screens.
2. The discharge of heated effluent will, under certain conditions, be in violation of the New York State thermal discharge criteria.
3. Discharged cooling water will contain objectional levels of residual chlorine resulting from treatment used to prevent development of biological growths on heat exchange equipment.
4. That thermal discharges will interfere with the life cycle of fish and other aquatic life, especially the striped bass.

5. That dissolved oxygen levels in the river will be seriously depleted.

While these arguments are well considered and important, it would be well to examine them closely.

1. It is indeed important that steps be taken to minimize the effects of inflow on the impingement of fish on inlet screens. It is felt that a number of possibilities exist for redesigning the intakes to alleviate this condition. It is felt that innovative approaches can solve or at least markedly reduce the magnitude of the problem.
2. Whether the discharge of heated effluent will violate New York State thermal discharge criteria is highly in doubt. Predictions of behavior are based on mathematical models which depends upon field data which is largely inadequate, and upon numerous unproven assumptions. This has been clearly stated in the Impact Statement of the U.S. Nuclear Regulatory Commission. Even with the results of such models, any predicted violations are marginal.
3. It is anticipated that any residual chlorine in discharged water will rapidly be dissipated by dilution and by consumption by oxidizable materials naturally present in the river water.
4. It seems highly unlikely that the heated discharges will have any marked effect on life cycles of aquatic species, since the temperature levels at worst will barely exceed acceptable limits. Even under these relatively rare occurrences, which by-the-way are most likely to occur at times other than normal spawning times, most life forms may find that they can adjust to such minor excesses, or avoid them entirely. It may be noted that some reports have indicated that some life forms instead of being injured by thermal discharges, actually thrive in them.
5. Again occasional marginal temperature excesses, if they occur at all, will hardly have a significant effect on dissolved oxygen content in excess of that anticipated for temperatures within acceptable limits.

In the present Draft Environmental Statement, the NRC has considered various alternatives to once-through cooling in the form of a number of closed cycle cooling systems. It is felt that a number of points in their analysis are at fault and that the conclusions are subject to criticism in several respects.

1. It is felt that the use of cooling towers at Indian Point does not represent an improved solution to the thermal problem. As the draft statement itself says, "CCC does not eliminate thermal pollution, but transfers the primary impact from the hydrosphere to the atmosphere."
2. It is stated that the blowdown of twice concentrated recirculated cooling water, containing treatment chemicals including sulfuric acid, will be diluted with water from Unit No. 1 and discharged back to the river. Unit No. 1 has been shut down for some time

and all indications are that it will not be returned to service. Hence, the dilution water is not available.

3. The position is taken that ground level fogging will not be serious. It is stated, however, that while fogging is usually not anticipated to be a problem, Hosler reported an instance where the tower plume did reach the ground in a mountainous terrain. The area of Indian Point might well be so described.
4. It is stated that the estimates of salt deposition and drift as presented by Conn Ed are unduly high. This appears to be highly questionable in view of other experimental evidence. The NRC staff estimates are based on mathematical models which of necessity must contain simplifying assumption. One such assumption, as stated in the report, is that surrounding terrain is uniform in elevation and that wind speed is independent of elevation. This is obviously far from the facts.
5. It is admitted that salt drift has deleterious effects on exposed surfaces such as various metals. It is stated that such effects fall off with distance. However, such distances are not clearly stated. The estimates are based on seashore experience at low altitudes, much different from the situation at Indian Point. No mention is made of possible cumulative effects.
6. The statement is made that only white ash, flowering dogwood and Eastern Hemlock appears to be sensitive to salt deposition. However, it is noted that more than 44% of properties in the area have at least one of these sensitive species. The NRC staff suggests that replacement of killed trees is possible. This unfeeling statement does not take into account the inconvenience to the homeowner nor the loss in property values resulting from killed or partially effected vegetation.
7. A real possibility exists of the interactions of tower plumes with stack effluents containing SO_2 to produce sulfuric acid rain. The Indian Point Plant uses 0.3% S fuel and in light of the peculiarities of wind currents in the area, such inter-mixing is entirely possible.
8. It is felt that NRC overlooked entirely the impact of cooling towers on the terrestrial biota in the area proposed for tower construction. Great concern was expressed about the impact of once-through cooling on aquatic biota, but the same concern was not expressed with regard to the bird and animal life of the area. It is casually stated that they can probably find a home in other areas, without however, considering any resulting ecological impacts. This is viewed as a serious oversight on the part of the NRC staff.

9. The claim is made that there is an extremely small potential for sever damaging episodes resulting from the operation of cooling towers at the Indian Point site. However, the report goes on to say that the licensee should monitor drift and salt deposits and determine their significance. Why the concern about drift and salt deposition if no problems are anticipated? It is interesting to speculate what NRC would suggest if later studies, after towers were constructed, indicated serious salt deposition was taking place.
10. NRC claims that no cumulative effects from salt deposition should be expected. Yet experience with spray irrigation has shown that salt does accumulate in soils, often through an ion exchange mechanism, and that the resulting accumulations have serious effects on plant life.
11. The report describes the opinions of a panel of "experts" on the projected aesthetics of cooling towers. It is quite apparent, however, that none of the experts were property owners from the Indian Point area. It is easy enough to express opinions on matters of no impact to the people involved. It was also of note that the aesthetic comparisons were between tower alternatives, but no comparisons were between "towers" and "no towers."
12. It should be noted that the NEPA states as an objective:
"Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings."

It is strongly felt that the construction and operation of closed cycle cooling towers will violate the spirit and intent of the NEPA for a segment of population long established in the area. While one can be coldly objective and say that the destructive effects of cooling towers involve a relatively small area and only a moderate number of people, the people of Buchanan are human beings and their rights are just as important as those who are making decisions from afar.

I trust these remarks will be of help to you and if I can be of further service, please let me know.

Yours truly,



Dr. William W. Shuster, P.E.
Director of Environmental Programs
Rensselaer Polytechnic Institute

Distribution
 Rusche
 Docket Files 50-3
 50-247
 50-286 ✓

JUN 1 1976

Docket Nos. 50-3
 50-247
 50-286

PDR (3)
 LPDR
 D&SS
 EDO #00354 TEngelhardt
~~SECY (3)~~ MGrossman
 OCA (3) JScinto
 PE MKarman
 PA TBruen
 OGC Chrono
 NRC Central FF(2)
 OELD File
 HShapar

Honorable Benjamin A. Gilman
 U.S. House of Representatives

Dear Mr. Gilman:

Your letter of May 6, 1976, enclosing a letter from Mrs. Irene P. Dickinson dated May 4, 1976, has been referred to me for reply. In her letter, Mrs. Dickinson urges that the Indian Point Station, Unit Nos. 1, 2 and 3, seismic show cause proceeding be held in New York instead of in Bethesda, Maryland.

As you know, the first three days of the proceeding (April 21-23, 1976) were held in White Plains, New York. The second week of the hearing was held in Bethesda, Maryland. The presiding Atomic Safety and Licensing Appeal Board then solicited the views of all the parties as to where subsequent weeks of the hearing should be held. After taking into consideration the positions of the parties in favor of a New York site for the hearing as against the protracted absence of the Appeal Board members from their offices, which would necessarily curtail their activities on a number of appeals pending in other proceedings, the Appeal Board ruled that the May sessions of the Indian Point proceeding would be held in Bethesda, Maryland. To date, no specific site has been designated for subsequent sessions of the hearing.

If I can be of any further assistance in this matter, please do not hesitate to contact me.

Sincerely,

William J. Dircks
 Assistant Executive Director
 for Operations

Enclosure
 Note from Rep. Gilman dtd 5/6/76
 w/ltr from I. P. Dickinson dtd 5/4/76

OFFICE	OELD Bruen	OELD Karman	OELD Engelhardt	OCA	NRR 5/26/76
SURNAME					
DATE			5/26/76		