

BUCKET NUMBER 50-3,247,286
PROD. & UTIL. FAC. S&D

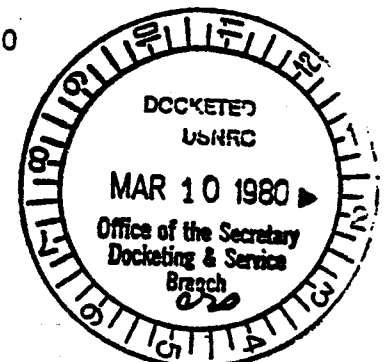
NEW YORK STATE COMMITTEE FOR
JOBS AND ENERGY INDEPENDENCE

Chairman
Pete J. Brennan

Executive Director
Robert W. Searby

March 7, 1980

5
Commissioner Joseph Hendrie
Nuclear Regulatory Commission
1717 H. Street, N.W.
Washington, D.C. 20555



Dear Commissioner Hendrie:

Many New Yorkers were relieved upon hearing the recent decision by Harold Denton permitting the continuing operation of Indian Point nuclear units. The members of JEI throughout New York, among whom are thousands of organized workers, were especially relieved. Over the past year, we have come to realize the severe impact a shut-down would have on our jobs, livelihood, families and local communities.

Because of our scandalous dependence on foreign oil for electric generation, New York's loss of employment, industry, tax revenue, and work force have already reached crisis proportions. The last thing New Yorkers can afford is the loss of the only two major, non-oil generating units we have in the region. That is why we were deeply relieved to hear Harold Denton's prudent decision to approve the continuing operation of the Indian Point units. But now, we are threatened by a possible re-evaluation of that decision.

There comes a time in any regulatory case when a responsible agency makes a decision and stands by it. On Indian Point that time has certainly been reached. The members of JEI hope you will agree with us, let Mr. Denton's decision stand, and not join in any effort that might deny New Yorkers one of their few options to OPEC blackmail. Considering our inflation rate and foreign crisis, we need Indian Point now more than ever. Further hearings and re-evaluations will only extend our uncertainty and undermine confidence in our local economy.

Sincerely,

Peter J. Brennan
Peter J. Brennan
Chairman

PJB:ce

BENJAMIN S. ROSENTHAL
874 DISTRICT, New York

DOCKET NUMBER 50-3,21 986
PROD. & UTIL. FAC. S & D

SUBCOMMITTEE
FOREIGN AFFAIRS

DEPUTY WHIP
MEMBER, DEMOCRATIC STEERING
AND POLICY COMMITTEE

2171 RAYBURN BUILDING
WASHINGTON, D.C. 20515
(202) 225-2801

U.S. POST OFFICE
41-55 MAIN STREET
FLUSHING, NEW YORK 11351
(212) 939-8200

Congress of the United States
House of Representatives

Washington, D.C. 20515

March 7, 1980

SUBCOMMITTEE
EUROPE AND THE MIDDLE EAST
INTER-AMERICAN AFFAIRS

GOVERNMENT OPERATIONS

SUBCOMMITTEE
CHAIRMAN—COMMERCE, CONSUMER
AND MONETARY AFFAIRS

Mr. John F. Ahearna, Chairman
Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Ahearna:

I am writing to express my deep concern for the manner in which the Nuclear Regulatory Commission responded to the petition submitted by the Union of Concerned Scientists, regarding the Indian Point Nuclear Power Plants.

There appears to have been very little effort on the part of the Commission to answer the points raised by the UCS petition. Instead, the NRC staff, which was already considering certain safety improvements for Indian Point, worked out an agreement with the utilities on needed safety measures. As a result, the Commission gave approval to a safety plan which, in the final analysis, gave little consideration to the proposals recommended by the UCS.

In order to allow a fair airing of views, I feel that a full review of the UCS petition is in order. To this end, I urge the Commission to establish an Atomic Safety and Licensing Board in order to conduct adjudicatory hearings and compile a factual record on Indian Point. This procedure would allow testimony under oath, cross-examination, subpoenaing of documents and public participation. Once a factual record is available the NRC will be in a better position to decide if Indian Point can continue to operate without undue risk to the 15 million residents living within 50 miles of the plants.

I hope to hear from you in the near future regarding this matter of mutual concern.

Thank you in advance for your cooperation, and my best wishes.

Sincerely yours,

Ben Rosenthal

3/10/...To OGC For Direct Reply...Suspense: March 20...Cpys to: Chm, RF, EDO, Docket, OCA to Ack...80-0462.

SHIRLEY CHISHOLM
12TH D STREET, NEW YORK

DISTRICT OFFICE
RESTORATION PLAZA
1360 FULTON STREET
SUITE 400
BROOKLYN 4, NEW YORK 11216
(112) 330-7588

WASHINGTON OFFICE
2182 FAYBURN BUILDING
(202) 225-6231

DOCKET NUMBER
PROD & UTIL FAC 51 1,247 282
3+D

COMMITTEE ON RULES
SECRETARY
DEMOCRATIC CAUCUS

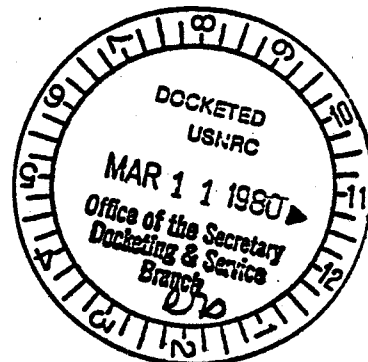
MR. WESLEY MCD. HOLDER
DISTRICT REPRESENTATIVE

REPLY TO:
☐ WASHINGTON OFFICE
☐ BROOKLYN OFFICE

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

March 5, 1980

John F. Ahearne, Chairman
Nuclear Regulatory Commission
Washington, D.C. 20555



Dear Chairman Ahearne:

Last month I joined several of my colleagues in the New York Congressional delegation in expressing concern to you regarding the Indian Point nuclear power facility.

Rather than restate the issues raised in our February letter, I simply would like to strongly encourage the Commission to undertake a thorough review of the Union of Concerned Scientists' petition.

Particularly in light of the recent heavy criticism of the Commission's procedures and decisions on Indian Point, it is my view that further hearings are needed to ensure that public safety and health issues are fully considered by the N.R.C. members.

Thank you for your attention to this urgent matter.

Sincerely,

Shirley Chisholm
SHIRLEY CHISHOLM
Member of Congress

SC/bf

3/10...To OGC For Appropriate Action...Cpys to: RF, EDO, Docket, OCA to Ack., Chm...80-0459.

MARIO BIAGGI
1014 DISTRICT, NEW YORK

WASHINGTON OFFICE
2428 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
(202) 225-2464

DISTRICT OFFICES:
BRONX
2001 WILLIAMSBURG ROAD
BRONX, NEW YORK 10461
(212) 931-0100
QUEENS
SECOND FLOOR
22-02 STEINWAY STREET
QUEENS, NEW YORK 11105
(212) 932-4448

DOCKET NUMBER
PROD. & UTIL. FAC. 5D-3,24 286
3ED

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

February 29, 1980

COMMITTEE
EDUCATION AND LABOR
SUBCOMMITTEE
LABOR MANAGEMENT RELATIONS
POST SECONDARY EDUCATION
SELECT EDUCATION

MERCHANT MARINE AND
FISHERIES
SUBCOMMITTEE
CHAIRMAN,
COAST GUARD AND NAVIGATION
MERCHANT MARINE
PANAMA CANAL

SELECT COMMITTEE ON AGING

SUBCOMMITTEE
CHAIRMAN, HUMAN SERVICES

DEMOCRATIC STEERING AND
POLICY COMMITTEE

SELECT COMMITTEE ON
NARCOTICS ABUSE AND CONTROL
(EX-OFFICIO)

CHAIRMAN, AD HOC
CONGRESSIONAL COMMITTEE
FOR IRISH AFFAIRS

John F. Ahearne, Chairman
Nuclear Regulatory Commission
1717 H Street, NW
Washington, D.C. 20555

REFERENCE CODE: 1 cwf

Dear Commissioner Ahearne:

I am contacting you regarding the petition filed by the Union of Concerned Scientists on September 17, 1979, in an attempt to resolve specific safety and site-suitability issues concerning Indian Point, Units 1, 2, and 3, in Buchanan, New York.

As one who is very concerned about the potential safety hazards posed by nuclear power plants, I urge that the Indian Point issue receive immediate attention. Please inform me of your findings and any actions taken in this matter by responding to the above referenced code.

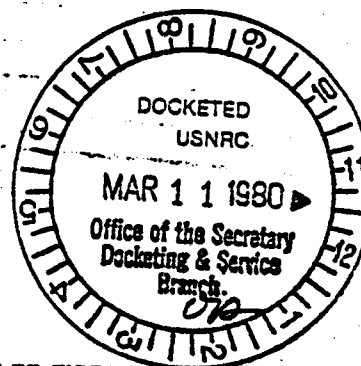
Sincerely,

Mario Biaggi

MARIO BIAGGI, M.C.

MB/cwf

3/10...To OGC For Direct Reply...Suspense: March 28...Cpys to: EDO, RF, Docket, OCA to Ack., Chm...80-0460.



Feb. 29, 1981

John F. Ahearn, Chairman
U. S. Nuclear Regulatory Commission
1717 H. St. N.W.
Washington, D.C. 20002

Re: Presentation in:

(5) U.S. 260 Petition on Indian Pt
February 5, 1980

Dear Mr. Ahearn:

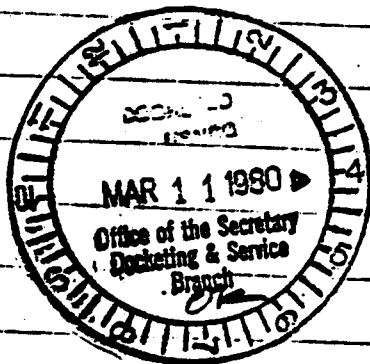
On February 5, 1980 I made
a presentation concerning the
above petition and said I would
get contact the person who
told me about the dead
animals at Three Mile
Island, as a result of the
accident, in order to prove
that statement. Since then,
I tried to contact that
man and found out he
had died without leaving
over

a phone number or address.

Presently, I am in the process of ~~research~~ researching the information from other sources. Hopefully, I should still be able to get this material to the Commission at a later date.

Sincerely yours,

Nancy Brodesky
675 Ave Z - apt 2K
Bklyn, N.Y. 11223

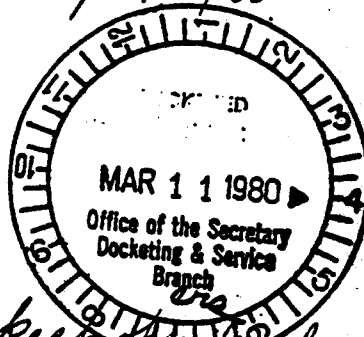


NT

S+D

630 Riverdale Ave.
Bronx, New York 10471
February 14 1980

President James Carter
The White House
Washington, D.C. 20500



Re: Approval to keep open nuclear
Plant at Indian Point.

Dear President Carter:

I strongly urge you to keep open
the Indian Point Nuclear Power Plant.
Nuclear stations are far safer than
almost any other industrial site.

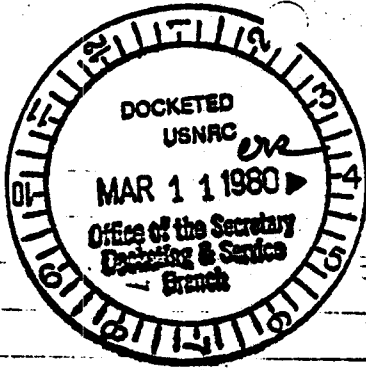
Many subversive groups are
trying to deter us from nuclear
projects as sources of energy.

(6)

Therefore, they deceive and stir up uninformed citizens to oppose nuclear sites. Besides, they employ propaganda, sabotage, demonstrations, and violence against nuclear energy. Of course, proper safeguards must be taken by nuclear plants. Moreover, we should favor research and plans for other sources of energy; but we must now operate nuclear power plants.

The current commotions about a recent minor earthquake near Indian Point and about health hazards are foolishly exaggerated. In fact, they are unfounded objections.

Thank you for your careful attention to this important matter. God bless you in your heavy burdens.
Yours truly
Mary S. Luggenheim



DOCKET NUMBER
PROD. & UTIL. FAC. 50-3,247,286
S+D

Andrea Gordon
Box 635
S.U.N.Y. Purchase
Purchase, NY 10577
3/6/80

Chairman John Ahearne, USNRC
1717 H Street, NW
Washington, DC 20555

Dear Sir,

(6) I live and go to school within thirty miles of the Indian Point Nuclear Power Plant and am concerned about the safety of the plant. After what happened at three mile island, I can't help but worry, living so close to such a potential danger.

This letter is to tell you that I support the creation of an Atomic Safety and Licensing Board (to be set up by the NRC). I reject Harold Denton's decision on the UCS petition, as inadequate to deal with the problems at Indian Point and ask that the NRC commissioners make the final decision on the UCS petition, NOT the Licensing Board. I would also call on you to suspend operation of the Indian Point plants pending the commissions' decision on the safety of said plants.

Please consider these issues carefully as the safety of millions of people in the New York City area could be at stake, should an accident occur. Thank-you,

Sincerely yours,

Andrea Gordon

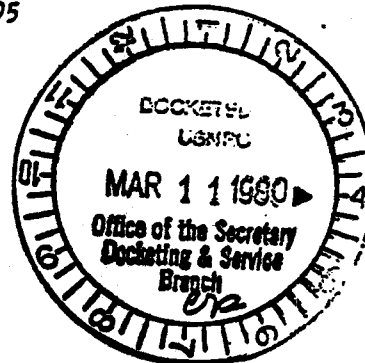
DOCKET NUMBER 50-3,247,286
PROD. & UTIL. F

SCIENTISTS AND ENGINEERS FOR SECURE ENERGY, INC. 9+D

570 Seventh Avenue - Suite 1007
New York, New York 10018

(212) 840-6595

Frederick Seitz, Rockefeller U, Chairman
Alexander von Graevenitz, Yale, V-Chair
Erich Isaac, CUNY-CCNY, V-Chair
Miro M. Todorovich, CUNY-BCC, Exec Sec'y



SE2

7 March 1980

John F. Ahearne, Commissioner
U.S. Nuclear Regulatory Commission
1717 H Street NW
Washington, D.C. 20555

Dear Commissioner Ahearne:

We are pleased to enclose the comments of
Scientists and Engineers for Secure Energy
concerning:

Denial of Petition Filed
by Union of Concerned
Scientists in the matter
of Consolidated Edison
and PASNY - Docket # 50-3
50-247
50-286

for your consideration.

Sincerely yours,

Miro M. Todorovich

Miro M. Todorovich
Executive Secretary

mmt/j
encl.

c.c. Commissioners Hendrie
Bradford
Gilinsky
Kennedy

Samuel Chilk

CHAPTER MEMBERS (partial listing): Robert K. Adair, Yale; Henry R. Barschall, U of Wisconsin; Hans A. Bethe, Cornell; Felix Bloch, Stanford; David Bodansky, U of Washington; Morris E. Bradbury, Los Alamos; D. Allan Bromley, Yale; R. Creighton Buck, U of Wisconsin; Bernard L. Cohen, U of Pittsburgh; Thomas J. Connolly, Stanford; John D. Courtney, Louisiana State U; Dwight H. Damon, U of Connecticut; R. H. Dicke, Princeton; Albert Gold, NY Polytechnic; Robert Hexter, U of Minnesota; Robert Hofstadter, Stanford; Behram Kursunoglu, U of Miami; Robert Lee, Hartford; W. F. Libby, UCLA; John McCarthy, Stanford; John P. Madison, Argonne; Robert S. Mulliken, U of Chicago; Ernest C. Pollard, Penn State U; James Rainwater, Columbia U; Norman C. Rasmussen, MIT; Malcolm J. Sherman, SUNY Albany; Edward Teller, Livermore; James A. Van Allen, U of Iowa; Eugene P. Wigner, Princeton; Richard Wilson, Harvard; Werner Wolf, Yale. *Affiliation for identification only. *Member, STEERING COMMITTEE.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE COMMISSION

-----X
CONSOLIDATED EDISON COMPANY OF NEW YORK :
(Indian Point, Unit No. 2)

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

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

-----X
COMMENTS OF MIRO M. TODOROVICH, EXECUTIVE
SECRETARY OF SCIENTISTS AND ENGINEERS FOR
SECURE ENERGY, ON DENIAL OF PETITION FILED
BY THE UNION OF CONCERNED SCIENTISTS

Responding to the solicitation of comments on Director's decision under 10 CFR 2.20C relating to Indian Point nuclear facility in Buchanan, New York, Scientists and Engineers for Secure Energy (SE₂) is of the opinion that the Commissioners should decline to review Director's denial.

While studying the petition filed by the Union of Concerned Scientists in September, 1979, SE₂ was unable to uncover any significant question, as raised, which had not been reviewed and discussed to death earlier, in connection with Indian Point units or otherwise. All technical allegations have been studied in the past by various pertinent forums within and outside the NRC. Since these issues have been previously resolved in favor of the continued operation of Indian Point Units 2 and 3, and since there were no genuine new questions raised in the current petition (except for novel permutation and agglomeration of erstwhile objections) the Commission's technical staff could find no basis to alter their earlier assessment as to the fundamental soundness

of the Indian Point Units 2 and 3. The Director has, therefore, decided for good reasons to deny the UCS petition and no purpose would be served for the Commissioners to review the Director's decision.

For the same reasons as enumerated above, SE₂ does not see valid grounds for the testing of Director's denial in a formal adjudicatory hearing. As in the case of humans; plants operating for the benefit of the public should be protected from double or multiple jeopardy.

SE₂ would also like to seize the occasion and comment on two points often raised by anti-nuclear critics. First point found i.e. in a recent editorial in the New York Times* asserts that "everyone agrees no reactors should or would be built in... densely populated areas, and so it (is) legitimate to ask whether reactors should continue to operate on such a site". The fallacy of this assertion is easily demonstrated by numerous examples to the contrary. The closest instance is on the Canadian side of Lake Ontario. About twenty miles from downtown Toronto, four reactors are, for many years, generating electricity at the Pickering station cooled by the fresh waters from the lake. The utility currently has under construction four additional nuclear-powered units so that eight reactors will soon be operating in the immediate vicinity of the most densely populated part of Canada. One can

*One should keep in mind that newspaper editorials are seldom an expression of public opinion nor are they particularly accurate when dealing with technological matters. A classic case in point is the mid-twenties editorial of the New York Times which castigated the famous rocket pioneer Goddard for advocating rocket flight into outer space; according to the Times, "everyone knows" that rockets cannot propel in outer space for lack of atmosphere on which to exert the push.

also cite the case of the densely populated France which will be putting into operation in the next decade, one nuclear power plant every two months or so. Clearly the Canadians, and the French, as well as the British and the Japanese agree that one can and should safely build reactors even in the most densely populated and seismically active areas.

The second assertion claims that one cannot design meaningful evacuation plans for the vicinity of the Indian Point power plants. Again, this belief is contradicted by experience. Between 11:56 PM on November 10, 1979, (when 11 propane tanks of a 106-car derailed train carrying highly explosive and poisonous chemicals exploded in flames) and 4:10 AM on November 12, the entire Canadian city of Mississauga, population 240,000, was completely evacuated, hospitals, nursing homes and all. The lock-up of Mississauga became effective at 4 AM of that date.** The evacuation was completely orderly and there was not one single person injured or killed. Massive evacuations are indeed feasible. There was only one single known case of looting with the perpetrators promptly arrested and charged. The Canadian transportation emergency assistance plan which maintains information centers manned 24 hours a day is sponsored by the Canadian Chemical Producers Association. Any similar peacetime emergency is coordinated by the regional director of Emergency Planning Canada.

SE₂ fully supports developments of adequate emergency preparedness and capability in the United States. Such planning

**Sample newspaper quotes are attached to these comments.

and development need not and should not interfere, however, with the normal industrial activities including the production of electricity by nuclear power.

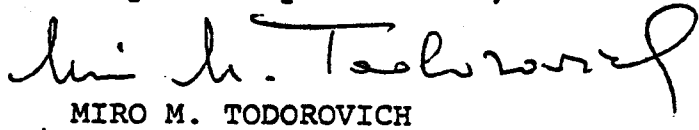
In conclusion, SE₂ wishes to reiterate the findings of the Kemeny and Rogovin reports that the NRC has in the past devoted too much of its time to endless regulation-producing hearings and too little time to more mundane tasks leading to practical and measurable improvements of safety. According to these reports, the compliance with regulation and regulatory orders became identified with safety while more substantive issues like the improvements in control panel design (suggested in 1975 by the study group of the American Physical Society), operator upgrading and emergency preparedness of the NRC itself escaped sufficient attention of the Commissioners.

SE₂ is of the opinion that yielding to requests and suggestions like those found in the UCS petition (and in comments of some other parties) would only further perpetuate practices which were so eloquently criticized by the Kemeny and Rogovin panels. Superfluous hearings are only liable to confuse the issues. We need a new "mind set" yet the UCS petitioners suggest more of the same.

The Director's denial of the said petition should be sustained.

Dated: March 7, 1980

Respectfully submitted,



MIRO M. TODOROVICH
Executive Secretary
Scientists and Engineers
for Secure Energy

ES

Mississauga evacuation largest in peacetime

The evacuation of about 220,000 people from Mississauga was the largest single movement of people in Canada during a peacetime emergency, the regional director of Emergency Planning Canada believes.

It may well rank second only to the wartime evacuation at Dunkirk when 338,226 French and British troops were taken from the beaches at Dunkirk and brought to England in a 9-day operation in June, 1940.

Dennis Amyot, who co-ordinated the federal response to the emergency, provided liaison between the various agencies set up to deal with the emergency.

"It's fair to say that it's the biggest, certainly in Canada, in peacetime."

The Canadian Chemical Producers Association sponsors the transportation emergency assistance plan, under which information centres are manned 24 hours a day, he said.

Amyot, with 21 years' experience in emergency planning said Transport Canada maintains an emergency response information centre in Ottawa around the clock to deal with accidents involving any hazardous material.

Amyot said he offered the centre's assistance, which includes identifying specific substances involved in an accident and how to extinguish chemical fires.

Involvement of Environment Canada was essential because of the importance of changes in wind direction and speed in dispersing the fumes.

Amyot co-ordinated the search for autonomous respirators vital for the safety of the men fighting the fire and others in the area.

Only five were available locally. The rest came from Canadian Forces bases in London and Downsview, the chemical industry and fire departments throughout southern Ontario.

Police were out in force in the deserted streets of Mississauga today to guard against an outbreak of looting.

So far only one incident of looting has been reported. Four hours after the train derailment, a window at Huron Park Flymouth was smashed and thieves tried to make off with a truck. But they couldn't get it over a curb when it became stuck in wet grass.

As the evacuation proceeded, Peel Regional Police — augmented by Ontario Provincial Police from Downsview, Steeles, York, Credit and the Niagara Peninsula as well as Metro police — set up a

light cordon around the city.

Some 500 police were on the scene, 200 manning roadblocks at every intersection. Cruisers are also patrolling all areas regularly.

To test the cordon, police yesterday sent four plainclothes officers to act as thieves and get into the evacuated areas.

Two of them got through — the other two were caught. The place where the undercover officers got in were "flagged" by a sign, a police spokesman said.

"But they got only a block or two before they were spotted," he said.

"If we catch anyone inside the city without authorization, we'll arrest them," Peel Regional Police Superintendent Karl Barnhart warned.

An officer will also be posted in each high-rise building, said Barnhart.

Last night, police were refusing to let residents who spent the night away from their homes.

"If we make an exception to the rule, we'll have to do it for all," said an officer.

Businesses and industries will also be off-limits to employees until the fire is out and danger of a chlorine leak is over.

An O.P.P. helicopter, equipped with

fluorescent lights that can illuminate a city block will also be standing by, not only to search for looters, but also to aid in firefighting.

Solicitor General Roy McMurtry has asked earlier yesterday that 250 Canadian Forces troops be placed on standby to help guard the city, but late last night he cancelled the request after being assured there were enough police.

Barnhart told The Star he didn't think there would be much looting, but added that he expected some false reports for people after they returned home to find that they'd been looted.

Big police dragnet puts a lid on looting

Mississauga is closed until further notice.

By 4 a.m. today they had shut down the whole place, Canada's ninth biggest city, and said to stay away until the threat of chlorine gas is gone.

Most of the city's 250,000-plus residents were evacuated yesterday after a spectacular train derailment at midnight Saturday caused fire, explosions and fears of spreading clouds of deadly chlorine gas like that used in World War I.

EXODUS 1979 -- the

No fuss, no argument, and people are

By Helen Bullock Toronto Star

Confrontation just isn't the Canadian way. You're someone walking in front of you and you fall in behind, single file, politely.

And that's the way it was in Mississauga. There was no panic, no argument, no indignation.

There was time to ask questions but very few did; a time to think about staying put but even fewer did that.

Through the evacuation from Mississauga of 240,000 people threatened by a chlorine gas cloud was the largest peaceful movement of people in Canada, it was marked by a calmness and co-operation that made rescuers want to wave the flag.

"People could have refused to leave their homes, could have hassled us and wasted time arguing," Sgt. Robert Balch of Peel Regional police said. "Instead they co-operated right down the line. We couldn't have forced them out of their homes —

but it never came near being a question of that."

Police who knocked door to door, buzzed apartments, and cruised streets with a loudhailer concentrated on what Balch described as "good communications. We tried to let people know this thing is serious without panicking anyone."

"It's a nice, family-oriented, middle-class neighborhood," says Lorne Hartman, a behavioral psychologist at the Clarke Institute of Psychiatry. "And we're pretty compliant as a society as a whole. We tend to respond politely to the authority of a uniform."

Marvellous experience

Ah, but it's more than just that. The Chlorine Cloud is the Canadian answer to the London Blitz or the New York Black-out.

"This whole evacuation thing is a marvellous experience for these people, something akin to the British sleeping in the

basements during air raids," said author John Robert Colombo, who compiled the bestselling Colombo's Canadian Quotations.

"It has a certain romance, glamor even. A year from now they'll all be remembering where they were and what they did when they were moved. There'll be an instant camaraderie and the rest of us will be very left out."

Colombo said he'd heard of some people, offered shelter in private homes, who preferred to stay in the relief centres "where they'll be part of it and won't miss anything."

"It's very Canadian. Very follow-the-leader. Very docile. No issue of civil liberties is even raised. The temper of Canadians has been tested and, I think, not been found wanting."

A Red Cross worker at the Toronto International Centre on Airport Rd., one of a dozen evacuation centres, confirmed Colombo's idea.

"There's a lot of good-natured activity

Canadian way

now enjoying the thrill of danger

going on," Ivor Rogers said in a telephone interview. "People are playing cards and introducing themselves to other people. They've got newspapers and the kids had cartoons on a huge wall screen this morning — Donald Duck I think."

"The teenage kids are having a ball with all the food and freedom from school. They say 'who wants to go home?'"

Same thrills

"And we've had more accommodation offered than people want. People would rather stay here. They're all getting to know one another and they all share the same problem."

They can also afford to share the same thrill of suspense and the scent of danger, so far, everything's under control.

There are no fatalities, no injuries and no damage to private property to fret about. The evacuees are free to enjoy the adventure of being part of an upheaval in

stead of passively watching it on a television or movie screen.

And there is the chilling thrill of speculation. "What if it blows up?" has been asked all around the relief centres all day, providing titillation for some, akin to horror movies or the CINE rides.

And there has always been the soothing officialdom to keep it in perspective. Police, firefighters, and volunteer workers have been unfailingly cheerful, organized and orderly.

There's also an understanding that the threat hanging over them, in the form of a yellowish-green gas, is a real one.

"No one has any experience with chlorine gas and so they tend to take the official word on it and obey all instructions," said Tony Doob, a psychologist at the University of Toronto.

"With hurricanes or other natural disasters they can always say, 'Well, last time the water didn't get up here,' but who has dealt with a gas like this? No one wants to

take a chance; they're grateful for the advice."

There's less likelihood of panic in a spread-out city, Leob says.

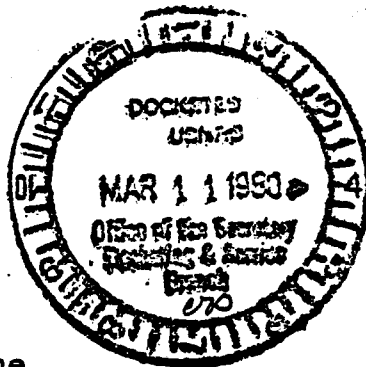
"It's not like all these people were confined or enclosed in a theatre or stadium where the panic would run wild."

"It was a street-to-street thing and officials very gradually expanded the evacuation area. It was very controlled. The communication was excellent."

"Everyone was told moving out was a precautionary measure. People were given time to digest the move; they weren't panicked and therefore moved obligingly."

As for the lack of looting and property destruction, Leob said, "It shouldn't surprise anyone there's no looting. There are no people there to loot. As long as people stay out, everything's safe."

A Peel Region police spokesman said police surveillance and patrols of the deserted homes and streets would be stepped up after dark to keep intruders away.



DOCKET NUMBER 50-3,247,286
PROD. UTIL. FAC. S&D

Brooklyn SHAD
c/o Marc Gross
305A President St
Brooklyn, N.Y. 11231
March 4, 1980

Commissioner John Ahearne
U.S. Nuclear Regulatory Commission
Washington, D.C. 20535

Re: Indian Point Units
2 and 3
Docket Nos. 50-3,
50-247, 50-286

Dear Commissioner Ahearne,

Brooklyn SHAD is a community based group committed to the development of alternate energy sources. We would like to take this opportunity to comment on Director Denton's decision concerning the petition presented by the Union of Concerned Scientists regarding Indian Point Units No. 2 and 3.

However, before responding to Director Denton's decision, we would first like to comment on the NRC's manner of publicizing its proceedings and public comment decisions. We received unofficial word of Director Denton's written decision from another NYC group only on February 25th. Official word of the decision did not reach us until we received in the mail on March 3, 1980 the Commission's "News Releases" for the week ending February 19, 1980. We would urge the NRC to notify interested parties in a more timely fashion so that public comment could be adequately prepared.

Turning to Director Denton's decision, Brooklyn SHAD urges the Commission to adopt a course of action similar to that stated in the "Separate Views of Commissioner Gilinsky". Specifically we would urge the NRC to conduct hearings on what standards should be applied to nuclear plants sited in high density areas (including consideration of whether such plants should continue operating at all); whether Indian Point Units 2 and 3 satisfy such standards; and whether Indian Point should be permitted to continue operating pending the outcome of these proceedings.

We feel that the Director's decision is particularly deficient in addressing the last issue. The decision states:

"Staff does not believe that 'the increment of risk' involved in operations while we are reviewing the licensee's plan during 1980 requires suspension of Indian Point Station Units 2 and 3." (pg 8)

We find this reasoning very suspect. If the incremental risk is really not sufficient to justify a shutdown while changes are made, what's to prevent the Director from arguing that the incremental risks are not sufficient to justify implementation of any changes at all. There is no indication as to why the risk presented by current deficiencies will become greater as time passes so as to justify their implementation at a later date.

Furthermore, at no time does the Director's decision provide any substance to this incremental risk standard. Nowhere do we see a review of the risks associated with operating a nuclear facility within 40 miles of New York City, particularly one which is not entirely up to current NRC standards. Indeed, nowhere do we see any analysis of what constitutes, in the Director's eyes, an "unacceptable risk".

We are particularly perturbed by the fact that the decision acknowledges that Unit 3 is more technically advanced than Unit 2, yet does not take this into account in weighing the "incremental risks". The continued operation of Unit 2 is obviously at a higher "risk" than Unit 3. Nevertheless there is no hint that the Director considered the possibility of shutting down only Unit 2. If the technical differences between the two units are so substantial as to require 3 months of analysis by Con Ed (as the Confirmatory Order calls for), then we seriously question why the Unit should be allowed to continue operating during this period.

Most importantly, nowhere do we see in the Director's decision any analysis of the costs and benefits of a shutdown of the plants, at least while certain remedial actions take place. We would urge that the Commission determine the amount of time needed to implement the proposed changes, and compare this to an analysis, as Commissioner Gilinsky suggests, of the "present need for the electricity generated by these plants." If it can be shown (and we believe it can be) that the shutdown of these facilities, at least during a remedial

period, will not create a significant problem for the consumers, then we see little reason why a shutdown should not be considered. The Commission should determine whether the consumers would be damaged more by a shutdown than by a possible accident at Indian Point.

We would therefore urge that the Commission institute a full scale review of Director Denton's decision and the underlying petition of the Union of Concerned Scientists, including public hearings and an analysis of the standards applicable to Indian Point Units 2 and 3.

Sincerely,

BROOKLYN SHAD

S&D

march 1, 1980

To the attention of Chairman John Ahearne -

This is a public comment on the UCS petition decision recommendation as requested in the federal Register.

We reject Harold Benton's decision on the UCS petition as inadequate to deal with the serious problems at Indian Point.

We urge that the NRC set up an atomic Safety and Licensing Board; that this board call adjudication hearings, in order to compile a factual record and data on items addressed in the UCS petition dealing particularly with problems of siting and evacuation & of safety at Indian Point. This data gathering in these hearings is a prime way of assuring adequate procedural safeguards (using cross-examination, testimony under oath and suppression of documents) Some of these hearings

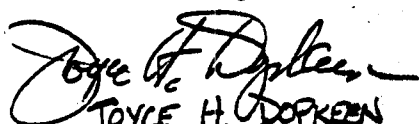
should be held in the 50 mile radius of Indian Point so local residents can participate.

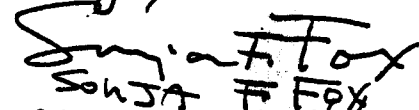
We consider it of critical importance that the NRC Commissioners make the final decisions on the UCS petition, not the licensing board.

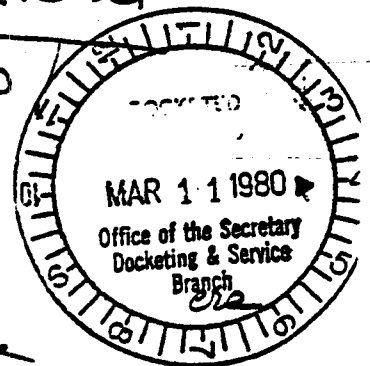
We want Indian point II & III's operation suspended during the period the Commission is making its decision.

We would wish to see all of this accomplished in the shortest possible time. For us living in the shadow of Indian point speed is very important. We feel the imminent danger from these plants

Sincerely,


JOYCE H. DOPKEN
HASTINGS-ON-HUDSON, N.Y.


Sonja F. Fox
24 aqueduct Lane
Hastings on Hudson N.Y.



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE COMMISSION

-----X
CONSOLIDATED EDISON COMPANY OF NEW YORK :
(Indian Point, Unit No. 2)

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

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

65
COMMENTS OF ROBERT ABRAMS, ATTORNEY GENERAL
OF THE STATE OF NEW YORK, ON DENIAL OF
PETITION FILED BY THE UNION OF CONCERNED
SCIENTISTS

These comments are submitted by Robert Abrams, Attorney General of the State of New York, with respect to the decision by Harold R. Denton, Director of the Office of Nuclear Reactor Regulation, denying the petition of the Union of Concerned Scientists ("UCS") to suspend operations at Indian Point Units 2 and 3. Comments on that decision were solicited by the Commission on February 19, 1980.

We submit that the Commission itself should render a decision based on the record of a formal proceeding. We do not favor a rulemaking, or leaving the decision to a licensing board. However, such a board could preside at the formal hearing to take evidence subject to cross-examination, and then certify the record to the Commission for decision.

The Director's Decision

The UCS petition questioned the safety of Units 2 and 3 because of (i) their location in a highly-populated area, and (ii) alleged design deficiencies in both plants, especially Unit 2. The Director's response is that a special NRC Task Force on the Indian Point and Zion plants is studying various possible long-term design changes which could delay or reduce radioactive releases in case of an accident. Installation of such new design features, however, would take about two years, and so interim measures to improve operating procedures -- apparently negotiated ahead of time with Con Edison and the Power Authority -- are being required to be phased in over a period of time. In addition, emergency preparedness evaluations are being made. For these reasons, says the Director, the plants should be allowed to remain in operation. Notably, the interim measures proposed by the Director are totally unrelated to the design issues raised by the UCS.

Significantly, the Director does not contradict the basic contention by UCS that both Indian Point units have design deficiencies. To the contrary, Mr. Denton's decision concedes that many such design problems exist. It concludes, however, that in staff's estimation these problems -- in light

of steps now being taken or planned to address them -- do not pose an unacceptable risk. However, we believe this Commission must make the decision whether the design deficiencies and siting factors pose an unacceptable risk. After all, staff may be willing to accept a higher level of risk than is the Commission. Moreover, the Commission must determine whether the Director's answers meet the objections raised by UCS in a responsible manner.

It would be instructive here to review some of the UCS allegations and the Director's responses. UCS alleges in its petition filed over 5 months ago that the design differences between Units 2 and 3 reflect the inadequacy of the Unit 2 design. The Director's response (p. 13) is to allow the licensees an additional 3 months -- or a total of over 8 months from the filing of the petition -- to evaluate those differences. The Commission must consider if such a period is excessive.

UCS contends that the diesel generator building in Unit 2 is inadequate. The Director responds (p. 15) that, as stated in staff's January 31, 1979 Safety Evaluation Report, Con Edison will be required to make significant changes in that building -- but will not have to complete that work until the end of the next refueling outage, now scheduled for December 1980. In other words, staff was ready to allow two

years from the date of its Report for the modifications to be made. The Commission must decide if that is reasonable.

UCS contends that the battery system for Unit 2 is inadequate because it includes only two batteries and requires automatic transfer switching. The Director minimizes the problem, but does say (p. 18) that staff "is re-evaluating the acceptability of the automatic transfer feature of this system."

UCS was critical of the auxiliary feedwater system in Unit 2. The Director concedes that improvements are needed, and says that Con Edison has agreed to make several changes. The "hardware modifications," however, have not yet been made; they are to be made in the future "on an expedited basis" (p. 19). Is that sufficient to assure public safety?

UCS argues that the fire protection systems for both units are inadequate. The Director's response (p. 21) is that "many changes have been made, and are scheduled to be made, related to fire protection," and that staff has concluded "that the schedule for completion of the remaining fire protection issues is acceptable." Id. Is it acceptable also to the Commission?

UCS cites generic unresolved safety issues for Units 2 and 3. The Director concedes that these exist but

has decided -- for reasons not specified -- that continued plant operation is acceptable nonetheless. "Furthermore," says the decision (p. 22), "the Staff is making a concerted effort to accelerate resolution of outstanding generic and plant specific actions pertinent to Units 2 and 3." No date is given by which these problems will be resolved. The Commission must decide if this response satisfies its duty to assure safety.

UCS alleges that post-accident monitoring procedures are inadequate at Units 2 and 3. The Director's response (p. 23) is that improvements are being required on a specified schedule, and the licensees are meeting that schedule. Is that schedule adequate according to the Commission's standards?

UCS contends that equipment aging has not been considered for Units 2 and 3, and therefore the equipment's ability to withstand accidents is unknown. The Director acknowledges the validity of this contention, and says that staff "has included consideration of the potential effects of aging in its current program to reevaluate the adequacy of equipment qualification in all operating reactors" (p. 27). In addition, staff "is accelerating its evaluation of the adequacy of the equipment qualification program at the Indian Point plants" (p. 28). No date is given by which these efforts by staff will resolve the problem, but staff is confident that

the plants can remain in operation. Is that confidence justified by the facts?

Finally, UCS contends that asymmetric loads from a postulated accident create a hazardous condition. The Director acknowledges the problem. He says that a generic study of the issue has just been completed, and that plant - specific evaluations for Units 2 and 3 "are currently being reviewed against criteria derived from the Staff's generic study" (p. 28). "Until our review is complete, and modifications to the facilities are made," he says that the plants may continue to operate. Is that decision reasonable?

Commission Review

The conclusion to be drawn from the above discussion is that the Director acknowledges the validity of many of the concerns raised by UCS. But because staff says it has already begun taking steps to study or address these problems, continued operation of the plants is said not to constitute a risk which staff would regard as unacceptable. We submit, however, that UCS should be given the opportunity to rebut staff's conclusions and to demonstrate that the risk is unacceptable. Staff's assurances should not be accepted by the Commission without careful scrutiny. And, staff's notion of what risk is acceptable should not be controlling. Especially in heavily-populated areas superior design should be required, whereas

staff is apparently ready to accept many deficiencies in design for the time being.

We urge the Commission to hold further proceedings itself on the UCS contentions. Since the Indian Point plants evidently pose 20% or more of the total accident risk attributable to nuclear plants in the United States, the issues raised are of sufficient importance to require the direct attention of the Commission. The issues are too important for the decision to be left to a licensing board. We urge the Commission to appoint a licensing board to take evidence in an adjudicatory hearing and then certify the record to the Commission for resolution. The hearings should be held in the vicinity of the Indian Point site. All testimony, of course, should be subject to cross-examination.

Many issues need to be explored in this formal proceeding, including the following:

1. Is the Director correct in concluding that the design questions raised in the UCS petition do not pose an unacceptable risk to the 20 million people living within a 50-mile radius of the plants?

2. Is there any assurance that the long-term design improvements under consideration -- including core retention devices and filtered venting system -- can be

installed within two years? Are any of them still in the research or development stage?

3. Is there any assurance that those proposed design improvements will, in fact, reduce the danger of an accident at Indian Point to an acceptable level? When he briefed the Commissioners on his recommendation, Mr. Denton displayed a chart purporting to show that such changes, under certain circumstances, would reduce the societal risk of an accident at Indian Point substantially. Is there a firm basis for that claim? Is the chart based upon correct data and assumptions? And, what are the exceptions?

4. Are proposed design improvements, even if they increase the evacuation time by a number of hours, adequate if New York City or other affected areas nonetheless could not be evacuated in that extended period of time?

5. Are the interim operating procedures ordered by the Director adequate to assure public safety until the proposed design improvements are installed in two years?

6. Is the Indian Point site suitable for continued operation of two nuclear plants?

Since the Director has said that the interim measures ordered by him coupled with the proposed design improvements will meet all of the concerns raised by UCS and make the plants

safe to operate, he should have the burden of proof on those issues.

It would not be an appropriate response to the UCS petition to initiate a generic rulemaking on nuclear plants in high-density population areas. The petition is very site-specific, detailing siting and design issues at the Indian Point plants. A generic proceeding would not deal with these issues. Therefore, a site-specific hearing is required. Since Indian Point itself is probably the site in the highest density area, the Commission through this specific proceeding could give some consideration to the broader question -- but on a concrete record rather than a sea of abstractions. Moreover, rulemakings can last for years. The question of the safety of the Indian Point plants in this highly-populated region should not wait that long for resolution.

Needless to say, credibility itself is in issue here. The Commission's handling of the UCS petition to date has been characterized by the New York Times, in an editorial on February 27, 1980, as "cavalier," and the public session on February 5, 1980 has been seen as a "kangaroo conference". Whether fair or not, that is the public perception: that a petition raising serious safety questions is being rejected cavalierly despite the possible dangers to public safety.

In urging the Commission to hold hearings on the UCS petition, the Times said:

The commissioners need to devise some forum in which the critics can make their best case for shutting the plants down and can cross-examine the regulatory staff to bring out its underlying assumptions. The reactors at Indian Point and Zion constitute a large part of the total risk to the American population from nuclear power. Their fate should not be determined in behind-the-scenes deals between a handful of regulators and nuclear plant officials.

(Latter emphasis added). A copy of the editorial is annexed to this Statement.

CONCLUSION

The Commission should convene a licensing board to take evidence in an adjudicatory hearing limited to Indian Point. The record should then be certified to the Commission for decision.

Dated: March 3, 1980

Respectfully submitted,

ROBERT ABRAMS
Attorney General of the
State of New York
By


EZRA I. BIALIK
Assistant Attorney General
Environmental Protection Bureau
2 World Trade Center
New York, New York 10047
Tel. No. (212) 488-7565

Let Nuclear Critics Make Their Case

The nuclear critics who are trying to shut down the reactors at Indian Point, 35 miles up the Hudson from midtown Manhattan, complain that the regulatory game is rigged against them. They are probably right. Consider the cavalier treatment given a recent petition raising serious questions about the safety of the site.

The petition was submitted to the Nuclear Regulatory Commission last September by the Union of Concerned Scientists, one of the more responsible groups critical of nuclear power. It called for Reactors 2 and 3 to be shut down while the commission determined whether the site, in such a populous area, was suitable, and if so, whether added safety features were needed. The proposal was hardly radical. Everyone agrees no reactor should or would be built today in such a densely populated area, and so it was legitimate to ask whether reactors should continue to operate on such a site.

It seemed then, as now, that the chance of a catastrophic accident was so small, and the cost of a shutdown so high, that the reactors should probably keep operating for the rest of their useful lives. But we were not sure, and we looked forward to a full airing of the issues.

What happened? The petition was referred to the staff of the Nuclear Regulatory Commission, which was already considering safety improvements for Indian Point and for the Zion site, north of Chicago. That staff, of course, is the very group that has allowed these reactors to operate for years. It is hardly likely to shut them down now and admit that past practice was a

terrible mistake. (It did order Indian Point 1, which had long been shut down, closed permanently.) As is customary, the staff met privately with the utilities and negotiated an agreement on safety improvements and further studies.

Then, a public meeting was staged. The critics, still unaware of the staff's final plan, had to speak first; the staff then presented its plan. And the five commissioners, who were also hearing the plan for the first time and were in no position to ask penetrating questions, told the staff to go ahead and carry out the plan. There was no sign at any point in this kangaroo conference that the possibility of a complete shutdown had been given the serious attention it deserves.

This is no way to reassure the public that important questions of safety are being analyzed carefully and impartially. The commissioners are now — after the fact — seeking comments on the merits of the planned improvements and on whether they should hold further hearings. Our vote is an unqualified yes.

The commissioners need to devise some forum in which the critics can make their best case for shutting the plants down and can cross-examine the regulatory staff to bring out its underlying assumptions. The reactors at Indian Point and Zion constitute a large part of the total risk to the American population from nuclear power. Their fate should not be determined in behind-the-scenes deals between a handful of regulators and nuclear plant officials.

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

EZRA I. BIALIK, being duly sworn, deposes and says that he is an Assistant Attorney General of the State of New York; that he has read the foregoing "Comments of Robert Abrams, Attorney General of the State of New York", that the statements contained therein are true to the best of his knowledge, information and belief.

Ezra I. Bialik
EZRA I. BIALIK

Sworn to before me this
3rd day of March, 1980

Seryl Kudon
Notary Public of the State
of New York

SERYL KUDON
Notary Public, State of New York
No. 0 10053
Qualified in New York County
Commission Expires March 30, 1980

CERTIFICATE OF SERVICE

I hereby certify that I am this day serving by U.S. mail the foregoing "Comments of Robert Abrams, Attorney General of the State of New York", upon each person designated on the attached sheets.

Dated at New York, New York, this 3rd day of
March, 1980.

Ezra I. Bialik
EZRA I. BIALIK

Samuel J. Chilk
Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Chairman John F. Ahearne
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Commissioner Victor Gilinsky
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Commissioner Richard T. Kennedy
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Commissioner Peter A. Bradford
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Commissioner Joseph Hendrie
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

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

Harold R. Denton, Director
Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Ellyn R. Weiss, Esq.
Sheldon, Harmon & Weiss, Esqs.
1725 I Street, N.W.
Suite 506
Washington, D.C. 20006

Mr. Robert Pollard
Union of Concerned Scientists
1725 I Street, N.W.
Suite 601
Washington, D.C. 20006

Mr. George T. Berry, President and
Chief Operating Officer
Charles Pratt, Esq.

Power Authority of the State
of New York

10 Columbus Circle
New York, New York 10019

Mr. William J. Cahill, Vice President
Brent L. Brandenburg, Esq.

Joyce P. Davis, Esq.
Consolidated Edison Company of
New York, Inc.

4 Irving Place
New York, New York 10003

Mr. J. P. Bayne, Resident Manager
Indian Point 3 Nuclear Power Plant
P.O. Box 215

Buchanan, New York 10511

Mr. J. W. Blake, Ph.D., Director
Environmental Programs
Power Authority of the
State of New York

10 Columbus Circle
New York, New York 10019

Honorable George Begany
Mayor, Village of Buchanan
188 Westchester Avenue
Buchanan, New York 10511

White Plains Public Library
100 Martine Avenue
White Plains, New York 10601

Joseph D. Block, Esq.
Executive Vice President
Administrative
Consolidated Edison Company
of New York, Inc.
4 Irving Place
New York, New York 10003

Richard Remshaw
Nuclear Licensing Engineer
Consolidated Edison Company
of New York, Inc.
4 Irving Place
New York, New York 10003

Natural Resources Defense Council
1725 I Street, N.W.
Washington, D.C. 20006

Dr. Lawrence R. Quarles
Apartment 51
Kendal at Longwood
Kennett Square, Pennsylvania 19348

Theodore A. Rebelowski
U.S. Nuclear Regulatory Commission
P.O. Box 38
Buchanan, New York 10511

John D. O'Toole
Assistant Vice President
Consolidated Edison Company
of New York, Inc.
4 Irving Place
New York, New York 10003

Carl R. D'Alvia, Esq.
Attorney for the Village of
Buchanan, New York
395 South Riverside Avenue
Croton-on-Hudson, New York 10520

Jeffrey C. Cohen, Esq.
New York State Energy Office
Swan Street Building
CORE 1 - Second Floor
Empire State Plaza
Albany, New York 12223

Director, Technical Development
Programs
State of New York Energy Office
Agency Building 2
Empire State Plaza
Albany, New York 12223

Director, Technical Assessment
Division
Office of Radiation
Programs (AW-459)
U.S. Environmental Protection
Agency
Crystal Mall #2
Arlington, Virginia 20460

Dr. Peter D. G. Brown
Chairman of the Board
Mid-Hudson Nuclear Opponents, Inc.
P.O. Box 666
New Paltz, New York 12561

Mr. Donald K. Ross, Director
New York Public Interest
Research Group, Inc.
5 Beekman Street
New York, New York 10038

Women Opposed to Nuclear Technology
P.O. Box 608
Huntington, New York 11743

Mr. Philip J. Kaplan
Liberal Party of New York State
1560 Broadway
New York, New York 10036

Mr. Larry Bogart
Citizens Energy Council
P.O. Box 285
Allendale, New Jersey 07401

Mr. Robert Horn
Lead and Environmentally Aware
Future
P.O. Box 224
Garden City, New York 11530

Mr. Philip J. Kaplan
Community Board #1 Staten Island
111 Canal Street
Staten Island, New York 10304

Mr. Sam Gdanski
39 Lawrence Place
Spring Valley, New York 10977

Ms. Nancy Brodesky
657 Avenue "Z"
Brooklyn, New York

Ms. Connie Hogart
Westchester Peoples' Action Coalition
255 Grove Street
White Plains, New York 10601

Mr. Miro M. Todorovich
Executive Secretary
Scientists and Engineers for
Secure Energy, Inc.
570 Seventh Avenue
New York, New York 10038

Ms. Joan Holt
New York Public Interest
Research Group, Inc.
5 Beekman Street
New York, New York 10038

Mr. Vito J. Cassan
Assistant General Counsel
Power Authority of the State
of New York
10 Columbus Circle
New York, New York 10019

Mr. George M. Wilverding
Licensing Supervisor
Power Authority of the
State of New York
10 Columbus Circle
New York, New York 10019

Mr. P. W. Lyon
Manager - Nuclear Operations
Power Authority of the
State of New York
10 Columbus Circle
New York, New York 10019

U. S. Environmental Protection
Agency
Region II Office
ATTN: EIS COORDINATOR
26 Federal Plaza
New York, New York 10007

Representative Elizabeth Holtzman
U.S. House of Representatives
Washington, D.C. 20515

Representative Thomas J. Downey
U.S. House of Representatives
Washington, D.C. 20515

Representative Anthony Toby Moffett
U.S. House of Representatives
Washington, D.C. 20515

Representative Ted Weiss
U.S. House of Representatives
Washington, D.C. 20515

Representative Richard L. Ottinger
U.S. House of Representatives
Washington, D.C. 20515

Representative Shirley Chisholm
U.S. House of Representatives
Washington, D.C. 20515

Representative Hamilton Fish, Jr.
U.S. House of Representatives
Washington, D.C. 20515

Representative Frederick W. Richmond
U.S. House of Representatives
Washington, D.C. 20515

Representative Benjamin A. Gilman
U.S. House of Representatives
Washington, D.C. 20515

Representative Jonathan B. Bingham
U.S. House of Representatives
Washington, D.C. 20515

Speaker Stanley Fink
New York State Assembly
Albany, New York

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

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. 50-3
50-247
50-286

COMMENTS OF POWER AUTHORITY
OF THE STATE OF NEW YORK

The Power Authority of the State of New York ("Authority") submits these comments in response to the Nuclear Regulatory Commission's ("Commission's") solicitation on February 15, 1980 of comments on the decision of the Director of the Office of Nuclear Reactor Regulation ("Director") issued on February 11, 1980 concerning the Union of Concerned Scientists' ("UCS") petition filed on September 19, 1979. The Authority respectfully submits that the Commission should decline to review the decision which, so far as affects Unit 3, (1) denied the UCS petition

and (2) made mandatory certain commitments by the Authority concerning the safety of Unit 3. In the event that the Commission determines that further consideration of the societal risk caused by the siting of nuclear power plants in high-density population areas is appropriate, such further consideration should be undertaken through a rulemaking proceeding.

POINT I

THE COMMISSION'S RULES AND PRACTICE
AND THE MANDATE OF SOUND POLICY PROVIDE NO BASIS
FOR REVIEW OF THE DIRECTOR'S DECISION

The February 11, 1980 decision of the Director to deny the UCS petition with respect to Unit 3 ("Director's Decision") was made pursuant to 10 CFR § 2.206 which states the Commission's procedure for instituting show cause proceedings. The Commission's regulations provide that the standard governing whether the Commission should review a Section 2.206 denial of a petition to institute a show cause proceeding is whether the denial results from an abuse of discretion. 10 CFR § 2.206(c)(1).

This standard for Commission review was explained in an earlier Commission decision concerning the Indian Point site, Consolidated Edison Company of New York, Inc. (Indian Point, Units 1, 2, & 3) CLI-75-8, 2 NRC 173 (1975). In that

proceeding the Commission refused to review a denial of a request to institute a show cause proceeding concerning the application of recently developed seismic data to the Indian Point units. The Commission stated that there is no requirement that the Commission review such a denial, even when requested to do so by a member of the public. Id. at 175. Rather, the Commission's review of a denial of a request to commence show cause proceedings should be based upon a determination by the Commission that there has been an abuse of discretion. In determining whether a denial of a request that a show cause proceeding be commenced constituted an abuse of discretion, the Commission established the following criteria: (1) whether the statement of reasons given in denying the request permits rational understanding of the basis for his decision; (2) whether the Director has correctly understood governing law, regulations and policy; (3) whether all necessary factors have been considered, and extraneous factors excluded, from the decision; (4) whether inquiry appropriate to the facts asserted has been made; and (5) whether the Director's decision is demonstrably untenable on the basis of all information available to him. Id. at 175.

These criteria for review of Staff action were recently reaffirmed by the Commission on June 8, 1979. Nuclear Engineering Company, Inc. (Sheffield Low-level Waste Disposal Site), CLI-79-6, 9 NRC 673 (1979). That proceeding involved a licensee's attempt to repudiate its license to operate a low-level radioactive waste disposal site. The Director ordered the licensee to show cause why it should not continue its responsibilities under its license and required the licensee to resume its responsibilities immediately. The licensee appealed to the Commission contending that the Director had abused his discretion in commencing the show cause proceeding. In rejecting this contention, the Commission stated:

...[W]e find that the Director's decision was not demonstrably untenable on the basis of all the information available to him. Consequently, we find that the Director acted well within his discretion in issuing an immediately effective show-cause order.

Id. at 678-79 (emphasis added).

While the Commission is not necessarily limited to reviewing whether there was an abuse of discretion, the Authority respectfully submits that it should, as a matter of good administrative practice, exercise care and restraint in undertaking to

review Staff action. The Commission's five criteria for review of Staff action provide a sound basis, independent of the abuse of discretion standard, for determining whether to review Staff action. The Staff has broad and deep knowledge of the relevant extraordinarily technical issues of nuclear safety. The decisions of the Staff, based on this knowledge and sophistication, should not be casually disregarded. This is particularly true when there is such high public concern over the continued use of nuclear power. It is essential that the Commission respond to true safety issues by using the considered and responsible judgment of the Staff concerning nuclear safety.

Examination of each of the five criteria for Commission review of Staff action, in light of the pertinent facts at issue in the case of the Indian Point plants, reveals that no basis for Commission review of the Director's Decision exists. The Decision permits a reasonable understanding of what factors were relied upon, that the inquiry leading to the Decision was sufficiently thorough and not based on extraneous issues, and that the Decision is not demonstrably untenable.

A. Stated Reasons Permit Rational Understanding of Basis for the Decision

The reasons for the Director's Decision were set forth

extensively, first, in the oral presentation made by the Director and other members of the Staff to the Commission on February 5 and 6, 1980; second, in the Director's Decision itself; and, third, in the materials annexed to the decision, particularly the Director's Confirmatory Orders, concerning certain interim measures, issued February 11, 1980. The Director's Decision addresses the points raised by the UCS petition and details the rationale and evaluations performed by the Staff in arriving at the conclusion that the UCS petition should be denied with respect to Indian Point Units 2 and 3. The thorough discussion of the issues in the Director's Decision and the Director's detailed presentation to the Commission on February 5, 1980, in which both his philosophy of the appropriate level of safety and his basis for assurance that the plants would meet that level were set forth, permit a rational understanding of the basis for the decision.

Review of the Director's Decision would necessarily involve more than merely delineating the reasons for the Staff action, as those reasons are detailed in the Decision. Rather, if the Decision is to be reviewed, it must be because the Commission disagrees with the conclusions reached by the Staff, either taken individually or the manner of balancing competing factors.

B. The Director Has Correctly Understood Governing Law, Regulations, and Policy

The UCS petition does not assert that continued operation of Unit 3 will constitute a violation of any Commission rule, regulation or policy. Rather, the essence of the petition is that the Commission should establish a new standard of safety for plants in high-density population areas. Thus, this criterion for review is not particularly pertinent in this instance. In any event, the Director's Decision, at page 30, indicates that since being licensed, Indian Point Units 2 and 3 have been significantly modified to meet Commission safety and security requirements. The Authority submits that it is clear that the Director has correctly understood governing law, regulations and policy.

C. All Necessary Factors Considered and Extraneous Factors Excluded

The Staff is conducting a thorough, ongoing investigation of all safety aspects of the operation of the Indian Point units as well as the two Commonwealth Edison Zion units. This study, for which a task force has been established, has gone well beyond the issues raised in the UCS petition. The thoroughness of this study and results that it has already produced, are ample proof that in the Director's Decision, while extraneous factors were given no weight, all necessary

factors were considered.

While the Staff's investigation, both prior and subsequent to the filing of the UCS petition, of the safety of Indian Point cannot be detailed briefly, several examples will indicate that the Staff's continuing investigation is appropriately considering the pertinent issues of nuclear safety. The fire protection claim raised anew by the UCS in its petition was previously the subject of Staff and Commission review during their consideration of the earlier and distinct UCS petition for rulemaking filed on November 4, 1977 and the UCS petition for reconsideration filed on May 3, 1978. As a result of that earlier review, extensive modifications to the fire protection system at Unit 3 have been completed and additional modifications are now under preparation. The material aspects of Staff's investigation of fire protection at Unit 3 and the Authority's response to Staff's directions for changes at Unit 3 is addressed on pages 20 and 21 of the Director's Decision.

The applicability to Indian Point of the unresolved safety problems listed in the Commission's Program for the Resolution of Generic Issues Related to Nuclear Power Plants, NUREG-0410 (January 1, 1978), has also been the subject of

intense investigation and review by Staff. As noted on page 21 of the Director's Decision, Staff has evaluated unresolved generic safety issues as they apply to Unit 3 and formulated a plan of action for their resolution. In addition, Staff has carefully examined Indian Point Unit 3 with respect to the lessons learned at Three Mile Island. The Staff's investigations and requirements of the Authority are detailed in the Director's Decision.

The issue of emergency planning, both generally and in high-density population areas, has recently been the subject of intensive examination by Staff as indicated on pages 7 through 12 of the Director's Decision. Concurrent with Staff's recommendations for generic improvements in emergency planning, the Authority commenced an extensive cooperative effort, together with the appropriate local officials, to prepare evacuation plans for an emergency planning zone surrounding Indian Point. The Authority is now providing extensive expert assistance to state and local governmental bodies to effect emergency plans. As part of this effort an analysis of the time required to evacuate the public from a 10 mile area surrounding Indian Point was submitted to the Commission on January 31, 1980. This extensive effort by the Authority is not the result of the rulemaking on emergency planning currently

in progress, but, in effect, anticipates the results of that proceeding.

— In addition, the Director independently reexamined the level of safety at Unit 3 in light of the issues raised in the UCS petition. The Staff's task force, as a result of its examination of Indian Point and Zion, has obtained from the Authority a commitment to increase further the plant's operational safety margin by making substantial modifications in administrative areas and design features. In addition, the Authority has agreed to study the appropriateness of installing one or more substantial new engineered safety features - which study is well under way - that would prevent or significantly delay escape of radiation to the general public in the unlikely event of a major nuclear accident.

D. Appropriate Inquiry Has Been Made

The Staff's inquiry has explicitly examined the claims asserted in the petition and broadly examined the safety of the Indian Point plants. As indicated above in subsection C, there was extensive staff inquiry into the questions of fire protection adequacy, unresolved generic safety issues, emergency planning and the need for additional administrative and emergency safeguards at Indian Point.

E. Director's Decision Is Not Demonstrably Untenable

The Director's Decision reflects the considered judgment of the Staff. The experience, training and wisdom of the Staff should not be casually disregarded. The Commission should not, in the absence of a demonstrated instance of error, review the Director's Decision simply to repeat and reexamine the issues that have already been examined by the Staff and detailed in the Director's Decision.

The Commission cannot, as a practical matter, take up each particular technical issue regarding safety of operating nuclear plants. The Commission cannot as a matter of practice act as the technical reviewer of Staff action nor has it the time in its schedule to undertake the extensive investigation that would be required if it chose to do so. The Authority submits that Staff's technical expertise and efforts to date should be recognized and that additional review by the Commission will add nothing to Staff's technical resolution of the issues as presented by UCS.

The Authority respectfully submits, as detailed above, that a basis for a technically supportable challenge to the Director's Decision does not exist and that on the basis

of all available information the Director's Decision is not demonstrably untenable.

The Authority respectfully submits that none of the Commission's proposed criteria for review of the Director's Decision exists and that further consideration of the Director's Decision is thus unnecessary and unwarranted.

POINT II

APPROPRIATE QUESTIONS FOR COMMISSION CONSIDERATION DURING ITS REVIEW OF COMMENTS

Appropriate questions for Commission consideration during its review of comments are: (1) the present level of safety of the Indian Point units, and (2) the cost to society of shutting down the Indian Point plants, whether permanently or for a period during adjudication of the UCS petition. The Authority respectfully submits that after consideration of the comments, should the Commission decide that further review of the Director's Decision is warranted, an informal proceeding would be the most appropriate means to investigate the pertinent facts.

A. The Present Level of Safety of the Indian Point Units

On February 20, 1980 the Authority, together with Consolidated Edison and Commonwealth Edison, made a presentation to the Staff on the level of safety, both present and projected, of the Indian Point plants. In that presentation a number of

substantial differences in the safety features incorporated into the Indian Point units were contrasted with other operating nuclear power plants.

Indian Point was designed with a clear appreciation of the region's high-density population. The design for the plant, therefore, contains a number of safety features which distinguish it from the average pressurized water reactor. The following twelve items indicate the most important of the distinctive design features at Indian Point. A more detailed description of these twelve items is contained in Appendix 1.

- (1) Containment Weld Channel and Weld Channel Pressurization System
- (2) Penetration Pressurization System
- (3) Isolation Valve Seal Water System
- (4) Extra Fan Cooler Capacity
- (5) Post LOCA Hydrogen Control
- (6) Third Auxiliary Feedwater Pump
- (7) Added Containment Radioactivity Removal
- (8) Use of Confirmatory Actuation Signals to Assure Proper Valve Position
- (9) In-containment Core Cooling Recirculating System
- (10) Emergency Diesel Generators
- (11) Gas Turbine Generators
- (12) Additional Service Water Pumps

In addition to detailing for the Staff the differences in plant design, the Authority, together with Commonwealth Edison and Consolidated Edison, compared the probability of a severe accident at Indian Point to the probability of a similarly severe accident at an average plant. The Authority examined the dominant accident sequences presented in the Commission's Reactor Safety Study ("WASH-1400") for pressurized water reactors ("PWR") and identified system differences at Indian Point from the average PWR plant used in the WASH-1400 study that were particularly significant. For example, the Indian Point units' containment fan coolers are redundant to and independent of the containment spray system. This independent system materially reduced the calculation of risk as compared to that in WASH-1400.

The probability curves set forth on Appendix 2 demonstrate both the risk to society as presented by the Director to the Commission on February 5, 1980, and what the Authority considers to be a more accurate comparison of the Indian Point plant's risk to the standard WASH-1400 risk curve. The reference curve (labelled WASH-1400) is the risk curve developed in WASH-1400 based on an average risk of the WASH-1400 model PWR which was based on a study of the Surry reactor at a composite of sixty-eight sites. Appendix 2 also contains a risk

curve, developed by Staff and presented by the Director on February 5, which assumes the Surry reactor is located at the Zion and Indian Point sites. This curve modified the societal risk curve developed in WASH-1400 by adding the population and meteorology characteristics of the Indian Point and Zion sites.

Finally, new curves are shown on Appendix 2 which represent the societal risk of the actual Zion and Indian Point plants. These curves, which consider plant specific aspects, present a dramatically lower societal risk than the reference curve which the Staff apparently believes represents an acceptable level of risk.

The risk scale used in Appendix 2 is the same as used in the presentation on February 5, 1980. The curves are smoothed probability curves as used in WASH-1400 and represent a conservative assessment of risk.

It is important to recognize that the curves of Appendix 2, irrespective of any limitation in probabilistic risk analysis methodology as applied to single specific plant, demonstrate the relative safety of the Indian Point and Zion plants with respect to the risk of other PWRs to the surrounding population. When the Indian Point and Zion plants

are represented as they in actuality exist, that is, with their additional safety features which are not incorporated into the Surry plant, a clear gain in comparative safety results. In fact, the Indian Point and Zion plants are shown by the Appendix 2 curves to be safer than the reference plant curve, labelled WASH-1400, even considering that the population density is greater around the Indian Point and Zion sites than around the reference composite site.

Apart from the plant specific analysis discussed above, analysis following the publication of WASH-1400 and particularly following the accident at Three Mile Island, has altered the risk calculation in several important respects. First, the loss of auxiliary feedwater following shutdown, which was a major contribution to risk in WASH-1400, was found not to be a crucial contributor at Indian Point. Studies following the Three Mile Island accident have indicated that emergency cooling injection systems can provide the cooling necessary to avoid core melt provided the pressurized relief valves are open. For this reason certain accident sequences were deleted from the analysis of Indian Point.

Second, the two WASH-1400 accident sequences involving reactor transients followed by failure of the reactor trip system were deleted. These transients have been analyzed by the appropriate vendors and found not to result in core melting.

Third, the likelihood of one of the five containment failure modes identified in WASH-1400, -- an in-vessel steam explosion generating a missile with consequent containment failure -- has been reduced significantly compared to WASH-1400. Recent data suggests that in-vessel steam explosions are less likely and the probability of that event has consequently been reduced.

These changes in the calculation of the risk and consequences indicate that the comparison of risk of the Indian Point plants to the WASH-1400 standard plant, as presented by the Director to the Commission on February 5, 1980, over-emphasizes the risk to society from Indian Point.

In short, the Staff's estimate of the risk from Indian Point is substantially higher than it should be. The Indian Point plants do not represent an unusual risk, but in fact a lower than average risk. This is, in part, the result of the care taken in the initial design of the plants. The Authority submits that the basis for the Director's Decision is unduly conservative as it does not consider all relevant aspects of plant design.

In addition to the safeguards currently in place, measures are currently being undertaken to assure an even greater degree of safety at the Indian Points plants. These

measures, which are being undertaken jointly by the Authority, Consolidated Edison and Commonwealth Edison, include studies to develop methods of mitigating the effects of severe accidents and reducing the probability that such accidents will occur. These activities by the three utilities are being closely coordinated with the Staff.

B. The Cost of Shutting Down Indian Point

The Authority believes that the Commission, in deciding what level of safety is appropriate, should give consideration to the economic and social dislocations associated with a plant shutdown. Such consideration would be consonant with the declaration of the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011, which directs in Section 1 that atomic energy be developed to, among other things, improve the public welfare and increase the standard of living. The statement of national policy supporting the use of atomic energy for the generation of electricity for the public's use requires the Commission to consider the cost of shutting down Indian Point contrasted with the risk to society from continued operation of the plants.

That economic factors, as well as safety factors, must be considered by the Commission in its decision-making is also evidenced in its regulations. For example, 10 CFR §50.34a

requires specification by an applicant for a construction permit of how levels of radioactive material in effluents to unrestricted areas will be kept "as low as reasonably achievable." This term is defined in §50.33a as:

...as low as is reasonably achievable taking into account the state of technology, and the economics of improvements in relation to benefits to the public health and safety and other societal and socioeconomic considerations, and in relation to the utilization of atomic energy in the public interest.

The continued operation of the Indian Point plants provides a substantial public benefit to electric consumers in the metropolitan New York region. This region has come to depend on petroleum and nuclear fuels for generation of electricity; most of the nuclear power used in the region is generated at Indian Point.

It hardly needs explanation today that oil-fueled generation of electricity inevitably leads to sharply increased costs for electricity with consequent impacts on industrial, commercial and residential electricity consumers. In the metropolitan New York region this cause and effect relationship is exacerbated by the fact that almost all of the petroleum used to produce electricity is imported.

The calculation of the cost of shutting down Indian Point requires the resolution of a number of complex issues. In fact, the only simple fact in the economic consideration of continued operation of Indian Point is the inevitability of the rising cost of imported petroleum. The analysis set forth below does not resolve each question of cost, but presents what the Authority considers to be a realistic estimate of the costs to society of shutting down Indian Point.

It is estimated that operation of the Indian Point plants displaces approximately 20 million barrels of imported oil each year. The shutdown of Indian Point would deprive New York of more than 1,800 Mw of generating capacity which produces the cheapest electricity generated in the New York City-Westchester area.

The shutdown would thus be an economic calamity for New York City. It could cause, for the year 1980 alone, an

estimated increase in costs for the Authority's and Consolidated Edison's ratepayers of about \$700 million, an amount that would escalate dramatically in subsequent years as the cost of imported oil rises.

About 45 percent of such an enormous cost increase would fall on the Authority's public customers, including the Metropolitan Transportation Authority ("MTA") and the City of New York, both of which are experiencing severe financial difficulties. Were the Indian Point plants shut down, the New York City subway system and commuter rail lines alone would suffer an annual increase of about \$100 million in electricity costs. As the MTA already faces a deficit for 1980 of \$200 million, such an increase would jeopardize New York's efforts to maintain the present transit fare and would lead to reduced use of mass transit and increased use of private vehicles.

The additional cost increases brought about by a shutdown of Indian Point would be paid directly by residential, industrial and commercial customers in New York City and Westchester County. These customers are now paying high rates for electricity and they should not be asked to assume new financial burdens caused by a shutdown since the analysis shows the Indian Point plants already meet the safety objective sought by the Director.

In addition to increases in the cost of electricity, the shutdown of Indian Point would lead to increased use of oil burning units with secondary impacts on other oil uses in the New York region, including increasingly scarce and expensive home heating oil. Shutting down the Indian Point plants would dash any real hope in New York City for any deceleration of energy cost increases and would inhibit the City's ability to attract new commercial enterprise.

Ironically, the increases will merely be used to pay for some 20 million barrels of oil which would have to be purchased overseas to replace nuclear-fueled generation, thus further increasing our debilitating dependence on foreign oil as an energy source. In the last analysis, these cost increases would simply be transmitted as new-found and additional tribute to the OPEC cartel, further impairing the nation's balance of trade payments and accelerating its inflationary spiral.

C. An Informal Proceeding Will Afford The Commission An Opportunity For Further Consideration If It Is Required

Should the Commission decide that the Director's Decision warrants further consideration, which the Authority believes it does not, an informal proceeding such as that described in Option No. 5 of the solicitation of comments is preferable to an adjudicatory hearing before a panel of hearing judges or examiner.

An informal presentation in which designated parties would present their views directly to the Commission without the rigidity and strictures of an adjudicatory hearing would be conducive to a full and free exchange of information between all parties. The Authority is confident that in the event the Commission believes that the Director may have abused his discretion, it can satisfactorily demonstrate to the Commission how the unprecedented and extraordinary safety measures at Indian Point will continue to provide operational safety and an acceptable measure of public risk.

In the event that informal proceedings are prescribed by the Commission, the three parties of principal interest, i.e., the Authority, Consolidated Edison, and UCS should be permitted to present their views in writing and orally before the Commission. Such a proceeding should be limited to the two questions previously described, namely (1) the present level of safety of the Indian Point units, and (2) the cost to society of shutting down the Indian Point plants, whether permanently or for a period during adjudication of the UCS petition.

POINT III

THE PUBLIC CAN MOST EFFECTIVELY PARTICIPATE IN REVIEWING THE SAFETY OF PLANTS IN HIGH-DENSITY POPULATION AREAS THROUGH A RULEMAKING

If after the informal proceedings the Commission is still not convinced that the Director's Decision was factually grounded

and well reasoned, a generic rulemaking proceeding should be considered rather than an adjudicatory hearing. An adjudicatory hearing is appropriate to resolve clearly defined issues of fact concerning a particular plant. The UCS petition, by contrast, raises broader issues of what constitutes an appropriate level of safety for plants operating near densely populated areas and how the costs of attaining specified safety levels are to be considered. These issues, while grounded in the facts concerning specific plants, are not limited to Indian Point. Moreover, the resolution of some of these issues will be governed by policy determinations that do not rest on the detailed factual questions at issue. These policy determinations will be founded on considerations of highly technical areas involving the disciplines of engineering, statistics, meteorology as well as others. This type of broad-based investigation, which is not limited to any particular site, is better suited to a rulemaking rather than an adjudicatory type hearing.

The rulemaking proceeding should be structured to address the two major factors comprising risk, i.e. the low probability of a release of radioactivity as a result of an accident and the societal consequences of such a release. The various components which comprise each factor should be identified, evaluated and

standards established. The objective of the proceeding should be to establish a level of acceptable societal risk resulting from operating plants in densely populated areas as compared to the risk imposed on society by plants in less populated areas. The WASH-1400 report could be used as an appropriate reference point for release probability comparison. Proposed administrative and engineering modifications could be analyzed and the resultant reduction in release probability quantified and compared to the same plant using WASH-1400.

Distinct from the determination of release probability yet equally important to the measure of societal risk are the consequences of a release. In this context it is important to note that Staff is currently conducting a rulemaking on improved emergency response planning by state and local agencies. The results of that rulemaking proceeding could also serve as an additional reference point to the licensee of a plant in a densely populated area.

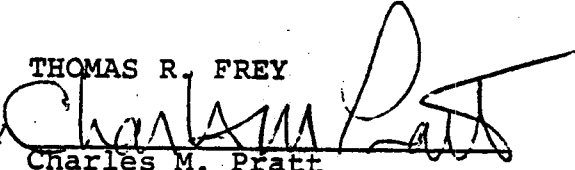
CONCLUSION

The Authority respectfully submits that the Commission, after examination of the Director's Decision and the comments submitted in response to the Commission's solicitation, should not review the Director's Decision. In the event that the Commission believes that further elucidation of the issues is necessary, it may institute an informal proceeding.

The Authority further submits that the issues raised by the petition are essentially not site-specific, but raise broad issues pertinent to a number of sites. Thus, an adjudicatory hearing concerning Indian Point would not provide an adequate procedural opportunity to resolve the issues; a rulemaking proceeding would be far preferable.

Respectfully submitted,

Angel J. Martin, Esq.
of counsel

THOMAS R. FREY
By 
Charles M. Pratt

Attorney for the Power Authority
of the State of New York
10 Columbus Circle
New York, New York 10019
(212) 397-6200

Dated: March 10, 1980

APPENDIX 1
DISTINGUISHING SAFETY FEATURES
INCORPORATED INTO INDIAN POINT UNIT NO. 3

— (1) Containment Weld Channel and Weld Channel Pressurization System

All containment liner welds are enclosed by continuous linear channels welded to the liner to form a redundant seal at the joints of liner plates. Those channels which cover joints not buried in concrete are pressurized with air to a pressure exceeding calculated containment peak pressure. This eliminates leakage at liner plate joints.

(2) Penetration Pressurization System

In addition to the normal pressurization of electrical penetrations (with dry nitrogen), mechanical penetrations are pressurized with air to a pressure above calculated containment peak pressure. This eliminates leakage through penetration assemblies.

(3) Isolation Valve Seal Water System

Those double isolation valves, normally closed on a containment isolation signal, in water and small air systems have the area between valves filled (if needed) and maintained in a filled condition at a pressure exceeding calculated containment design pressure by this system. This eliminates any leakage of containment atmosphere via an open (or ruptured) line through the redundant isolation valves.

(4) Extra Fan Cooler Capacity

Each containment has 5 fan cooler units, 3 of which are required for post accident containment cooling. The added capacity provides assurance of system availability.

(5) Post LOCA Hydrogen Control

Each unit has both recombiner and post-LOCA containment purge capability. The recombiner capability was added to provide added conservatism.

(6) Third Auxiliary Feedwater Pump

Each unit has 3 auxiliary feedwater pumps per unit. Two of these are 100% capacity motor driven pumps and the third is a 200% capacity steam turbine driven pump. All three pumps are intertied through lines and valves designed for an active or passive failure. This extra capacity over a 2-100% capacity pump configuration provides added assurance of system availability.

(7) Added Containment Radioactivity Removal

Each fan cooler unit is equipped with HEPA and charcoal filters for post-accident particulate and iodine removal.

(8) Use of Confirmatory Actuation Signals to Assure Proper Valve Position

Confirmatory Emergency Safeguards Features (ESF) actuation signals are sent to power operated valves which are not required to change position. This ensures that, if a valve had inadvertently been placed in an incorrect position, it would restore to its proper position upon ESF actuation. This has been applied to critical safety systems valves.

(9) In-Containment Core Cooling Recirculating System

Two recirculating pumps located inside the containment provide for sump recirculation into the hot leg. These are in addition to the reactor heat removal.

(10) Emergency Diesel Generators

Three diesel generators are available for each unit. Two generators are adequate to meet engineered safeguards load.

(11) Gas Turbine Generators

One gas turbine located onsite and two others located in close proximity provide diverse energy sources. Interconnections exist for supplying power from these gas turbine units to both units.

(12) Additional Service Water Pumps

Three 100% capacity service water pumps are available per unit. In addition, three additional pumps provide balance of plant cooling requirements and these pumps can be used for safety systems.

Cost (per React. yr.)

Zion & Indian Point Plants
at Their Own Sites (Base
Plants with No Changes & no
credit for steam explosion
technology)

WASH-1400.
AT ZION SITE

WASH-1400 AT
INDIAN POINT
SITE

WASH-
1400

APPENDIX 2

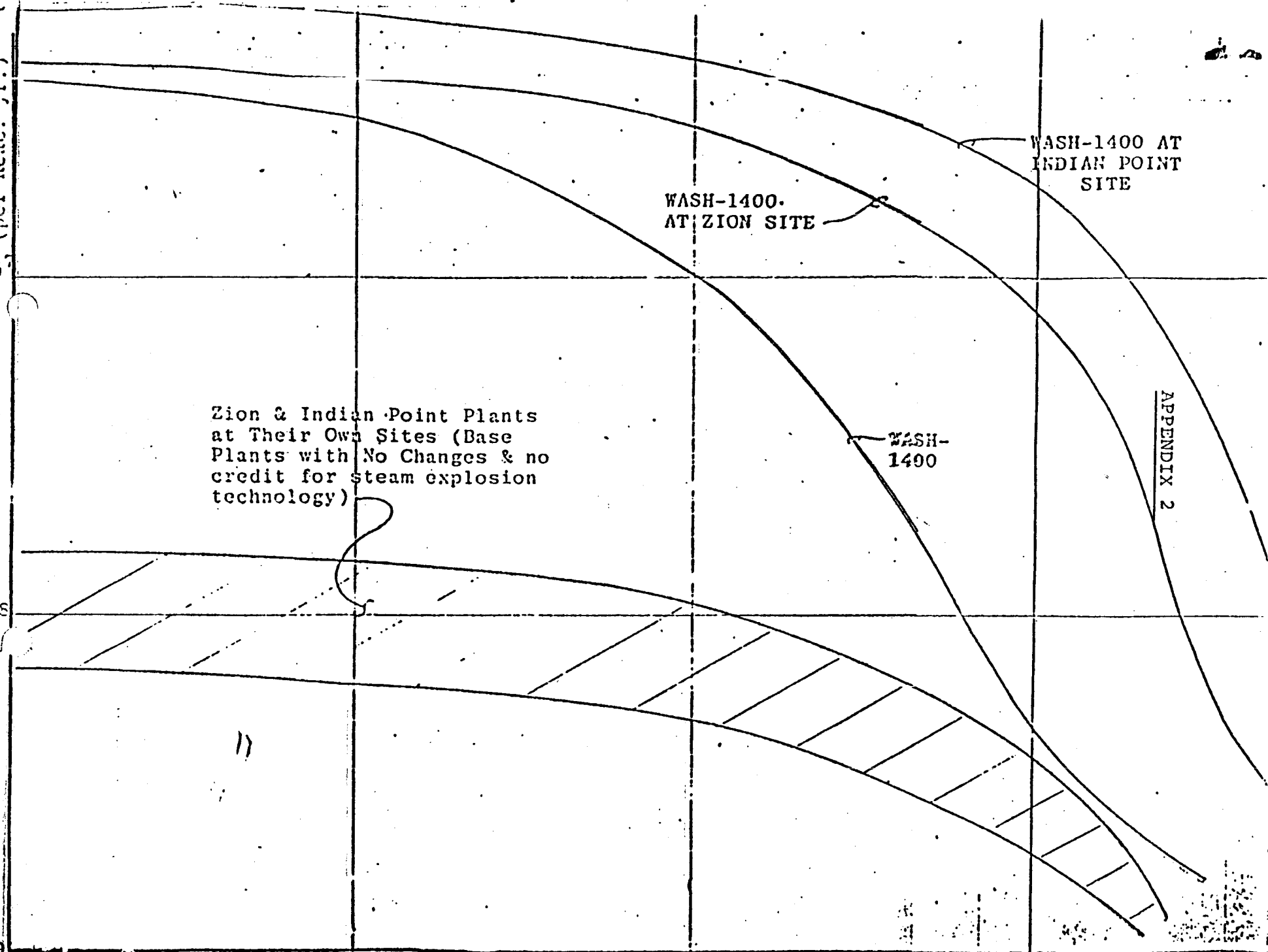
0.9

10

100

1000

Risk





NEW YORK PUBLIC INTEREST RESEARCH GROUP, INC.

5 Beekman Street • New York, N.Y. 10038 • (212) 349-6460

Offices in: Albany, Binghamton, Brooklyn, Buffalo, Long Island, Manhattan, New Paltz, Queens, Staten Island, Syracuse, Utica

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMENT TO THE COMMISSION

ON DIRECTOR'S DECISION TO DENY
UNION OF CONCERNED SCIENTISTS' PETITION
ON INDIAN POINT

AND

REQUEST FOR FURTHER PROCEDURAL
CONSIDERATION BY THE COMMISSION

SUBMITTED BY

THE NEW YORK PUBLIC INTEREST RESEARCH GROUP, INC.

IN RESPONSE TO FEDERAL REGISTER NOTICE

DOCKET NUMBERS: 50-3, 50-247, 50-236

dated: March 10, 1980

COMMENT TO THE COMMISSION

As we have stated previously before the Commission, the New York Public Interest Research Group, Inc. believes that the operation of the Indian Point nuclear plants constitutes an unacceptable risk to the 19-20 million people living within 50 miles of the site.

The lesson of Three Mile Island is starkly and horrifyingly simple: serious accidents can occur at nuclear power plants and surrounding populations may have to be evacuated. With this in mind, we submit that it is the Commission's responsibility -- even before consideration is given to the procedural matters upon which public comment has been solicited -- to immediately suspend operation at the Indian Point plants. We consider it an act of negligence that the Commission permitted these plants to go back on line in February and we urge you to delay no longer in taking this initial action to protect an unconsenting and defenseless population which could not be evacuated in the event of a serious accident at Indian Point.

Our views with respect to the Director's decisions and the procedural options for further consideration of the petition of the Union of Concerned Scientists are as follows:

1. We find the Director's decisions woefully inadequate and unresponsive to the grave safety issues raised by the Union of Concerned Scientists and by the numerous organizations, citizens, public officials, elected representatives, and newspapers who have expressed their concerns about Indian Point in recent months.

2. We believe that it is incumbent upon the Commission, in accordance with its Congressionally mandated responsibility to safeguard the public, to

convene, at the very earliest possible date, an Atomic Safety and Licensing Board for the explicit purpose of taking testimony and compiling an evidential record on each and every issue raised by the Union of Concerned Scientists and other concerned organizations and individuals with respect to the Indian Point nuclear plants. The Board should be instructed to place particular emphasis on issues relating to siting, especially existing evacuation and other emergency capabilities for the Greater New York Metropolitan area, as well as on the potential consequences for that region of a Class 9 accident.

3. Upon completion and certification of this record by the ASLB, the Commission should then decide the merits of the Union of Concerned Scientists' petition as well as any additional relevant matters raised by other participants with respect to the Indian Point plants. Recommendations made by the ASLB should be taken as advisory only, with all decision making authority retained by the Commissioners themselves.

4. Operation of Indian Point Units 2 and 3 should be suspended immediately and should remain so until all issues in this matter are resolved.*

NYPIRG is convinced that the above procedure is the only one which would provide the Union of Concerned Scientists and other participants with adequate formal safeguards in the presentation of their case, while at the same time providing protection for the public (by means of suspension of operations) during the period in which the Indian Point issues are being resolved.

We would like to comment, now, on some other matters which concern us with respect to the Nuclear Regulatory Commission's handling to date of the Union of Concerned Scientists' petition.

* The reserve capacity maintained by Consolidated Edison and P.A.S.N.Y. are more than adequate to permit this suspension without loss of electricity in the affected area.

Though we have been deeply disturbed by the Commission's previous complacency in this entire matter, we are hopeful that at this time you are giving serious and responsible consideration to the unique and grave situation of Indian Point (a plant that should never have been built).

Perhaps if the Union of Concerned Scientists had filed its petition after the release of the Kemeny and Rogovin reports, when Congressional and public attention and criticism was first aroused, you would have taken more seriously the UCS position on the matter of referring the petition to staff. In our statement before the Commission on February 5, 1980, we stated our view that there was a serious conflict of interest involved in delegating review of the UCS petition to Mr. Denton and his staff, since it is they who are most responsible for the conditions as they exist at Indian Point.* We asked: "How can he possibly be expected to be adequately objective about the petition when conceding its merits might reflect directly on his past performance as regulator?" We think that Mr. Denton's rejection of the petition with respect to Indian Point's two operating units, and his conclusion that they pose no unacceptable risk to the public was inevitable. It came as no surprise to us -- though we were quite shocked that he was able to be so cavalier about the danger to the public in spite of his estimation that Indian Point, together with Zion, accounts for approximately 40% of all risk attributable to nuclear power generation in this country.**

*In this regard, we are concerned about the possible conflict of interest of Commissioner Hendrie implied by the UCS in item 69 of its petition. Given his prior participation in reviews of the Indian Point plants, it would be appropriate for Mr. Hendrie to disqualify himself from future decisions on this matter, including consideration of the procedural options now before the Commission.

**When we recently inquired about the basis of this estimation and asked what portion of it is attributable to Indian Point, we were told that the calculation was based on methods suggested in a 1976 M.I.T. thesis (which
(continued next page)

By immediately endorsing Mr. Denton's decisions, rather than taking them under advisement for further Commission review and decision-making, the Commission compounded its error in this matter. If it is true that your rules (for 2.206 proceedings) dictate that in order to review Mr. Denton's decisions you would have to somehow find that he had abused his discretion, that problem should have been anticipated and avoided by following the procedure requested by the UCS originally.

Without attempting to comment on the purely technical aspects of the Director's decisions, we wish to take strong exception to some of Mr. Denton's basic assumptions (upon which he justified continued operation of Indian Point). We reject his assumption that it is possible to "compensate" for high population density by unproven techniques -- "under consideration" for possible application some time in the nebulous future -- for mitigating or slowing down the course of an accident as a substitute for rapid evacuation capability. We are not at all reassured by the notion of a "core-catcher" which might give us $4\frac{1}{2}$ days for evacuation (instead of $1\frac{1}{2}$) when it has been estimated that it would take two weeks to evacuate the Bronx! (We ask you to consider carefully the entire evacuation issue as we discussed it in our February 5 presentation before the Commission. Copy Enclosed.)

Another of Mr. Denton's assumptions which is unacceptable to us is that simply because a plant (e.g., Indian Point) is already in operation, it need not meet standards required for new or future nuclear plants. This may be a very convenient posture from the standpoint of both the regulators and the utilities involved; it is hardly a responsible one with respect to

** (cont'd) we have learned was supervised by Dr. Rasmussen, whose previous risk-assessment work has been widely criticized). We wonder about the 40% estimation and have reason to believe the actual risk may be even greater, considering the population, evacuation, and safety problems associated with Indian Point.

public safety. Indeed, NYPIRG views this practice of applying one set of standards to old plants and another to new plants as highly reprehensible, if not downright immoral. We find the double-standard with regard to siting the most disturbing example. Most people (including Mr. Denton and Mr. Luce of Con Edison) now agree that the Indian Point location would not meet today's siting standards and yet the NRC refuses to apply these standards to the plants now operating there. We hope the Commissioners are prepared to confront this double-standard matter: if Buchanan is not acceptable for new plants, it is not acceptable for old ones!

We wish, at this point, to protest the manner in which Mr. Denton and the General Counsel's office refused to provide us (or, for that matter, the UCS) with any indication of his recommendations prior to the February 5th meeting. When we requested advance information in order that we might comment intelligently, we were told that only Mr. Denton and his staff would know ahead of time what he would recommend. We then asked that we be permitted to present our views after hearing Mr. Denton's briefing instead of before. This request was denied as well. As it turned out, again there was a double standard in effect, one for the UCS and its supporters (and, we are told, the Commissioners), another for the utilities, with whom everything had been neatly worked out beforehand. Another strike against the NRC on the credibility issue!

In closing, we repeat our requests (1) that you promptly suspend operations at Indian Point, (2) that you appoint an ASLB to compile an evidential record on Indian Point, and (3) that you review that record and then decide whether Indian Point can be returned to operation without undue risk to 1/10 of the population of the United States.

We find the other options listed by you unacceptable because they are too non-specific, slow, or lacking in adequate procedural safeguards.

Respectfully Submitted,

Joan Holt

Joan Holt, Project Director
The New York Public Interest Research Group, Inc.
5 Beekman Street
New York, New York 10038

Dated: March 10, 1980

N.Y. TIMES Editorial 2/27/80

Let Nuclear Critics Make Their Case

The nuclear critics who are trying to shut down the reactors at Indian Point, 35 miles up the Hudson from midtown Manhattan, complain that the regulatory game is rigged against them. They are probably right. Consider the cavalier treatment given a recent petition raising serious questions about the safety of the site.

The petition was submitted to the Nuclear Regulatory Commission last September by the Union of Concerned Scientists, one of the more responsible groups critical of nuclear power. It called for Reactors 2 and 3 to be shut down while the commission determined whether the site, in such a populous area, was suitable, and if so, whether added safety features were needed. The proposal was hardly radical. Everyone agrees no reactor should or would be built today in such a densely populated area, and so it was legitimate to ask whether reactors should continue to operate on such a site.

It seemed then, as now, that the chance of a catastrophic accident was so small, and the cost of a shutdown so high, that the reactors should probably keep operating for the rest of their useful lives. But we were not sure, and we looked forward to a full airing of the issues.

What happened? The petition was referred to the staff of the Nuclear Regulatory Commission, which was already considering safety improvements for Indian Point and for the Zion site, north of Chicago. That staff, of course, is the very group that has allowed these reactors to operate for years. It is hardly likely to shut them down now and admit that past practice was a

terrible mistake. (It did order Indian Point 1, which had long been shut down, closed permanently.) As is customary, the staff met privately with the utilities and negotiated an agreement on safety improvements and further studies.

Then, a public meeting was staged. The critics, still unaware of the staff's final plan, had to speak first; the staff then presented its plan. And the five commissioners, who were also hearing the plan for the first time and were in no position to ask penetrating questions, told the staff to go ahead and carry out the plan. There was no sign at any point in this kangaroo conference that the possibility of a complete shutdown had been given the serious attention it deserves.

This is no way to reassure the public that important questions of safety are being analyzed carefully and impartially. The commissioners are now — after the fact — seeking comments on the merits of the planned improvements and on whether they should hold further hearings. Our vote is an unqualified yes.

The commissioners need to devise some forum in which the critics can make their *best case* for shutting the plants down and can cross-examine the regulatory staff to bring out its underlying assumptions. The reactors at Indian Point and Zion constitute a large part of the total risk to the American population from nuclear power. Their fate should not be determined in behind-the-scenes deals between a handful of regulators and nuclear plant officials.

DOCKET
PROD. & UTIL. FAC. 50-3,247,286
S&D

Westinghouse
Electric Corporation

Water Reactor
Divisions

Nuclear Technology Division

Box 355
Pittsburgh, Pennsylvania 15230

March 10, 1980

NS-TMA-2213

Mr. Samuel J. Chilk, Secretary
U. S. Nuclear Regulatory Commission
1717 H Street
Washington, D.C. 20555

Dear Mr. Chilk:

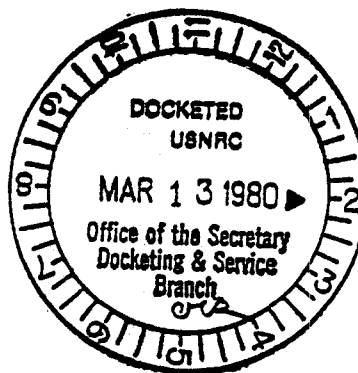
Subject: Denial of UCS Petition

This is in response to the Solicitation of Comment on Director's Decision under 10CFR2.206 in the matter of Consolidated Edison Company of New York (Indian Point Units Nos. 1 and 2) and Power Authority of the State of New York (Indian Point Unit No. 3) which appeared at 45 Fed. Reg. 11969. Westinghouse recommends that the Commission:

1. decline to review the Director's denial of the UCS petition with regard to Units 2 and 3,
2. request the Director to reevaluate the need for the extraordinary interim measures required by Appendix A of the Director's Confirmatory Order, and
3. initiate a generic rulemaking proceeding to provide needed policy guidance on siting and the role of population density in reactor safety decisions.

The Indian Point Units 2 and 3 were designed with special attention to the site characteristics. Engineered safety features were incorporated in the design to ensure that regulatory requirements would be met and that there would be no undue risk to the health and safety of the public because of the site meteorology and projected population densities. The features which were incorporated include:

1. containment weld channels and weld channel pressurization system,
2. containment penetration pressurization system,
3. containment isolation valve seal water system.



4. five containment fan coolers (three required for post-accident cooling),
5. post-LOCA hydrogen recombiners and containment purge capability,
6. steam turbine driven auxiliary feedwater pump (200% capacity) backing up two 100% capacity motor driven auxiliary feedwater pumps,
7. post-LOCA containment cleanup system to remove particulate and iodine radioisotopes from the containment atmosphere, and
8. confirmatory emergency safeguards actuation signals to reposition critical valves if they are not in their proper position.

The licensing reviews of Indian Point Units 2 and 3 included extensive consideration of the site characteristics and the safety features incorporated in the plants at both the construction permit and operating license stages. Extensive contested public hearings were also conducted in which these matters were considered, leading to the conclusion that the plant designs were adequate for the site.

On February 20, 1980, Consolidated Edison, Commonwealth Edison and the Power Authority of New York presented a summary of the results of their 60-day reliability and risk evaluation study for the Indian Point and Zion units. This was documented in a letter from the three utilities to the Director of Regulation dated February 25, 1980. Last week, the results of the study were presented to the ACRS Subcommittee on TMI Unit 2 Accident Implications on March 5, 1980, and to the full ACRS on March 7, 1980. The detailed evaluations of the study show that both the Indian Point and Zion Units, as built, are lesser contributors to risk than the WASH-1400 average plant. The NRC Staff indicated in the ACRS subcommittee meeting that their evaluations, which led to the interim measures of the Director's Confirmatory Order, were based on the WASH-1400 average plant (Surry) and thus did not take into account the affect on risk of the additional engineered safety features of Indian Point or Zion.

On the basis of this information, it should be clear that the Director's denial of the UCS petition and the Confirmatory Order for Indian Point Units 2 and 3 are conservative and cannot be construed to be an abuse of discretion. It is on this basis that Westinghouse recommends that the Commission decline to review the Director's denial.

The Director's population-based assumptions leading to the imposition of extraordinary interim measures at Indian Point and Zion illustrate the need for a meaningful opportunity for timely participation by the entire industry in the development of an overall safety policy relating to near-site population

March 10, 1980

HS-TMA-2213

differences through a generic rulemaking proceeding. The Director stated in his Confirmatory Order that, due to the relatively high population density surrounding the Indian Point site as compared to other nuclear power plant sites, the Indian Point site is believed to present a disproportionately high contribution to the total societal risk from reactor accidents. It was on this basis that the Director had the HRC Staff initiate the review of what additional procedural measures and/or design changes can and should be implemented to further reduce the probability of a severe reactor accident and/or to reduce the consequences of such an accident which led to the extraordinary interim measures incorporated in the Director's Confirmatory Order.

By HRC Staff's own admission before ACRS, the Staff did not consider the additional engineered safety features incorporated in the Indian Point and Zion Units, specifically to cope with the relatively high population density surrounding the site, in assessing the relative societal risk. The utility study which does take into account the actual plant design, although it has not yet been reviewed in detail by the Staff, is strong evidence that the Director's premise was incorrect and that adequate assurance of safety exists at Indian Point and Zion without extraordinary interim measures. On this basis, Westinghouse recommends that the Commission request the Director to evaluate the societal risks at sites representing an appropriate range of population densities, based upon the actual design features of the nuclear plants at those sites. The need for the extraordinary interim measures at Indian Point and Zion, or at any other site for that matter, should be reevaluated on the basis of this work. To the extent that any reduction of power output would result from interim measures, the incremental risks from replacement power generated by fossil fuels should be compared to any expected reduction of risks from the nuclear plant to ensure that any measures adopted in fact reduce the total risk rather than to simply transform it to a different type of risk.

Societal risk evaluations, based upon actual nuclear plant installations, are an important first step in reaching any policy decisions with respect to siting and the role of population density in safety decisions. Such evaluations should be conducted in the context of a generic rulemaking proceeding to provide a sufficient opportunity for the entire industry to submit information and to evaluate and rebut materials relied upon by the Staff or submitted by others. Only in this manner can the final recommendations of the Staff be based upon all the available relevant material and consider the views of interested persons.

There are numerous documents on the public record which point to the need for a generic rulemaking proceeding. In SECY-78-137, "Assessments of Relative Differences in Class 9 Accident Risks in Evaluation of Alternatives to Sites with High Population Densities," dated March 7, 1978, the HRC Staff requested Commission concurrence with a change in regulatory requirements concerning the treatment of Class 9 accidents in evaluating reactor sites having high population density. This matter was never resolved. NUREG 0478, "Metropolitan Siting - A Historical Perspective," dated October 1978, illustrated various issues and positions taken by the Staff and attempted to clarify some of the

March 10, 1980

NS-TMA-2213

bases for the Staff's current practices. NUREG 0625, "Report of the Siting Policy Task Force," dated August 16, 1979, provided opinions and recommendations to the Commission which they proposed be adopted through rulemaking. Both The Kemeny Commission and Rogovin reports recommend the use of rulemaking as the proper means for the Commission to develop and promulgate policy guidance for the Staff. The relevance of these recommendations becomes apparent when one considers the Report of the Siting Policy Task Force. This report, which makes important recommendations for which Commission approval is sought, did not have the benefit of peer review or comment by interested persons. The 10-page bibliography at the end of the report contains not one reference to any document originating outside the NRC. Furthermore, of the NRC documents, not one is a reference to any docket for any of the many contested licensing proceedings in which siting issues were adjudicated. The same population-based assumptions which influenced the interim decisions on Indian Point and Zion also pervade the recommendations of NUREG-0625. Westinghouse recommends that the Commission request the Siting Policy Task Force to seek industry comments on NUREG-0625 and to reconsider their recommendations in the light of comments received together with the Director's reevaluation of the societal risks for actual nuclear facilities.

The Commission also should publish a notice to the effect that actions are being taken to establish a record upon which necessary overall policy decisions can be made relating to near-site population differences. The Commission, in its Memorandum and Order dated September 14, 1979, in the matter of Offshore Power Systems, announced its intent to complete the rulemaking on the question of the environmental consideration of Class 9 accidents in land-based plants. On December 19, 1979, the Commission published a proposed rule on emergency plans. On February 13, 1980, the NRC announced that the FEMA/NRC Steering Committee had developed revised interim guidance and acceptance criteria for emergency planning and preparedness. In draft 2 of NUREG-0560, "NRC Action Plans Developed as a Result of the TMI-2 Accident," dated January 23, 1980, the NRC Staff proposes to recommend rulemaking proceedings on Siting and on Consideration of Degraded or Melted Cores in Safety Review. Important issues involved in all of these are interrelated because of common technical considerations and the inescapable interaction between plant design and operation with safety, environmental and emergency planning considerations. Furthermore, they are all affected by the Director's population-based assumptions. Westinghouse recommends that the Commission take the necessary actions to develop an overall plan for dealing with these matters so that underlying issues are resolved in an orderly non-duplicative process leading to consistent overall policy decisions based upon an adequate public record. If decisions need to be made prior to the conclusion of these proceedings, they should be made with due consideration of the record as developed at the time. If the Commission finds a need to take actions based upon the record as it develops, such actions should be designated as interim measures and should not unnecessarily prejudice the final decisions reached when the proceedings are concluded.

Mr. Samuel J. Chilk

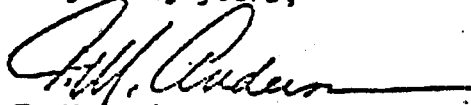
-5-

March 10, 1980

HS-TMA-2213

Westinghouse appreciates the opportunity to comment on these important matters and would be pleased to discuss our recommendations with the Commission or the NRC Staff, as appropriate.

Very truly yours,



T. M. Anderson, Manager
Nuclear Safety Department

RAW/THA/jaw