



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

58-247

July 5, 1972

Director
Office of the Federal Register
National Archives & Records Service
Washington, D. C. 20408

Dear Sir:

Attached for publication in the Federal Register are an original and two certified copies of a document entitled:

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

ORDER EXTENDING FACILITY OPERATING LICENSE EXPIRATION DATE

Publication of the above document at the earliest possible date would be appreciated.

Sincerely yours,

W. B. McCool
Secretary of the Commission

Enclosures:
Original and 2
certified copies

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Docket Nos. 50-247
and 50-286

Honorable Ogden R. Reid
Congress of the United States
House of Representatives

Dear Mr. Reid:

Thank you for your letter of August 3, 1972, forwarding material sent to you by Mary Hays Weik regarding her contentions of radiological hazards associated with nuclear power plants, with particular reference to the Indian Point reactor plants of the Consolidated Edison Company of New York, Inc.

We have reviewed the articles by Ms. Weik enclosed in your letter. We find that her allegations are the same as those she made at the public hearings held in Buchanan, New York, before Atomic Safety and Licensing Boards for the purpose of considering (1) the issuance of an operating license for Indian Point Unit 2 (this hearing began in November 1970) and (2) the issuance of a construction permit for Indian Point Unit 3 (this hearing began in March 1969). Ms. Weik participated as a party to both of these proceedings. During the aforementioned proceedings, the Consolidated Edison Company of New York, Inc. and the AEC responded to these concerns and the testimony of these proceedings is a matter of public record. The AEC's testimony in these proceedings is essentially the same as that given by Dr. Glenn Seaborg, previous Chairman of the AEC, in response to Ms. Weik's allegations at hearings held in 1969 before the Joint Committee on Atomic Energy (JCAE) on the environmental effects of producing electric power. Dr. Seaborg's testimony concluded that, "We are not able to substantiate her allegations." A copy of Dr. Seaborg's testimony, excerpted from the JCAE hearing record is enclosed.

Regarding Ms. Weik's letter to Mr. W. B. McCool, we are enclosing a copy of the AEC Memorandum and Order that was forwarded to Ms. Weik. By letter to the AEC dated December 4, 1971, Ms. Weik filed a request for a special public hearing on the AEC's determination not to suspend

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OFFICE ▶						
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DATE ▶						

ENVIRONMENTAL EFFECTS OF PRODUCING
ELECTRIC POWER

HEARINGS
BEFORE THE
JOINT COMMITTEE ON ATOMIC ENERGY
CONGRESS OF THE UNITED STATES
NINETY-FIRST CONGRESS
FIRST SESSION
ON
ENVIRONMENTAL EFFECTS OF PRODUCING ELECTRIC POWER

OCTOBER 28, 29, 30, 31; NOVEMBER 4, 5, 6, AND 7, 1969

PART 1

Printed for the use of the Joint Committee on Atomic Energy



U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1969

37-2580

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402 - Price \$4.50

mental agents for the Hanford employees has been completed. It is anticipated that an equivalent state of data processing on the Oak Ridge employees will be achieved within another year. By late 1970, analysis of the causes of death can begin for an estimated 50,000 deaths within the approximate 770,000 members of the study population.

Dr. SEABORG. I think we should emphasize that it is too early to draw definitive conclusions. I think what we should make clear here is that we just have large samples of populations upon which observations have been made over a long period of time and that eventually we will be able to come out with some meaningful statistics on this important point.

Representative MAY. Dr. Seaborg, I really wanted to bring this up for the record because when it comes to calming people's fears it is not easy to calm them when you just say, "we think."

This is a situation where we know that after a really meaningful number of years and a really good sample of the population, that there have not developed any of the unexpected or unpleasant effects that people continually bring up.

Thank you very much.

That is all, Mr. Chairman.

Representative HOSMER. Mr. Chairman, since we have gone around the country somewhat in geography, I wonder if at this point you might furnish us for the record some comment relative to what an intervenor at the Indian Point 3 hearings, named Mary Hays Weik, said concerning the epidemiological situation in the community of Montrose and explain what her allegations were and what the facts are.

Dr. SEABORG. Yes: we will be glad to do that. We have looked into that quite carefully. We are not able to substantiate her allegations. We have that information and will furnish it for the record.

Chairman HOLIFIELD. Fine.

(The information referred to follows:)

STATEMENT FOR THE RECORD

(At the AEC public hearing on April 28, 1969, concerning Consolidated Edison Company's application for a construction permit for Unit 3 of its Indian Point Nuclear Generating Plant, Mrs. Mary Hays Weik presented a list of seventeen citizens of Montrose, New York, whose deaths from cancers had occurred in a sharply localized area directly downwind of the Indian Point plant during the period 1964-1969.)

The AEC has investigated the statements of Mary Hays Weik at the Indian Point #3 Hearings and earlier statements by her. Mrs. Sandra Kinch, Director of Health Statistics of the New York State Department of Health was contacted and has provided mortality statistics for the Montrose area of New York. Montrose is a district in the Courtland township and is not a separate registration district for the New York State Department of Health; therefore mortality statistics for the Montrose area *per se* are not available. Since the death certificates are not recorded specifically for Montrose, we are unable to state where the number 17 came from. It is fair to say, however, that without some reference to the incidence of cancer prior to the operation of the nuclear power reactor, and consideration of the increase in the size of population in Montrose, the number by itself has no meaning epidemiologically.

In earlier statements by Mary Hays Weik, she reported that lung cancer is 35% over the U.S. rate, digestive cancer is 108% higher, leukemia 43% higher, and birth defects are up by 38% in the Indian Point area. On the basis of the mortality statistics provided by the New York State Department of Health, it is clear that the communities in question are small (about 20,000 people), and the number of cases of cancer of digestive organs, respiratory system, lymphatic

hematopoietic and congenital malformations were too small to be of significance in terms of reporting percentages such as are used by Mrs. Weik. With a small population base considerable variation would be expected from year to year in the incidence of most diseases and fairly large percentage changes may be meaningless.

Furthermore, extrapolation from small population sizes to 100,000 for comparison with national figures is considered not valid by experts in this field. For instance, in Peekskill in 1966 there were two deaths reported from lymphatic-hematopoietic tissue cancer and five reported in 1967. This would appear to be an increase from 10.8 to 27.2 per 100,000 population or almost a three fold increase in the rate in one year. On the other hand, it would appear that the occurrence of 4 congenital malformations in Ossining in 1966 and 2 in 1967 represented a reduction of 50% in congenital malformations. Neither of these represent meaningful changes. However, when the whole of Westchester County with a population of 859,359 is examined, it is clear that there is little change in any of the causes of death reported. The death rate due to lymphatic-hematopoietic tissue cancer in 1966 and 1967 has remained at approximately 18 deaths per 100,000 population which compares with the national average of approximately 15 per 100,000 population.

It might be pointed out that radiation effects are commonly studied by exposing groups of experimental animals to high levels of radiation and then comparing the incidence of various biological effects with the incidence of these effects in a control group of identical animals that have not had unusual exposure to radiation. The incidence of effects increases or decreases as the exposure is increased or decreased. As lower exposures are tried the difference between the incidence of a given biological abnormality in the exposed group and in the control group becomes so small that if a difference exists it is masked by normal variation from one group of experimental animals to another. Under these conditions, it becomes impossible to determine whether the observed effect is occurring more frequently in the irradiated group of animals or in the un-irradiated groups. Exposure of the population from the operation of nuclear power reactors is far below the lowest levels at which observable results of any kind have been identified in animals or could be expected in humans.

It has been impossible to demonstrate radiation effects due to differences in the radiation exposure rate from natural background cosmic radiation in the Denver, Colorado, area when compared with lower background areas such as Chicago. Since reactor-produced radiation in the vicinity of nuclear power plants is far less than the difference in natural background between Denver and Chicago, it would not be possible to demonstrate any rising incidence of cancer near atomic plants as a result of radiation exposure from the plant.

Chairman HOLIFIELD. I am going to call on Dr. Totter, who is the Director of the AEC's Biology and Medicine Division and ask him if he has anything to add to the subject matter that we just discussed.

Dr. TOTTER. Thank you, Mr. Chairman.

I could add that studies supplementary to the very large epidemiological study that the chairman and Commissioner Johnson spoke about have been made by others.

The U.S. Public Health Service made a very careful survey along the Columbia River of the incidence of leukemia and other types of cancers. They found no basis for believing there was any change whatsoever from the statewide incidence of leukemia.

Representative HOSMER. Does that follow some publication in some magazine of an article by somebody who expressed a contrary view?

Dr. TOTTER. Yes.

Representative HOSMER. This sets forth the facts with clarity and detail. I suppose, that would refute that article.

Dr. TOTTER. Yes; it does.

Representative HOSMER. Thank you.

Chairman HOLIFIELD. Now on the subject of mutations, of course, in order to make the record complete, we do not know as much as we would like about the mutation of genes, do we?

Dr. TOTTER. We have certainly reduced the uncertainty in our knowledge to a great extent, but there is still, of course, a degree of uncertainty which we may never be able to eliminate because of the size of the population needed for such an evaluation and the random occurrence of natural mutations.

Mr. RAMEY. There is always, of course, background radiation that has affected people for centuries.

Chairman HOLIFIELD. Yes. There is background radiation everywhere just as there is in this room. It varies, of course, with altitude and therefore to differentiate between the effect of natural radiation on genes and chemical effects on the mutation of genes and other sources that might adversely affect them, is difficult if not impossible.

Dr. TOTTER. It seems to be so far.

Chairman HOLIFIELD. In that situation, can you say that we are proceeding in a prudent fashion, taking into consideration from every reasonable and practical standpoint, protective measures for the people who are working in the nuclear industry and, of course, the population at large?

Dr. TOTTER. Yes, sir; we certainly are. We have built-in safety factors. For example, the estimated genetic doses are based on acute—rapidly given—high doses of radiation and we know now that lower doses given over a longer period of time are less damaging by a factor of from 4 to 15.

In other words, while we base our standards on the effects of acute doses, most of the exposures that will ever occur will be at the lower dose rate and therefore the standards that we use have a factor of somewhere between 8 and 12 already built into them.

Chairman HOLIFIELD. Of course, the Russell experiments at Oak Ridge and other experiments of that type on mice and other mammals have been going on for many, many years.

Dr. TOTTER. That is correct.

Chairman HOLIFIELD. And we have gained a great deal of knowledge in the field of mutation of genes from those experiments.

Dr. TOTTER. Yes, sir.

Chairman HOLIFIELD. And we are making use of it in every way we can?

Dr. TOTTER. We certainly are.

AEC RESEARCH IN BIOLOGICAL EFFECTS OF RADIATION

Chairman HOLIFIELD. What is the financial support of your division this year?

Dr. TOTTER. It is \$89.5 million.

Chairman HOLIFIELD. Is that about the level of, let us say, the past 10 or 15 years?

Dr. TOTTER. For the last 3 years, that is about the level at which the program has been supported. Before that, it was less but it has been quite well supported for the last 20 years or so.

Chairman HOLIFIELD. Do you feel that you are funded in that division to the extent that you are able to do research and development on problems which are important? Do you need more money? [Laughter.]

I hesitate to ask that question because I know that everybody needs more money.

FROM: Rep. Ogden R. Reid (N.Y.)		CONTROL NUMBER: 4766	FILE LOCATION
		DATE OF DOCUMENT: 8/3/72	ACTION COMPLETION DEADLINE: 8/22/72
TO: DiIvano		ACTION PROCESSING DATES: Acknowledged _____ Interim Report _____ Final: <u>Bl Giambusso</u>	PREPARE FOR SIGNATURE OF: _____ Chairman _____ Director of Regulation <u>X Giambusso</u>
DESCRIPTION: <input checked="" type="checkbox"/> Original <input type="checkbox"/> Copy <input type="checkbox"/> Other <u>8/30/72</u>		REMARKS	
Encl by ltr fr Mary Kaye Weik to McCool re request for a public hearing on AEC's determination to resume construction of Indian Point 3 w/eys of articles re radiation hazards in the area.		<p style="text-align: right;">19819</p> <p style="text-align: right;">J. [unclear] 8/13</p> <p style="text-align: right;">Reed [unclear] 8/18</p> <p style="text-align: right;">[unclear] 7/10/72</p>	
REFERRED TO: <u>Giambusso f/action</u>	DATE: 8/16/72	IS NOTIFICATION TO THE JCAE RECOMMENDED? _____	
Cys: <u>FBI (50-286)</u>		[Handwritten signature]	

De Young

Pl take lead
in this reply

The reply should
address itself to:

1. The letter to M'Cool
- 2 The Article

Input as necessary
should be obtained
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Les Rapp, Skorkin
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Plus add a par to
effect that procedures will be
complied with his instruction
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The Great Atomic Fraud

XI Indian Point-Showdown For Nuclear Power?

by Mary Hays Weik

The first privately-owned atomic power plant in America - at Indian Point on the Hudson, 24 miles above New York City - seemed to have every point on its side, when it began operation in 1962. Heavily subsidized by U.S. funds, its costly nuclear fuel a gift from the government and most of its huge public liability risk backed by government guaranty, its owner, Consolidated Edison of N.Y., numbered on its Board of Trustees a former U.S. Secretary of Defense, the President of Columbia University, and the Chairmen of four of America's top corporations. At its Construction Hearing in a Washington suburb on Dec. 7, 1961, only one citizen appeared in protest - a young Brooklyn N.Y. physics teacher, Guy Torre, who warned of the serious hazards the plant involved. No other scientist came to Torre's support. With only one opposing witness, the construction permit was quickly granted.

But the plant was jinxed from the start, plagued by accidents, and shut down for 20 of its first 48 months. That these accidents have resulted in frequent releases of abnormal amounts of radioactive wastes to air and water, has been common knowledge in engineering circles - though never publicly admitted. In 1964 and '65, Beta levels in the Hudson's water below the plant jumped to many times the state average. Since then, monitoring figures on plant emissions have been increasingly scanty and long-delayed.

The fact was, the original Indian Point plant was only a trial start, planned as the first opening wedge for a series of much larger atomic reactors. In 1966, Indian Point reactor II, 4 times as big as No. I, was launched at a federal hearing held at Buchanan's brand-new firehouse, attended by scores of engineers and publicity men from Con-Edison and Westinghouse, the plant's builder - and, except for Buchanan's jubilant mayor, by not one citizen of the surrounding community! Its construction license was therefore a pushover. (Its operating license has not yet been achieved.) But 3 years later, in 1969, the construction license for a third Indian Point atomic reactor, whose hearing began in the High School auditorium of the village of Montrose, a mile or so south of the atomic plant, found rising citizen opposition. I took part in this hearing as a citizen intervenor.

The Montrose Catastrophe

At the end of the first morning's session, I went outdoors to find an eating-place. A local resident, who had been at the hearing, invited me to have lunch with her; and as we drove to her Montrose home, she told me of the current wave of anxiety among women who lived in a small area of Montrose downwind to the tall exhaust chimney of the Indian Point plant. The reason? An unusual number of cancer cases cropping up there. The remark stuck in my mind. I asked the location of the part of Montrose she had mentioned; and a few days after, wishing to see some official proof, I drove with her to the Town and County offices where local deaths were registered. We found the women clerks in the offices already knew of the cancer outbreak in Montrose. There was an undercurrent of fear and anxiety in their voices, which I understood when I saw the death certificates with the doctors' diagnoses: for the majority of those named on the certificates were women too - family women in their 30's and early 40's, as were many of the clerks.

That afternoon we collected the records of 17 Montrose citizens who had died of cancer in the seven years since the plant was built. Their homes had been in the Montrose section directly downwind to the atomic plant: several blocks of private houses holding less than 500 people. I checked with longtime local residents and with the U.S. Meteorological Bureau, and found that the prevailing wind in this section - from the northwest, following the mountainous bend in the Hudson River - would indeed blow the fumes of the Indian Point plant directly toward the Montrose area named. This brought to my mind a government report I had recently seen, published by the U.S. Science & Technology Office in Washington ("Considerations Affecting Steam Power Plant Site Selection," Feb/69). I looked up a copy, and found a diagram on page 126 showing the typical path taken by a power plant's cloud of released gases, as it traveled horizontally through the air to "a distance of from 1/2 to 2 miles" where it was "very rapidly dispersed towards the ground". - And I remembered that Montrose lay a little more than a mile southeast of Indian Point . . .

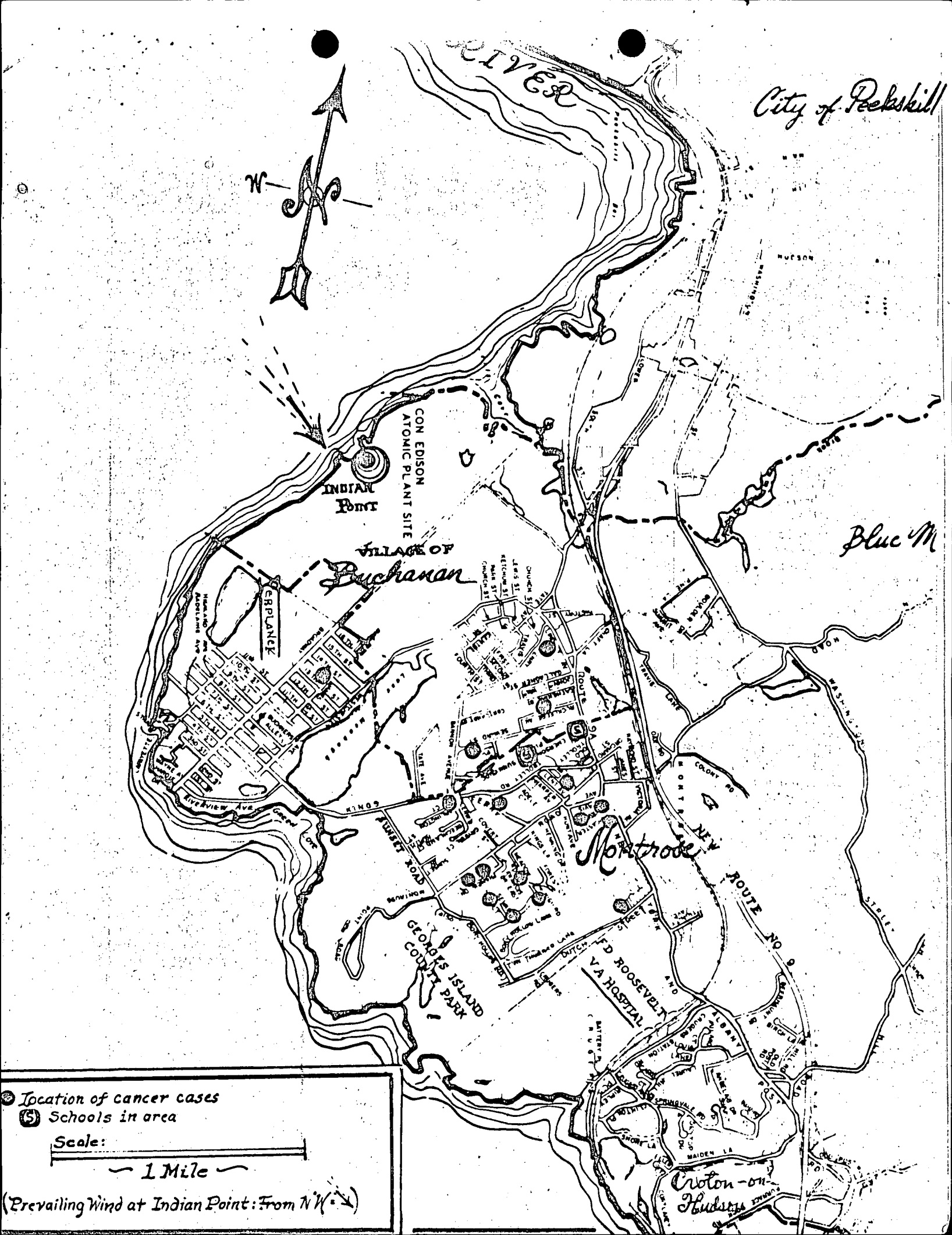
Introduction of the new evidence of the 17 Montrose cancer deaths met with complete silence at the next day's hearing. But in no time at all, a battery of refuting arguments was brought into play by Con-Edison. The testimony of a new witness quickly shifted the prevailing wind from northwest to northeast! Soon new reports from local health departments gerrymandered and confused the borders of the Montrose area, to include a much larger adjacent section, and so dilute its accusing cancer figures. Both State and County health departments disclaimed any local reason whatever for anxiety . . . But I was struck by one fact that turned up a year later in a State health department report - "Review of Mortality Statistics in the Northwest Section of Westchester County," by Dr. Burnett of the Bureau of Cancer Control (Feb/70). For "Table VII-C" of this report showed irrefutably that in the section of Cortlandt Town southeast (downwind) of the Indian Point plant - containing Montrose and Croton-on-Hudson - where during the years 1957 to 1961, not one case of Brain Cancer had been reported - in the period from 1963 to 1967, following the atomic plant's start in '62, 10 deaths from Brain Cancer alone were on record.

In the summer of 1970, an energetic group of women from the local "Citizens' Committee For the Protection of the Environment," headed by Irene Dickinson and Jean Mulcahy, made a house-to-house survey of 315 families in the same general area I had written about in "The Montrose Catastrophe" in 1969, and found in addition to the 17 cancer cases I had reported, 24 more cancer cases and 6 serious cases of Birth Defects! The Montrose record remains therefore highly disturbing. Interest has been aroused in these facts, not only in other sections of America, but in many other countries overseas where nuclear power plants are built or have been proposed. For the Montrose study seems to be the only one in existence where factual, statistical evidence shows the tragic effect an atomic power plant can have on the health of an adjoining community.

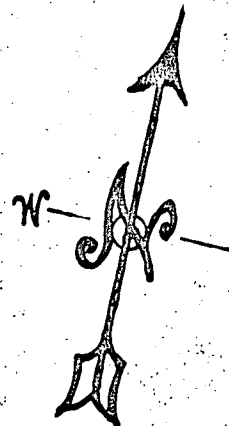
Soon another reactor hearing will be underway for Indian Point, with 3 more giant reactors scheduled to follow. The Indian Point plant has long been a leader in atomic trends: Now governments and atomic industry are watching to see what local citizens decide to do. Shall this dangerous and polluting plant be allowed to remain, to hazard the lives of people of surrounding areas? Or shall Indian Point I, with its history of accident and pollution, be closed at last as community conscience dictates - its contaminated structure dismantled and physically removed, with an order that no other atomic reactor shall ever again be located on this spot? Only citizens of courage and action can supply the answer.

(Mrs. Weik heads the Committee To End Radiological Hazards, of New York City.)

(Copyright 1971, Mary H. Weik)



City of Peekskill



CON EDISON
ATOMIC PLANT SITE

INDIAN
POINT

VILLAGE OF
Buchanan

Blue M

Montrose

ROUTE NO. 9

GEORGE'S ISLAND
PARK

F.D. ROOSEVELT
VA. HOSPITAL

Croton-on-Hudson

- Location of cancer cases
- Ⓢ Schools in area

Scale:
— 1 Mile —

(Prevailing Wind at Indian Point: From NW ↙)

Cancer and Leukemia Rise Around Indian Point

Committee Chief Notes Spurt In Mortality Near Nuclear Plant

by Mary Hays Weik

A significant new report has just been issued by the Committee To End Radiological Hazards of New York City, on health conditions around the Indian Point atomic plant. The report shows percentage of increase in deaths by Brain and Breast Cancers and Leukemia in the Cortlandt Town area directly surrounding the atomic plant, during the 5 years 1963-67, after the plant began to operate in August '62, as compared with the 5 years, 1957-61, just before its start. Included population figures for 1960 and 1965 show that cancer increase has far outstripped population growth.

The report is based on figures contained in the N.Y. State Health Dept. report, "Review of Mortality Statistics In the Northwestern Section of Westchester County." The State report is a curious document. It was published shortly after this writer revealed, as a citizen intervenor at the 1969 Indian Point Hearing, an unusual number of Cancer Deaths in an area of Montrose downwind to the atomic plant. The State report shows an obvious intention to confuse and mislead the public; for the local map it includes so confuses the boundaries of the area involved in the Montrose cancer deaths as to make difficult a localized study of the problem.

Neither State nor County Health Department seems worried by the situation shown by their own figures. I was surprised to receive a "personal copy" of the report from State Commissioner of Health Dr. HOLLIS S. INGRAHAM, who had refused to honor my citizen's subpoena to testify at the 1969 Indian Point Hearings. In a letter to the AEC sent me with the report, Dr. Ingraham said: "We find no evidence of increase in . . . cancer mortality in the vicinity of Indian Point;" and DR. DONALD R. REED, President of the Westchester County Board of Health, in a letter to a local citizen listing figures which amounted to an increase of 22% in MONTROSE and an increase of 150% in BUCHANAN, wrote: "Those figures would indicate to me that the cancer deaths have not increased in the villages of Buchanan or Montrose(1)."

The latest (1971) Rand-McNally Commercial Atlas shows Montrose population as 2200. But the State report cited submerges the Montrose village figure in a vague total, numbering 22,000, called the "Rest of Cortlandt Town." (This greatly dilutes, of course, the Montrose cancer mortalities.) Yet local records

show that 3 out of the 4 brain cancer deaths reported in 1963-67 for this Cortlandt area of 22,000 were actually registered from the Montrose section I described in "The Montrose Catastrophe" - population, less than 500!

Unfortunately, ^(for them) the people who prepared the delusive State report made one false step: In making their report, they revealed local statistics not available to the general public or reported in "U. S. Vital Statistics" (because the communities involved are too small for individual mention). In other words, the report brought into the open statistics heretofore available only to the two Health Departments. These figures happen to be most significant.

The cancer deaths shown in the New York committee's statement (taken from Tables VII and Table VII A of the State "Review of N. W Westchester County" cited above) though damning as evidence, would appear to be small in number. They will certainly be labeled as such and called "unimportant" by AEC and Con-Edison attorneys. But this is far from true, as any honest statistician knows. For:

1) By the State figures, Peekskill, Buchanan, and Croton-on-Hudson are now implicated in the Indian Point cancer problem. (What about other - unnamed - Westchester communities?)

2) In 11 out of 12 community situations named, an unbroken increase of cancer deaths is shown. In the 12th, Peekskill, the number of brain cancers remained the same in the two periods covered. Yet, even there, unreported 1968-71 figures may now have changed the picture.

3) If such an increase could occur with only the 265-megawatt Indian Point I reactor in operation, what would result with the addition of the 873-meg. Reactor II - 4 times as large as Indian Point I?

4) If such an increase could occur with only Indian Point I's Pressurized Water 265-meg. reactor, imagine the effect of adding, as planned, Reactors III, IV and V (of 1100-meg. each) all of "Boiling Water" type - since airborne radioactive releases from this type of reactor are known to be enormously larger. . . What will be the effect downwind then?

- Copyright 1971, Mary H. Weik -

CANCER DEATH RECORD IN "CORTLANDT TOWN" AREA SURROUNDING INDIAN POINT, NY, ATOMIC PLANT, BEFORE & AFTER PLANT'S START IN 1962

From Official Mortality Statistics in 1969 New York State Dept. of Health Publication, Review of Mortality Statistics in Northwestern Section of Westchester County - Tables VII-A: "Number of Deaths (Brain and Breast Cancers & Leukemia) for Cortlandt Town (Including) Peekskill City, 1957 - 1967" ***

A r e a s	CANCER of BRAIN and Nervous System (193)			BREAST CANCER (WHO International Code 170)			LEUKEMIA (International Code 204)			P o p u l a t i o n		
	'57-'61	'63-'67	% Increase	'57-'61	'63-'67	% Increase	'57-'61	'63-'67	% Increase	1960	1965	Increase
Peekskill	4	4	—	20	25	25 %	4	10	150 %	18,737	18,504	(1% drop)
Croton-on-Hudson	-	6	600 %	7	10	43 %	3	6	100 %	6,812	6,941	Inc: 2%
Buchanan	-	1	100 %	-	2	200 %	-	1	100 %	2,019	2,168	" 7%
West of Cortlandt Town (including MONTROSE)	-	4 *	400 %	4	12	200 %	2	5	150 %	17,505	22,231	** " 27%
TOTAL Cortlandt Town	4	15	275 %	31	49	58 %	9	22	144 %	45,073	49,844	" 11%

* Three of these 4 deaths were recorded for a small section (c. 500 population) of MONTROSE directly downwind to the Indian Point atomic plant.

** MONTROSE total population was only 2200 in 1970 (Rand McNally 1971 Commercial Atlas & Marketing Guide).

*** Conclusions issued by State and County Health Boards are in curious contradiction to their own records: In spite of the increases shown in the N.Y. State Health Dept. figures reported above, State Health Commissioner HOLLIS S. INGRAHAM, in his presentation letter to the U.S. Atomic Energy Commission of March 23, 1970 accompanying the above report, said: "We find no evidence of an increase in . . . cancer mortality in the vicinity of Indian Point;" and Dr. DONALD R. REED, President of the Westchester County Board of Health, in a March 18, 1970 letter answering a local citizen's inquiry, in which Dr. REED himself cited a rise in All Cancer Death figures in the 4 years after Indian Point's start (1963-1966) which, compared to the 4 years preceding its start (1958-1961), amounted to an increase of 22% in MONTROSE and an increase of 150% in BUCHANAN, wrote: "These figures would indicate to me that the cancer deaths have not increased in the villages of Buchanan or Montrose (!)."

B I L I N G U A L
Q U O T E S

FROM: Committee To End Radiological Hazards
166 Second Avenue, New York, NY 10003, USA
Mary Hays Weik, Secretary (GR 7-5935)

ATOMIC PLANT RELEASES CANNOT BE FAIRLY COMPARED TO NATURAL BACKGROUND RADIATION

(English translation):

"A nuclear power plant releases radioactivity to its environment through its chimney and cooling-water. Even in undisturbed normal operation, the chimney emits radioactive gases and particulate matter which are distributed through the surroundings.

"Company 'experts' claim that the amount released is minimal. They calculate high plant releases by comparing them with natural background radiation. Actually, the effect of radioactive material taken into the body, as is that from the plant's chimney and cooling-water, through inhalation, or by way of the food chain and drinking-water, is significantly higher (than company figures show), and impossible to measure exactly.

"If a (radioactive) particle merely lies on the ground, then its effect is minimal although its radiation may be dangerously high. If the particle, however, is deposited on a mucous membrane by inhalation or ingestion, or if it settles in an organ due to its chemical nature, then as a result of contact radiation, its effect will be increased to the square of its own value and give an extraordinarily strong dose of radiation to its direct surroundings, leading to death of the cells contacted or severe damage to those it touches.

"Especially effective in this connection are Alpha and Beta rays, whose effect would otherwise be screened out by the atmosphere. These inner effects cannot be controlled from without. Thus numbers of Cancers and other damages can arise; above all, genetic damage and disease if the reproductive organs are affected. Moreover, this radioactive matter stored up in the body increases with time, and the damages build up . . ."

(From Der Skandal Atomkraftwerk by Ing. KARL NOWAK, Vienna physicist and editor of "Neue Physik", in an article in "Oberösterreich. Wochenpost," Austria)

(Original German):

"Ein Kernkraftwerk gibt über Schornstein und Kühlwasser Radioaktivität an die Umgebung ab. Der Schornstein auch im ungestörten Normalbetrieb laufend radioaktive Gase und Schwebstoffe ausstößt und in der Umgebung verteilt.

"Von den bezahlten 'Experten' wird es so dargestellt, als sei das minimal. Man rechnet mit der erhöhten Umgebungsstrahlung und vergleicht sie mit der natürlichen Strahlenbelastung. Tatsächlich ist die Wirkung inkorporierter radioaktiver Stoffe, wie solche aus Schornstein und Kühlwasser über Atomluft, Nahrungskette und Trinkwasser in den Körper gelangen, ganz bedeutend höher und nicht exakt messbar.

"Liegt ein Staubkörnchen am Boden, so ist seine Wirkung minimal, mag es auch ein gefährlicher starker Strahler sein. Gelangt das Teilchen aber mit Atomluft oder Nahrung auf eine Schleimhaut oder wird es gar infolge seiner chemischen Beschaffenheit in ein Organ eingelagert so kann es infolge Kontaktbestrahlung, da die Wirkung mit dem abnehmenden Abstand quadratisch zunimmt, an seine unmittelbare Umgebung ausserordentlich starke Strahlungsdosen abgeben und so sogar zu Nekrose (Zelltod) oder schweren Zellschäden Anlass geben.

"Besonders wirksam sind dabei Alpha- und Betastrahler, deren Wirkung sonst durch die Luft abgeschirmt wird. Diese inneren Vorgänge sind von auszen überhaupt nicht kontrollierbar. So können Krebsherde und andere Schädigungen entstehen, vor allem auch Erbschäden und Erbkrankheiten, soweit die Fortpflanzungsorgane beeinflusst werden. Auch speichern sich radioaktive Stoffe im Körper und die Schädigungen summieren sich . . ."

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