

NYPIRG

NEW YORK PUBLIC INTEREST RESEARCH GROUP, INC.

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

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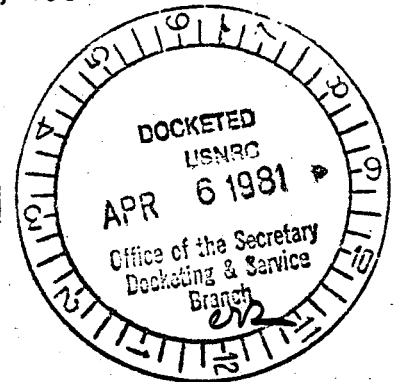
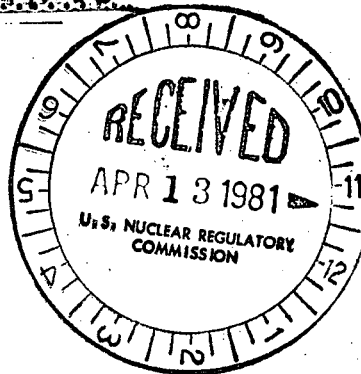
50-247.286

April 1, 1981

Commissioners:

Joseph M. Hendrie, Chairman
 John F. Ahearne
 Peter A. Bradford
 Victor Gilinsky

U.S. Nuclear Regulatory Commission
 1717 H Street, N.W.
 Washington, D.C. 20006



Dear Commissioners:

The New York Public Interest Research Group urgently requests you to order the immediate suspension of operations at Indian Point on the grounds of non-compliance with the NRC's Final Emergency Planning Rule. This rule requires that on-site and off-site emergency plans for 10- and 50-mile Emergency Planning Zones around commercial power plants be implemented by April 1, 1981.

e rule states:

"The NRC will then make a finding as to whether the state of onsite and offsite emergency preparedness provides a reasonable assurance that adequate protection measures can and will be taken in the event of a radiological emergency...

"After April 1, 1981, an operating plant may be required to shut down if it is determined that there are deficiencies such that a favorable NRC finding cannot be made or is no longer warranted and the deficiencies are not corrected within 4 months of that determination."

Furthermore, the rule provides for immediate Commission action if required to protect the public:

"In any case where the Commission believes that the public health, safety, or interest so requires, the plant will be required to shut down immediately."

-- Federal Register
 August 19, 1980

Today is April 1st and there is no implemented off-site emergency plan for Indian Point, the nation's most densely populated reactor site.

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The New York Public Interest Research Group, Inc. (NYPIRG) is a not-for-profit, nonpartisan research and advocacy organization established directed and supported by New York State college and university students. NYPIRG's staff of lawyers, researchers, scientists and organizers works with students and other citizens, developing citizenship skills and shaping public policy. Consumer protection, higher education, energy, fiscal responsibility, political reform and social justice are NYPIRG's principal areas of concern.

Plans for the 10- and 50-mile EPZs were submitted to FEMA and NRC by the licensees (Consolidated Edison and the Power Authority of the State of New York) on January 2, 1981.

As you know, these plans have been the subject of extensive criticism by the local county officials who would be responsible for carrying out protective actions to safeguard the public in the event of an accident at Indian Point (comments of Westchester County officials enclosed). These officials, acting responsibly by refusing to concur in an emergency plan which they believe is, in the words of Westchester County Executive DelBello, "not realistic and not workable", have declined to sign onto the plans in their present form.

"In Westchester, emergency response plans required by the NRC have been developed with virtually no local government, emergency service, and citizen input. County department heads have been consulted, but in some cases, their counsel has been ignored. The results thus far are proposed plans for Indian Point that in the present form will not work." (our emphasis)

-- Alfred DelBello
Westchester County Executive
from a letter to
Congressman Richard Ottinger
February 10, 1981

"A plan is only workable and implementable when the nuts and bolts details have been worked out. The plan doesn't even raise nuts and bolts problems let alone provide solutions. The only thing we'll be left holding, is the proverbial bag."

-- Charles W. Bates, Commissioner
Department of Social Services
Westchester County

The licensees' plans not only lack the concurrence of the officials of the 4 counties surrounding Indian Point, but, in addition, fail to meet the April 1 implementation requirement in other essential respects: communication, monitoring, protective and decontamination equipment, emergency response personnel, and financial resources the counties require to carry out the plans are all either lacking or seriously deficient.

Were a major accident to occur at Indian Point today or in the near future, the off-site plans could not be executed. Indian Point 2 and 3 should, therefore, not be permitted to operate.

We understand from the wording of your January 8 order for the Indian Point investigation, that were a Licensing Board in place at this time, it could have brought to your attention this new evidence for you to act upon:

"In the event that the Licensing Board conducting the adjudication determines that new evidence warrants interim relief, it may at any time recommend a course of action to the Commission."

-- Commission Order
January 8, 1981

But, since a Licensing Board is not yet in place nor have intervention procedures begun, we are coming to you directly with what we consider to be compelling new evidence for "interim relief."

Because re-start of Indian Point 2 and 3 is imminent, we believe it imperative that you give immediate personal attention to the fact that there is no emergency plan in effect to protect the public in the event of an accident.

As a result of the Three Mile Island accident and the subsequent recommendations of Congress, the Kemeny Commission and the Rogovin Report, the Commission enunciated a new safety policy to protect the public in the event of nuclear power plant accidents: "onsite and off-site emergency preparedness as well as proper siting and engineered design features are needed to protect the health and safety of the public" (Final Emergency Planning Rule).

If you permit the Indian Point plants to operate at this time, it will be in spite of major deficiencies in all three safety systems:

1. Emergency Planning -- there is no implemented and approved off-site emergency plan for Indian Point -- nor is there likely to be an effective and workable plan in place in the near future.
2. Siting -- the Indian Point site is dreadful, placing at risk the greatest number of people and economic assets of any nuclear power plant in the nation. To consider this site a "defense" against catastrophe is a perversion of safety policy.
3. Design (and operations) -- given the recent "events" at Indian Point 2 and 3, and the management and operating practices of both licensees, there is every reason to question whether the 3rd defense system is adequate to guarantee safety to the public, notwithstanding the preliminary conclusions of the NRC Task Force on Interim Operations of Indian Point.

The design and operations of both units are of questionable adequacy. First, the flooding accident at Unit 2 resulted in the culpability by NRC's Office of Inspection and Enforcement, when, on March 3 (subsequent to issuance of your January 8 order), the Director -- with your concurrence -- levied a \$210,000 fine on Consolidated Edison.

Second, staff evaluation of conditions at Indian Point 3, upon which you based your decision to permit interim operation of that unit, must now be considered inadequate, if not actually in error: on January 31, a low-pressure turbine blade broke, damaging other blades and the condensor, and resulting in a prolonged outage of that reactor. The turbine blade weakness should have been detected by an adequate inspection program.

We are therefore deeply concerned that Indian Point inspection programs are inadequate to guarantee safe operations -- and may in fact have led to overoptimistic staff assessments of conditions at both Units 2 and 3.

Testimony presented on March 5, 1981, by Victor Stello before the House Subcommittee on Environment, Energy, and Natural Resources (Toby Moffett, Chairman), and a February 17 communication to Congressman Moffett from (then) Chairman Ahearne, revealed alarming deficiencies in NRC's inspection programs due to severe personnel shortages. We were not reassured to learn (from a memorandum dated April 26, 1980, from H.B. Kister, Chief, Reactor Projects, Section 4, to E.J. Brunner, Chief, RO&NS Branch) that staff permitted inspections at Indian Point to fall to 30% (completed inspections), far below the national average of 60%: half the number of inspections for twice the number of people at risk. We are forced to question the adequacy of staff safety evaluations based on such inspection deficiencies.

(Our concerns, in this regard, are heightened by the knowledge that portions of the NRC staff have been placed on overtime in order to speed up the licensing of new reactors, for it appears inevitable to us that regulation inspection programs for operating reactors will be further neglected as a result.)

With regard to the other two safety systems, siting and emergency planning -- it is abundantly clear that they are lacking at Indian Point.

In your January 8 order, you singled out Indian Point as having "the highest population within 10, 30 and 50 miles of any nuclear power plant site in the United States. At 50 miles, its population is more than double any other plant site." Thus, the Indian Point site provides no safety. Furthermore, the Commission itself has properly recognized the critical importance to Indian Point of emergency planning, by including in the order four questions directly or indirectly related to emergency planning (questions 1, 3, 4, and 5).

In the absence, as of this date, of any implemented off-site emergency plan for Indian Point, it is your clear responsibility to immediately order the suspension of operations of Units 2 and 3 until such time as there is a workable, implemented, fully tested and approved emergency plan and pending the outcome of the Atomic Safety and Licensing Board investigation you have ordered.

We urgently request that you take this action to safeguard the 20 million people who live within 50 miles of Indian Point.

Respectfully,

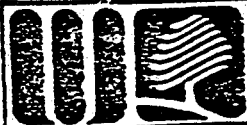
Donald K. Ross

Donald K. Ross,
Executive Director

Joan Holt

Joan Holt,
Project Director

cc: members of the New York
Congressional delegation,
New York State and local
officials



WESTCHESTER COUNTY MEDICAL CENTER

MEMORANDUM

TO: Alfred B. DelBello
County Executive

DATE: February 23, 1981

FROM: Bernard M. Weinstein
Commissioner of Hospitals

SUBJECT: Nuclear Response Plan

Dear Mr. DelBello;

After a thorough review of the Westchester County Radiological Emergency Response Plan it is apparent that the duties and responsibilities assigned to the Department of Hospitals can only be carried out if:

- A. Legal questions regarding the authority of the Commissioner are clarified.
- B. Additional communications equipment and computer capabilities are secured.
- C. Staffing in technical areas is increased.

The attached implementation plan provides the specific details on each of these needs. It also offers a timetable showing that the Department of Hospitals could be ready to respond to a nuclear disaster by May 15, 1982 if all the needs identified in this implementation plan are met.

If there are any matters which need further clarification, do not hesitate to call me.

Legal Issues

- I. The Westchester County Radiological Emergency Response Plan spells out some very important duties and responsibilities for the Commissioner of Hospitals. In summary form these responsibilities include:
 - A. Directing nursing home administrators to evacuate patients from their institution & providing evacuation assistance.
 - B. Directing nursing home & hospital administrators in the 10 mile radius EPZ, to provide continually updated reports regarding the number and mobility status of patients in their institutions.
 - C. Directing ill, -handicapped or infirm persons in private residences to register initially and reregister any changes of location or status.
 - D. Directing these dependent persons to evacuate their homes and providing evacuation assistance in the form of transportation & medical care.
 - E. Directing ambulance providers to carry out specific duties during a disaster event.
 - F. Directing the operators of trucks, busses, vans and other vehicles to perform specific duties during a disaster event.
- II. Before progressing any further with methodologies to implement this plan, it is first necessary to determine if the Commissioner of Hospitals does, in fact, have the legal authority to issue the directives noted above.

Scope of the Disaster Response

- I. If it is determined that the Commissioner of Hospitals does have, or can be given the legal authority to carry out the function called for in the plan, then the scope of the response must be studied.
 - A. After a thorough study of the plan, it is possible to summarize the responsibilities assigned to the Commissioner of Hospitals & Division of Emergency Medical Services under two main categories:

1. Providing primary & emergency medical care for the ill & injured. 1
2. Providing for the evacuation of the sick, handicapped & infirm. 2

B. "Providing primary & emergency medical care for the ill & injured" includes many related duties & responsibilities:

1. Notifying ambulance corps of an emergency.
2. Coordinating an orderly response of vehicles & personnel.
3. Providing on-scene triage & treatment.
4. Coordinating the transport of patients to assigned & appropriate hospitals.
5. Establishment of temporary morgue facilities.
6. Coordinating the deployment of Advanced Life Support (ALS) and Basic Life Support (BLS) ambulance personnel.
7. Notification & deployment of physicians to the emergency scene (s).
8. Alert of nearby hospitals and regional medical centers.
9. Deployment of specialized transport vehicles such as helicopters.
10. Mobilization of vehicles for transportation of non-stretcher patients & supplies.
 - 1) Busses, vans
 - 2) Trucks
11. Coordination of blood supplies
12. Coordination of EMS activities with fire, police and other public safety services.

C. Providing for the evacuation of the sick handicapped & infirm includes many related duties & responsibilities:

1. Alerting Dept of Hospitals staff.
2. Gaining immediate assessment of the number & location of dependent individuals.

3. Gaining immediate assessment of the basic health status of each individual.
 - 1) Ambulatory or stretcher
 - 2) Special health needs.
 - a) Monitors, respirators, dialysis, critical care etc.
4. Notifying & locating appropriate forms of transportation
 - 1) ambulances
 - 2) helicopters
 - 3) busses
 - 4) vans
 - 5) cars
5. Dispatching & coordinating deployment of special transport vehicles.
6. Keeping in contact with EPZ health care facility administrators to assess evacuation progress.
7. Keeping in touch with administrators of host facilities to constantly assess changing needs.
8. Clarifying patient orders and records.
9. Providing physicians with instant notification of whereabouts of their patients.
10. Arranging for deployment, transportation and coordination of medical professionals to assist the ill patients at temporary facilities.
11. Mobilizing & coordinating the deployment of trucks & vans to transport patients records, patient care equipment and related supplies.

Response to the Challenge

I. The challenge of evacuating an area of this size and a population this great & diverse is no ordinary task. Therefore, the response to this challenge should be equally extraordinary.

A. A task of major proportion (evacuation) must be accomplished in a brief time period.

B. There may be many unpredictable complications:

- 1) Single or multiple medical disaster scenes requiring manpower & equipment.
- 2) Reluctant response by needed workers.
- 3) Changing traffic problems.
- 4) Need of same vehicles by many departments
- 5) Adverse weather conditions.
- 6) Disruption or overloading of phone lines & radio channels.

C. It is impossible to "rehearse" an event as great as this.

1. Key officials will be directing persons who may be totally unfamiliar with the locality & the specific tasks at hand.

II. It is necessary to plan, from the start, for a tight method of control over all facets of this major responsibility.

A. There must be a comprehensively efficient and controlled communication system linking command personnel, workers, transportation equipment and facilities.

B. There must be a computer system capable of providing:

- 1) location & status of dependent persons.
- 2) location & status of available beds or care facilities.
- 3) location & status of transportation equipment.
- 4) traffic pattern status & alternate routes..

- C. There must be personnel assigned on a daily basis to manage and direct the communications & computer systems. In addition, there must be other personnel who, while performing regular Dept. of Hospitals functions on a daily basis, are also trained & practiced in the direction of a Nuclear Plant Disaster Response.

Design of a Comprehensive Communication System

- I. The communications system used for coordination of resources in response to a nuclear event must offer many benefits:

A. It must give county-wide coverage.

B. It must be available & installed in all necessary transportation resources.

1) busses, trucks, vans, ambulances, helicopters.

C. There must be many hand held units for command personnel & workers.

D. It must operate on clear & uncongested frequencies.

E. There must be several channels to permit coordination of high volume traffic & assignment of priorities.

1) e.g. a channel each for:

- a) busses & vans
- b) delivery trucks
- c) emergency medical personnel & ambulances
- d) hospitals & nursing homes
- e) command personnel

F. It must be simple & uncomplicated for the unaccustomed user

- II. Serious consideration has been given to the utilization of existing, and possibly expanded, county communications resources.

A. The county has a wide range of current communications capabilities. These include police, fire, EMS and local government frequencies.

B. On a daily regular basis however, each of these frequencies is relatively busy. During a disaster evacuation they could be expected to be quite overloaded.

C. The complexities of trying to coordinate a major evacuation on a multitude of congested frequencies, each borrowed from other users who require these frequencies for routine business, is too discouraging to consider further.

D. Furthermore, not all necessary vehicles (eg. busses & trucks) have any radios at all, nor do all ambulances have a common frequency.

E. For these reasons, another direction needs to be explored.

III. To accomplish the goals required of such a system, we would recommend the development of a repeater system linking mobiles, bases & hand held units.

A. The system would require at least 5 repeater base stations in each of at least 3 separate county locations (Grasslands, Dunwoodie, Mohansic).

B. The system would be designed in the 900 megahertz range to take advantage of relatively clear channels and better choice of multiple frequency segments.

C. Command consoles would be installed in the county command post to monitor each of the channels & control each of the repeaters.

D. Mobile radios would be installed in: Est.#

1) all ambulance vehicles	300
2) all designated busses & vans	100
3) all designated trucks	75
4) all county vehicles	200
5) selected local municipal vehicles	100
6) Red Cross & disaster vehicles	20
7) blood supply vehicles	15
8) helicopters	5
	<hr/> 815

E. Base station radios would be installed in: Est.#

1) selected hospital emergency depts	20
2) selected police depts	20
3) selected nursing homes	30
4) selected bus depots	10
5) selected county departments	10
	<hr/> 90

F. Hand held radios would be assigned to:

Est.#

- 1) command & direction personnel
- 2) medical triage officers
- 3) vehicles pressed into service for specific needs

50
20

60

130

G. In order to provide adequate range, the radio system would utilize satellite receivers with transmitter steering.

H. Each group (e.g. busses & vans or trucks or EMS personnel) would have a separate frequency. The command center would coordinate request among users. In specific cases for unusual needs, repeaters could be linked to cross communicate between channels.

I. Each repeater site would have emergency power in case of electric system failure. There would also be at least one spare transmitter at each site in case of equipment failure.

J. There would be paging facilities to alert personnel regardless of the time of day or where they are

1) Pagers would be assigned to:

Est.#

- a) Dept of hospital personnel
- b) selected nursing home & hospital administrators.
- c) selected transportation company administrators
- d) selected medical professionals
- e) selected bus drivers (esp.school bus drivers)

40

40

30

25

50

185

K. The proper use of this system linked with computer aided dispatch (to be described) would permit the orderly coordination, assessment, deployment and allocation of resources during a very demanding period.

Design of a Computer System to Coordinate a Disaster Plan Response

I. Computer capabilities would be provided to insure improved coordination of the disaster response.

A. This computer capability would take one of two directions:

1) Additional equipment needed to utilize the existing county computer.

2) A smaller computer dedicated for this purpose alone.

B. Personnel would be assigned on a daily basis to program the computer with continually updated information regarding:

1) location of dependant persons living in private residences.

2) number, status & location of nursing home patients.

3) number, status & special needs of hospital patients.

4) availability of transportation resources (size, location, status).

5) highway status, repairs, closing etc.

6) availability of key personnel, vacations, shifts etc.

7) phone numbers of all places likely to be called.

C. On line terminals would be installed in institutions having high variation in status and in institutions performing other programming duties.

1) Peekskill Hospital

2) VA Hospital (Montrose)

3) Selected host facilities with rapidly changing bed status.

4) WCMC

D. For other institutions, there would be a daily call system in order to update information.

E. During a disaster, the computer would be used:

1) to show the location, number & status of dependant evacuees.

2) to show the location capacity & status of busses & vans

3) to show the location & status of ambulances

4) to show the bed availability at host facilities.

5) to show critical care beds at regional care centers.

6) to show location, status & size of delivery trucks.

7) to show blood supply inventory & location of delivery vehicles

8) to telephone evacuees at home

9) to display traffic patterns of main routes.

9

F. Separate display terminals at the command center would be used to show different data at the same time. For example, separate simultaneous displays might show:

- 1) bed availability at a host facility
- 2) traffic patterns
- 3) bus locations & status
- 4) blood inventory
- 5) dependent evacuees still remaining at home.

G. The computer system and the communications system would be blended into a single comprehensive disaster control system for operations management.

Operational Description

I. In the event of a nuclear accident of a large scale, the system would respond in this manner:

- A. The Commissioner of Hospitals and administrative personnel would be notified by a page alert transmitted by the county command center.
- B. The commissioner & key personnel would respond to the command center.
- C. An assessment of the situation would be made from public safety personnel & NRC reports.
- D. EMS personnel would already be responding, as called by plan from the command center.
- E. A computer read out would show the number of dependent persons to be moved as well as their status & location.
- F. Bus, truck & van operators & transportation administrators would be paged and vehicles would be dispatched as needed according to computer assessment.
- G. Ambulances & EMS personnel would be deployed both to disaster scenes and to transport the dependent ill patient. Deployment & dispatch would be computer aided.
- H. Trucks & delivery vehicles would be deployed as needed with the aid of computer assisted dispatch.
- I. Continual updates would be programmed as patients leave EPZ institutions & reach host facilities.
- J. Reports from police would be programmed regarding road conditions. Bulletins on clogged roads would be given to transport vehicles. Alternate routes would be advised.

- K. Partially filled busses would be routed to pick up other passengers at other facilities in order to expedite the evacuation.
- L. Drivers who were unfamiliar with the local geography would be guided by dispatchers using computer map displays.
- M. Medical triage personnel at disaster scene could request more vehicles, supplies & personnel and provide patient counts by major diagnosis.
- N. Hospitals could request blood & the delivery could be coordinated by computer dispatch.
- O. Delivery of food, drugs & special equipment could be expedited using radio dispatch.

Implementation Schedule for Development of System.

I. If funds were available, a comprehensive communication system could be implemented as follows:

- A. Design- by June 1, 1981
- B. Bidding & purchase by - Sept. 15, 1981
- C. Delivery & installation- May 15, 1982

II. If funds were available, a computer system could be implemented as follows:

- A. System design by- June 1, 1981
- B. Bidding & purchase by - Sept. 15, 1981
- C. Delivery & installation- by Jan. 15, 1982

III. If funds were available staff could be hired and trained.

- A. for computer programming & operation by- Oct. 15, 1981
- B. for communications center operation- by- Oct. 15, 1981

IV. Resolution of legal questions;

- A. Analysis by legal dept- by June/July.
- B. Possible enactment of new legislation - by Sept/Oct, 1981

V. Training and preparation of Dept. of Hospital staff.

- A. Drafting of duties by- May 15, 1981
- B. Training sessions & workshops - by Aug. 15, 1981
- C. Simulated drill- Oct. 15, 1981

VI. Contract & discussions with hospital & nursing home admin. personnel

- A. Letters & descriptive packets mailed-by May 15, 1981
- B. Meetings & conferences - by July 15, 1981

VII. Contact with bus & trucking operators.

- A. Letters & mailouts - by June 15, 1981
- B. Meetings & conferences by Aug. 15, 1981

VIII. Contact with ambulance corps

- A. Letters - by May 15, 1981
- B. Meetings - by June 15, 1981

Estimate of time needed to accomplish evacuation of special facilities

- I. The plan provides computer designed estimates for the time needed to evacuate special facilities (chart C-5 for normal weather conditions & chart C-7 for adverse weather conditions).
 - A. Chart C-5 gives a maximum estimate of 7 hrs & 10 minutes while chart C-7 gives a maximum time of 13 hrs & 10 minutes
 - B. These times are based on travel times after mobilization. Clearly, mobilization is a critical determinant. This is not a highly trained, disciplined & organized army unit which is being mobilized. Rather, it is a loosely structure diverse, independent & normally unrelated group of organizations and personnel which must come together and begin performing what, for many, would be an unfamiliar task under stress conditions,
 - C. Mobilization, therefore is a key element for which it is difficult to estimate time. We would, however, offer the following rough estimates as indicators:
 1. From alert until key personnel assemble at command HQ- max 1.5 hrs
 2. From alert until busses trucks & vans are on the road- max 2 or 3 hrs.
 3. From alert until ambulances are on the road max-20 min
 - D. We would therefore add at least 2-3 hours onto the estimates on charts C-5 & C-7 to account for mobilization.
 - E. This estimated mobilization time , it must be cautioned, can only be anticipated if proper radio alert & paging of key personnel is available. Likewise the evacuation of the EPZ can only be accomplished within the time estimate of the planners if a specialized communications systems & computer control system regulate the maneuver.
 - F. With the addition of mobilization time estimates and the qualification of the need for communications & computer control, the estimates of evacuation time in the plan appear reasonable.

Budget Estimate
Communications System

18 repeater bases @ \$5000	90,000
command console & comparator network	100,000
satellite receivers 15 @ \$1000	15,000
microwave links	300,000
mobile units 815 @ \$750	611,250
base units 90 @ \$900	81,000
hand held units 130 @ \$800	104,000
paggers 185 @ \$350	64,750
total (installed)	<u>1,366,000</u>
 yearly maintenance est. @ 5% of system cost	 68,300
 yearly insurance cost est. @ 10% of system cost	 136,600

Budget Estimate
Computer Control System

Additions to county computer or small independent computer	\$150,000
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Linkage accessories	75,000
Terminals 30 @ 3000	90,000
Printer & accessories	80,000

Hardware	395,000
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Initial programming expenses	75,000
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Total	\$470,000
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Annual maintenance est. cost	48,475
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Annual insurance premium	5,000
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Annual phone line costs for terminals	24,000
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Budget Estimate
Human Resources

A. Computer operations

EDP Director	\$31,000
Assist. Dir.	24,000
clerk tech. 7 @ 16,000	112,000
secretary 2 @ 13,000	26,000

193,000

fringe @ 32%

61,760

Annual total

254,760

B. Communications system

Communications Director	\$ 31,000
Assist. Dir.	21,000
operators 7 @ 18,000	126,000
secretary	13,000

191,000

fringe @ 32%

61,120

Annual total

252,120

C. Operations & administration

coordinator disaster planning	31,000
training coordinators	
(6- 20% time @ 21,000	25,200
secretary	13,000

\$ 69,200

fringe @ 32%

22,144

Annual total

91,344

Budget Estimate
Administration & OTPS Costs

supplies	\$5,000
printing & duplicating	6,000
postage	3,000
travel	4,000
space & utilities	10,000
meetings & conferences	3,000
equipment	8,000

Yearly total

\$39,000

Complete Program
Budget Summary

<u>Program/item</u>	Initial purchase cost estimate	Continuing An cost estimate
Administration & OTPS	-	39,000
Human resources:		
computer operations	-	254,760
communications	-	252,120
operations & administration	-	91,344
Communications system		
cost & installation	1,366,000	-
maint. & insurance	-	204,900
Computer system cost & installation	470,000	-
maint, insurance & phone lines	-	77,475
 <u>TOTAL</u>	 1,836,000	 880,599



February 18, 1981

TO: David Smith
Office of the County Executive

FROM: Joseph Caverly
Commissioner

RE: Radiological Emergency Response Plan

We have reviewed the Radiological Emergency Response Plan for Westchester County and make note of the following information as it relates to this department's participation.

1. We have previously filed with the Office of Disaster and Emergency Services the logistical information requested in reference to the inventory of equipment and personnel.
2. We are listed as a secondary support resource for engineering services to include debris clearance, emergency repairs and traffic control. I assume that the lead agency, D.P.W., will be in contact with us to make necessary arrangements for these functions.
3. Park Capacities - The chart showing the County Parks within the emergency area should be corrected to reflect peak attendance figures:

Croton Point Park	- 8,000 (special events)
	- 3,500 (summer daytime weekends)
Mohansic Golf Course	- 300
Muscoot Park	- 1,000
Camp Echo	- 200

Camp Echo is used in the Spring and Fall by school groups and other organizations when capacity could be 200.
4. Reception Center - The Westchester County Center, located in White Plains, could be designated as a reception center.

JC:JEA:pv

February 24, 1981

To: Hon. Alfred B. Del Bello
County Executive

From: Anthony R. Marasco

Subject: Westchester County Radiation
Emergency Response Plan

Westchester County has prime responsibility to implement this plan and to provide resources (equipment and personnel). Our Office of Disaster and Emergency Services has the responsibility for overall administration of the County Radiation Emergency Response Plan. In addition, we have the lead responsibility for the notification of the populous, evacuation and communications, and the primary support for direction and control, public information and radiological exposure control.

It is our contention that presently we do not have the staff or resources to adequately fulfill these functions. In addition to our present staff we should have, at the minimum, a Training Officer, a Resources Officer and an Administrative Officer.

To administer a plan you must be able to intelligently read and follow the plan. The format, as presently set forth, is very hard to follow. The Table of Contents is inadequate, and no index exists. A plan should contain no more than one volume and be easily understood.

Training of all emergency forces must be provided for, and an annual drill must be conducted. These two items alone require an initial and on-going expenditure of several thousands of dollars.

The radio communications systems in the Emergency Operating Center and the Mobile Communications Van do not allow us to communicate with all County emergency services. The only county-wide frequencies presently available are Fire and Emergency Medical Services. We should be able to contact local Police Departments and Departments of Public Works, as well as the Civil Air Patrol and the Red Cross, just to mention a few of the necessary auxiliary support services.

The plan implies that the only on-site assessment is by the utilities. It is our feeling and the past record of the utilities shows that they are not to be relied upon for on-site assessment and notification. We feel outside personnel who would represent the County's interests should be on the premises for assessment on a twenty-four hour basis.

In the notification of the populous, the utilities presently have assured us that they will furnish 42 tone-activated sirens. At the present time we have yet to see the survey as to where these sirens will be placed, and we are concerned about the dead spots in the County that cannot be adequately covered by sirens alone.

Another primary responsibility assigned to this office is education and evacuation of the populous. An on-going education program must be provided for the general populous to explain the evacuation procedures and the biological effects of ionizing radiation. The utilities have offered to prepare and distribute information brochures to the general populous. These brochures will need to be updated annually.

We must also be concerned about radiation exposure control of emergency forces and decontamination procedures. This requires personnel dosimeters, TLD's, survey meters, protective clothing, etc. Personnel must be trained in the use of radiological instruments. At the present time we have insufficient equipment. Once the radiological instruments are secured and in storage space (no storage space is available), we must set up an on-going recalibration of all instruments. We have no personnel or facilities for this responsibility.

In conclusion, an informal poll was taken of police departments within and outside the ten-mile EPZ, and all Police Chiefs contacted felt that they did not have sufficient equipment, training or manpower to fulfill their roles in executing this plan.

For these and other shortcomings too numerous to mention in this memo, it would be necessary to spend \$200,000-\$300,000 to successfully implement this plan.

ARM:jm



Westchester County

ALFRED B. DEL BELLO
County Executive

CHARLES W. BATES
Commissioner
Department of Social Services

February 4, 1981

Honorable Alfred B. DelBello
County Executive
County Office Building
White Plains, New York

Dear Mr. DelBello:

We have worked in good faith and diligence with the process of preparing an evacuation plan in the event of a nuclear accident at Indian Point. We have had a number of concerns which have become graven upon reading the latest draft, and upon hearing questions raised at the briefing on January 28, 1981. These include:

1. We agreed to notify specific agencies-day care centers, adult homes, and nursery schools. The plan has us notifying these, plus a host of others under the title "like facilities." The issue here is two fold. First, why were we asked what we would do; why did they agree to it; and why did they change the agreement without discussion. Secondly, the use of a vague term, "like facilities," in the procedural section which requires utterly specific directions is not only ill advised, but leaves us ill informed as to who we should notify.
2. The deadline for an implementable plan is April 1, 1981. The expectation that this deadline can be met is either naive (inexcusable for a consultant paid over \$1 million) or reflects an insensitivity to the real necessity of having more than a political document (unforgiveable). Being party to a naive or politically expedient document is obviously in the interests of safety. While we are strongly committed to the need for a plan, this one leaves room for a lot of doubt.
3. This plan makes no specific mention of how DSS staff will be trained to run reception centers and staff congregate care centers. We have to rely on more than the good intentions of DSS staff if this phase of the plan is workable. We are in essence being asked to provide expertise where we have none.
4. The commitment of Red Cross to run the congregate care shelters came from their national headquarters. There is a question as to whether the local Red Cross is either willing or capable of

handling the number of shelters required.

5. No realistic plan exists for the resettlement of people from the shelters. Giving the responsibility to DSS is one thing, realistically expecting the permanent relocation of 10's of thousands of people is another.

6. Getting staff to the shelters will be a problem. People will be arriving at the reception centers from the Emergency Planning Zones before many of our staff will have arrived to set them up. As people arrive, stop for instructions, wait, and create a traffic jam, our staff can reasonably be expected to be stuck in the jams.

7. Since evacuation is expected to take from 3 to 13 hours, many of the people arriving at the centers will be contaminated with dust, bringing their contamination into the centers. There are no clear measures to insure the safety of our staff, or for monitoring of their safety.

8. Many of our staff, assuming they would be willing to work under these conditions, would depend upon public transportation to get to the centers. Unfortunately for them, the public transportation buses will not be doing their regular runs around the county, but will be (theoretically) heading into the danger zone to evacuate people. At night, there is little if any bus transportation anyway.

9. We would have to develop two staffing plans, one for an incident during the weekdays, and another when the offices are closed, since our staff would be in two very different locations and availability.

10. After hours, contacting staff will be difficult. Our emergency service workers operate with an outdated seven year old list of phone numbers because the union apparently disagrees with its distribution.

11. Who is going to pay the school staff to operate some of the centers? Have the schools agreed to participate? Who is going to let us in? A plan is only workable and implementable when the nuts and bolts details have been worked out. The plan doesn't even raise nuts and bolts problems let alone provide solutions. They seem to have been left to we implementers. The only thing we'll be left holding, is the proverbial bag.

12. Is it reasonable to assume our staff will be safe working 15 miles from the disaster site? The answers provided at the hearing did not provide security.

13. There is a question as to whether the local police outside the EPZ will have adequate staff to provide the necessary supports. In the event of a disaster, they will probably be busy attending the duties required by their municipalities, and hardpressed to meet our needs.

14. No effective means of communication is available to DSS staff in all the centers. The plan is to have phone company staff install the extra phones. But, by the time they could be mobilized and accomplish this task, the plan already has most of the evacuation completed.

15. Where is all the food and cots for 10's of thousands of people going to come from? Who is going to pay for them?

16. The plan leaves children in their day care centers until parents or alternates pick them up. If they're not picked up, who will evacuate them, to where, and when? It seems odd to leave the most vulnerable in jeopardy longer. Their quick pickup depends on fluid transportation, an optimistic hope at this point.

17. What plans are being made to protect the mentally ill in the community who may well respond to the crisis with panic all poor judgement?

18. The inmates at Sing Sing are not to be evacuated because of the problems with security. This goes well beyond the border of insanity. Does this reflect the degree of respect for human life upon which this plan is founded.

19. There is no reason to suggest this plan will prevent chaos. In some instances, it will add to it.

20. The psychology of people responding to this form of disaster has been severely under considered. What makes us believe that our staff won't be putting as much as possible between their backs and Westchester. This plan doesn't leave us with faith in our capability.

21. Good intentions and hard work have not gone far enough in providing a plan that can reasonably be expected to succeed. More work needs to be done.

I do not feel that I can sign this plan in its present form.

Sincerely,

Charles W. Bates
Commissioner

CWB/bw



ALFRED E. DEL BELLO
County Executive

CHARLES W. BATES
Commissioner
Department of Social Services

February 23, 1981

Honorable Alfred B. DelBello
County Executive
County Office Building
White Plains, New York

Dear Mr. DelBello:

We have carefully reviewed the mission statement for the Department of Social Services as stated in the Emergency Response Evacuation plan. If a minor problem should occur at Indian Point, I don't foresee any problem with resources; We could possibly mobilize DSS staff to be quite helpful. However, if there is a major crisis at Indian Point and it is necessary to evacuate everyone within the 10 mile radius, then we seriously question if we have the resources to be helpful.

To begin with, we have a crisis, we don't have the manpower. According to the report there are approximately 125 thousand persons in the 10 mile danger zone. It is estimated that 32 thousand will require some kind of service from one of the six reception centers and possibly on going assistance from the Congregate Care Centers. We feel that at least 1500 workers would be needed during the initial crisis period. The Department of Social Services has 1200 staff, of which we feel that the maximum staff we think we could count on would be 1/3 of the total (400 staff members). The District offices will still be in operation and in need of staff. A number of employees may refuse to participate in the evacuation plan due to a real or imagined danger unless safeguards are provided. Recently we asked for Civil Defense volunteers and approximately 50 staff members volunteered.

If we were successful in getting those that we assume we could count on to participate we would still need 1100 additional staff. This would allow for 5 staff members per 100 persons for the reception centers. After the Evacuees are in the Congregate Care facilities we could use a lesser number of staff. There would be elderly and children requiring on going needs which will have to be met by DSS staff.

C. E.
cc. Dave
Smith

We noted in the plan that there were Congregate Care facilities, and reception centers in Putnam and Dutchess County. Many of Westchester residents in the 10 mile area will head north. We were wondering what arrangements were made for those individuals, and who would staff those centers.

There is no realistic plan for the resettlement of people from the shelters. Giving the responsibility to DSS is one thing, realistically expecting permanent relocation of 32 thousand people is another.

Housing needs beyond the shelter is a critical issue. We could not relocate thousands of people in Westchester unless one legally had police authority. The resources that we have in Westchester County are hardly enough to manage under normal conditions.

The plan states that DSS is responsible for financial resources for those individuals to be housed, clothed and fed. Would we have the authority to generate funds to pay for these items? If we have the authority to generate funds, then arrangements would have to be made with the Red Cross for conversion of funds into tangible goods and services.

We have been wondering if any provision has been made for cots to sleep 32,000 people.

If we were to start preparing now so that we could have a plan in case of a disaster, we would need a lead person, perhaps called a Director of Nuclear Crisis. This individual would design the program, oversee its implementation and train staff. This would be at least a pay grade XIV. This person could provide leadership but would need other core staff, approximately 3-5. This cost would be approximately \$100,000 per year. Staff members would need at least 4 hours of training per year. It would be necessary to have training and retraining due to the turn over of staff. We figure about \$25,000 per year in staff training, which would total \$125,000 per year to manage, plan and train.

We see the cost for staff time as another possible problem. Who would underwrite the cost for staff time (perhaps some overtime), plus food and housing for thousands of people. We can't present figures at this time; the dollars are astronomical, we would need a blank check.

We would also need:

1. Authority from the appropriate person to carry out our assignment.
2. A budget for staffing, planning and carrying out the program.
3. A guarantee that if there is a crisis, our checks wouldn't bounce.

Honorable Alfred B. DelBello

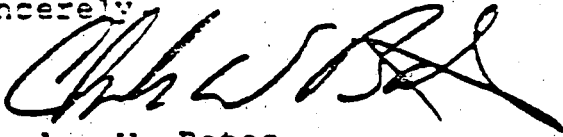
-3-

2/23/81

Although we have the desire to implement the plan, we seriously wonder if we have the capability to do so.

I have attached for your convenience, a copy of my original letter to you in response to the plan.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Charles W. Bates', written in a cursive style.

Charles W. Bates
Commissioner

CWB/bw
attachment

WESTCHESTER COUNTY FIRE CONTROL CENTER

OFFICE OF COORDINATOR

Public Safety Training Facility
Dana Road
Valhalla, N.Y. 10595
914-851-45



Telephone
Fire Control Center
Emergency W.H. 4-1111
Other W.H. 4-1114

WESTCHESTER COUNTY RADIOLOGICAL EMERGENCY RESPONSE PLAN COMMENTS

The Radiological Emergency Response Plan is more of a concept than a plan. As you read thru the "plan" you come up with more questions than answers.

General

The "plan" relies on people being willing and able to participate. Unfortunately, in many areas this can only be assumed. There is no way people can be compelled to comply. Some examples of this can be seen on page C-9 item (f) (g). In both instances you can hope that -

1. The gas station owners will be able to keep personnel on hand.
2. Tow truck operators will be able to get personnel to work. Another question that remains unanswered is "Who will pay these people even if they did work".

Reference is also made that first aid teams will be stationed inside the congregate care centers. This assumes that sufficient personnel will be available to staff the team. Where, how and when will first aid materials be made available?

The fire coordinator is listed in various tables as having responsibility for fire, rescue and ambulance service. Until a joint fire and E. M. S. communications system is established, the fire coordinator does not have any method of contacting the various volunteer ambulance corps.

Throughout the "plan" many holes are left open. It appears that everything starts when the emergency arises. Where is the pre-planning? How will I. D. be issued? Where will equipment come from?

Fire and Rescue

Fire Departments are being requested to provide -

1. Offsite radiation monitoring and ingestion pathway dose projections.
2. Assistance in evacuating personnel.

Fire and Rescue (Continued)

3. Fire police for traffic control.
4. Personnel for fire fighting and rescue if needed.
5. Assist in sheltering of displaced persons.
6. Assist in notifying the general public to stay inside, etc.

All of the departments are volunteers and relatively small in size. There is no way of insuring sufficient personnel to perform this task. In addition, most of the personnel have families in the affected area and they would be involved in evacuating their own families.

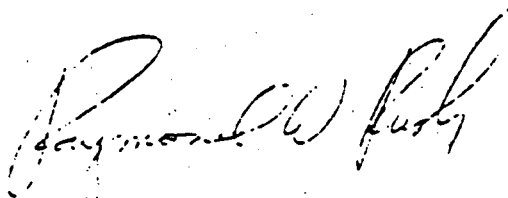
The "plan" also assumes a level of training to enable fire personnel to perform the above functions. While some people have taken courses in radiation monitoring, there just isn't enough training available or firepersons interested in that type of training.

Presently, some departments have one set of radiation monitoring equipment. The "plan" indicates that monitoring equipment will be picked up at the fire houses. Nothing is said about how the equipment will be made available or who would bear the cost of the material. The local departments can not be expected to purchase and maintain this type of equipment.

General Evacuation Procedures

The "plan" indicates that the fire coordinator will "maintain sufficient personnel"...., "will direct"...., "will assign....". The fire coordinator does not have any authority to "maintain, direct, assign". All he can do is request.

The "plan" refers to the Westchester County Ambulance Coordinator. There is no such title or person.





February 18, 1981

To: David R. Smith
Director, Intergovernmental Relations

From: Frank C. Bohlander
Commissioner of Public Works

Subject: Westchester County Radiological
Emergency Response Plan

At a meeting on February 10, 1981 the County Executive requested recommendations from each department relative to the above response plan. These are to form a complete response from the County Executive.

In general, however, let me state that in my estimation nothing in the proposed plan is impossible to carry out by the department from a theoretical standpoint. This is predicated on appropriate revisions in statute that will provide sufficient emergency powers to the Commissioner of Public Works to allow him to make demands of local departments. With sufficient funds other responsibilities could theoretically be implemented. Whether these individual categories are at all practicable is another matter. A radiological emergency is unlike any other function faced by any other department or, in fact, the prior experience of those in the military. A snow emergency, for example, can be addressed by an individual as basically as whether the snow is moved or not moved by a plow blade.

Analogies during the County Executive's meeting were made to bombings and battle conditions during wartime periods which, again, affect individuals differently. A person can identify with whether or not they are wounded by gunfire or other military activities. The situation that may be faced in a radiological emergency concerns a substance that can neither be seen, smelled, felt, or even experienced within an immediate time frame. It is the fear of the unknown which will undoubtedly create severe problems in gaining cooperation of personnel to carry out the mandates to the Department of Public Works.

The report lacks any significant reference to authority and relies completely on voluntary cooperation. It also indicates,

David R. Smith
February 18, 1981

2.

in many cases, the Commissioner of Public Works shall or will and these are used interchangeably.

With respect to some of the items such as the purchase and storage of uncontaminated food and water, it is a shared responsibility with Public Works as a support. The storage facility and transportation is Public Works and would require facilities which may not be under County control. This again would require local cooperation and is not easily legislated.

In the case of sewage treatment, water supply, power generation and fire prevention on all public and private facilities, the responsibility is distributed between Environmental Facilities, Public Works and Health, without designating any one agency in charge. It is assumed throughout the whole text that the County Executive or the Director of Disaster and Emergency Services will direct all of the participation. After having indicated this early in the text, it proceeds to distribute assignments and responsibilities to too large a group to become effective. The command control lines from the Director of D& ES supervises and directs too many areas and should have a lesser distribution to become effective.

In summary, there is nothing charged to the Department of Public Works that is physically impossible to be carried out with sufficient funds and the theoretical assumption that staff personnel will respond to direction and instructions. The report is written in an extremely confusing manner with no accurate index or any specific recommendations on how items enumerated can be implemented. There are also overlapping areas between the responsibilities of the County and local governments. It is our belief that while the responsibilities can theoretically be carried out, they stand little chance of implementation from a matter of practicality. Revisions in existing statute that provide the Commissioner of Public Works with the authority to issue directives is necessary, while additional staffing must be provided to determine the necessary requirements for the many mandates as simplistic, for example, as insuring that traffic signals can physically be placed in flashing operation.

cc: Frank T. Kearney
Arthur Freed



OFFICE OF THE COUNTY EXECUTIVE
County Office Building

MEMORANDUM

February 27, 1981

C.E. Dave Smith

TO: Alfred B. DelBello
County Executive

FROM: R. Raleigh D'Adamo
Commissioner of Transportation

RE: Critique of Indian Point Evacuation Plan

Attached is the Department of Transportation's critique of the proposed Indian Point Radiological Response Plan. The plan was looked at from three standpoints:

- 1) Our ability to respond
- 2) Resources necessary for us to respond
- 3) Costs to respond

R. Raleigh D'Adamo

RRD/ab

ABILITY TO RESPOND

1. The Westchester County Department of Transportation has no jurisdiction over bus drivers which are in the employ of private bus companies. Therefore, the department cannot command bus drivers to perform in an emergency situation.
2. The Westchester County Department of Transportation has no jurisdiction over private school bus or charter bus operations in the County.
 - a) Who will operate these buses that are now predominately driven by retired people or housewives?
 - b) There is currently no detailed inventory of these vehicles and their continued availability during an evacuation emergency.
3. The Westchester County Department of Transportation has no jurisdiction over private or public ambulances, ambulettes or specialized handicapped accessible vehicles.
 - a) The drivers of these special vehicles are under the control of the private company or municipality that operates them.
4. The report designates the County Department of Transportation with the lead responsibility to "provide transportation services.....for supplies and for people without the resources to transport themselves".
 - a) It is unclear as to the definition of "supplies"--personal belongings, medical supplies, etc.?
 - b) Both School and transit buses cannot accommodate "supplies" without decreasing the capacity of the buses to move people.
 - c) An estimate of the quantity of supplies to be transported is not given and raises the question as to whether additional buses have been factored into the total number of buses needed for the evacuation.
5. The Department's ability to transport substantial numbers of non-ambulatory people on a transit or school type bus is severely limited. For example, the Veterans' Administration Hospital has 300 wheelchair patients and 50 stretcher bound patients. The consultant has committed thirteen (13) Liberty Lines buses to this task.
 - a) The plan also indicates that these patients will be transported to the Veterans Hospital in the Bronx; a total bus trip of at least an hour.

- b) The County's 105 wheelchair equipped buses have only one wheelchair securement location per bus.
- 6. The Department's ability to respond is hampered by the absence of detailed route plan information from the Emergency Planning Zone (EPZ) to the Host Reception Center, outside the evacuation zone. The plan indicated only pick up points within the zone area.
- 7. There is no mention of computer capability for maintaining current inventories of:
 - a) Numbers of school buses.
 - b) Numbers of privately owned charter coaches.
 - c) Numbers of specialized vehicles.
- 8. There is currently no operational communications system between dispatchers and their transit buses in the field. This communications system is not expected to be fully operational until late 1982. Until then, the notification of all transit buses will be unattainable with the current supervisory staffs under most scenarios.
- 9. The base line scenario is described as "nighttime" when most people are in their homes. It should be noted that the most difficult times to assemble bus drivers are at night and on weekends and holidays.
- 10. Since the evacuation operation will involve numerous organizations and Bus Companies, many of whom will be unfamiliar with the EPZ area, certain necessary items must be addressed:
 - a) Adequate street lighting of all evacuation routes should be provided especially during nighttime evacuation.
 - b) A guarantee that all EPZ evacuation routes chosen can be negotiated by a full size transit, charter or school bus.
 - c) All EPZ evacuation routes should possess the proper road and street signs in the event of a "nighttime or adverse weather" evacuation.
 - d) A complete book of alternative bus routes should be developed and printed in sufficient quantities for all potential drivers and dispatchers, etc. indicating all the EPZ evacuation routes to the host reception center. This book should be designed in such a manner that an individual can easily operate over an evacuation route even if the individual is unfamiliar with the EPZ area.

and compensation should take into account union overtime wage rates.);

- c) the additional cost of providing maintenance personnel, (These costs would also have to take into account union overtime wages.);
- d) the labor and equipment costs involved in providing additional telephone information service from the Department's Telephone Information Bureau;
- e) compensation to private tow truck companies that would be required to provide standby service to move buses, (Heavy duty type trucks would be needed for emergencies.);
- f) compensation for bus driver training, (To bring these drivers in for training either on their day off or to substitute a driver for their regular run while they train, will add substantial costs. If done on a weekend or holiday, the union overtime rates will apply.);
- g) in the event of a radiological emergency, Department of Transportation personnel would be required to work additional hours for the duration of the emergency, (These additional hours would have a cost attached for personnel involved.);
- h) if a practice drill were to be set up, the expenditure for this exercise would be costly. Many of these costs would result from:
 - a) Drivers wages (overtime cost if performed on weekend or holidays)
 - b) Equipment costs
 - c) Fuel
 - d) Revenue lost due to disruption of service (if performed on weekdays in particular)
 - e) Cost of supervisory and maintenance personnel
 - f) Cost of Department of Transportation personnel
- i) if regular transit service is suspended, there would be an adverse effect on the transit dependents. These persons, along with those unable to reach places of employment or return to their homes, particularly in the unaffected areas, may file claims for mandatory transportation requirements supplied by other public conveyances such as taxis.

A conservative cost estimate to implement the transportation aspect of this plan is preliminarily estimated to be in the order of a quarter of a million dollars.

11. Is a drill of all agencies a practical exercise when under actual conditions, factors such as weather and wind direction might require the selection of different evacuation routes during an actual emergency? Also, if a drill were to take place during a weekday in order to test the practicality of the plan, buses could not be made available for this exercise without seriously disrupting the lives of many people.
12. Mention is made of bus drivers making as many round trips as feasible. Re-entry under described circumstances could prove extremely difficult and hazardous even if drivers could be found for all the required buses.
13. The plan does not address itself to the fact that if an emergency arose during the normal business day and people were already transported to work by bus, how these people would be transported home in the evening with a decreased transit fleet, or what accommodations would be made to provide food and shelter for stranded individuals.

RESOURCES TO RESPOND

1. Provided that all the necessary drivers and equipment can be assembled, certain protective equipment should be supplied to the bus drivers in the event of a radiological emergency:
 - a) Dosimeters
 - b) Film Badges
2. To provide the necessary service in the event of a fuel shortage, perhaps a guaranteed fuel stockpile should be established.
3. In the event of an emergency, a vehicle file retrieval system will be of the utmost importance. The development and programming of computer inventories capable of containing such information as:
 - a) Numbers of vehicles.
 - b) Type.
 - c) Location of garage.
 - d) Contact person.
 - e) Estimated response time to the EPZ.

COST TO RESPOND

The plan has not addressed any monetary concerns or compensation regarding the evacuation of the EPZ. The Department has identified some inevitable cost items in the event of a radiological evacuation:

- a) compensation for the use of private, school or charter type buses;
- b) compensation for bus drivers, dispatchers, and all other essential transit operating personnel, (Many of these private companies are union organizations



DEPARTMENT OF HEALTH
County Office Building 2

MEMORANDUM

February 25, 1981

TO: Anita S. Curran, M.D., M.P.H.
Commissioner of Health

FROM: Calvin E. Weber, P.E., Assistant Commissioner of Health
Bureau of Environmental Quality Control

RE: Westchester County Radiological Emergency Response Plan

As requested, attached are comments regarding those parts of the above plan that are the responsibility of this department.

It should be noted that several places in the plan this department is assigned the responsibility "to ensure" something, e.g., "The CCH and CDPW shall make all arrangements necessary to ensure that adequate uncontaminated supplies of drinking water and foodstuffs are available," (Section III.H.6.c.).

This department cannot ensure these items but can monitor, supervise, sample, analyze and take other appropriate actions to protect the public health and to determine if food or water is safe for human consumption to the best of our ability.

All of the recommendations and time frames set forth are dependent upon availability of adequate funds and resources.

clw

CEW:rtb
cc: File

COMMENTS REGARDING THE
RESPONSIBILITIES OF THE
WESTCHESTER COUNTY DEPARTMENT OF HEALTH
SET FORTH IN THE
WESTCHESTER COUNTY RADIOLOGICAL
EMERGENCY RESPONSE PLAN

February 25, 1981
Bureau of Environmental
Quality Control

In order to implement the radiological portions of the Westchester County Radiological Emergency Response Plan, 3 full time salaried Radiological Health Specialists would be required to establish certain arrangements and agreements as listed under the recommendations herein; determine equipment and instrumentation needs and prepare contracts for same; establish and maintain routine monitoring program; distribute, store and maintain all radiological emergency equipment and supplies; update and maintain the Plan; train staff and volunteers; and plan, participate and evaluate regular drills and exercises.

In addition, present staffing from the Bureaus of Public Health Protection and Environmental Quality would be required to initially investigate Reception and Congregate Care Centers for adequate food services, housing, water supply, sewage disposal, etc.

1. Provide primary and emergency care for the ill and injured.
2. Coordinate the movement of patients, personnel, and equipment of hospitals, nursing homes, etc. in risk or affected areas.
3. Coordinate the allocation of medical resources.
4. Provide public health and environmental sanitation services.

Needs-

1. Adequate medical staff trained in emergency medical care.
2. Established working relationships with hospitals, nursing homes, etc.
3. Adequate trained staff to monitor health and sanitation services at reception and congregate care centers.
4. Adequate trained staff to inspect, sample, and quarantine, if necessary, foodstuffs, milk, and water.
5. Arrangements for provision of adequate supplies of food, water, and milk that is safe for human consumption.
6. Appropriate and adequate medical supplies, sampling and monitoring equipment; availability of appropriate laboratory facilities; vehicles and other essential equipment.
7. Adequate and available facilities for short-term storage and ultimate disposal of contaminated food, water, milk, etc.

Concerns-

1. The Health Department does not have medical staff adequately trained, or adequate staff to be trained, in emergency medical care and does not have established agreements with hospitals and nursing homes, etc. necessary to ensure the movement of patients, personnel, equipment, and medical resources on a timely basis.
2. Although available staff is adequately trained in sampling techniques, all would need new or additional training in radiological health and safety with emphasis on nuclear emergencies.
3. Lack of availability of local laboratory facilities for radiologic analysis of samples of food, milk, water and other types of samples.
4. Lack of ready availability of vehicles on a 24-hour basis for emergency response.
5. Lack of appropriate arrangements with the N.Y.S. Department of Agriculture and Markets, FDA, foodstore chains, milk suppliers, water purveyors and others regarding provision of adequate supplies of food, milk and water and for protection of such supplies.

6. ~~Lack of available facilities for short-term storage and ultimate disposal of materials contaminated with radioactive materials.~~

Recommendations-

1. Responsibilities #1, 2, 3 above should be transferred to Commissioner of Hospitals who has the basic responsibility for providing such services on a day-to-day basis.
2. Provide initial and continuing radiological health training to staff including drills, exercises and annual refresher courses.
3. Make arrangements with N.Y.S. Division of Labs and Research or other certified laboratory for sample analysis and consider providing such facilities at least minimal, at the Westchester County Department of Labs and Research.
4. Provide County vehicles to at least key personnel on a 24-hour basis to reduce response time and to improve availability.
5. Determine the sampling equipment and supplies necessary to perform the responsibility, purchase, adequately locate, distribute, store and maintain.
6. Develop a plan and training for protection and provision of foodstuffs, including milk, and water supplies in the County, including the resources needed to implement such plan, and for securing such supplies from outside of the area impacted by contamination. A brief "first cut" of considerations for water supply is attached.
7. Develop a plan and procedure for disposal of contaminated materials.

Time Frame-

Recommendations 1 and 4 could be accomplished almost immediately through a change in the WCRERP and a change in policy regarding County cars.

Recommendations 2, 5 and 6 could be initiated, subject to availability of staff, within several months; full implementation would take at least 9 months to a year and continue beyond that with respect to training, drills and plan update.

Recommendations 3 and 7 could be initiated within several months but would take considerable time, most likely a year or more to get in place.

Responsibility - Accident Assessment - Section III C-14

Assess and/or monitor offsite consequences and coordinate such monitoring to determine potential risk to public health and safety by:

1. Determining magnitude and disposition of radiological releases into air, water, soil.
2. Deploying mobile radiological assessment resources.
3. Correlating nuclear facility operator's offsite estimates with the actual offsite consequences by field measurement.

Needs -

1. Established data on normal background radiation levels throughout county computerized for ready availability, including isointensity maps.
2. Established pool of volunteers for field monitoring and sampling.
3. Full time assignment of county vehicles with mobile communications to key field monitoring personnel.
4. Adequate portable radiological health monitoring kits.
5. Sufficient thermoluminescent dosimeters (TLD's) and reading equipment for environmental monitoring.
6. Adequate personnel trained in field monitoring and sampling techniques, and radiation health physics.
7. Availability of appropriate laboratory facilities for analysis of air, water and soil samples and other needs.
8. Boat, motor, trailer, and vehicle to pull same so as to monitor Hudson River, Long Island Sound and other bodies of water.
9. Adequate sampling materials and supplies.

Recommendations -

1. Establish routine monitoring program encompassing appropriate parameters to determine current background radiation levels throughout the County.
2. Recruit and train monitoring personnel from other county agencies (i.e., Department of Public Works, Parks and Recreation) and, where appropriate, local agencies.
3. Assign radio and instrument equipped vehicles to key field monitoring personnel on a full time basis.
4. Purchase adequately distribute, store and maintain nine portable radiological monitoring kits.
5. Provide initial and continuing training and drills to personnel on monitoring and sampling procedures, dose calculations, correlation of data, etc.
6. Make arrangements with a certified local laboratory for sample analysis or equipment, staff the Westchester County Department of Labs & Research for such radiological analysis capability. Training of laboratory staff also necessary.
7. Purchase, adequately distribute, store and maintain sampling materials and supplies.

Time Frame -

Recommendations 1, 4, 6 and 7 depend on availability of funds and resources. While development of specifics to accomplish them could be initiated relatively soon, full implementation would take at least a year and in some cases be continuing thereafter.

Recommendation 2, 5 could be initiated in several months but would take a year or more to accomplish due to the time involved with recruitment and training.

Recommendation 3 could be initiated almost immediately with a change in policy regarding county cars followed by installation of equipment within a year subject to availability of equipment.

Concerns -

1. Although some data re: background radiation levels is available, this information must be continuously updated and maintained in a readily available and useable form.
2. The plan states that women capable of reproduction and individuals under the age of 45 years should not be used for field monitoring. This presents a serious problem since most individuals in the Bureau of Environmental Quality Health Services are below the age of 45 years, therefore, personnel from other sources must be recruited.
3. Key field monitoring personnel must have fully equipped vehicles assigned to them on a full time basis so as to facilitate rapid deployment in the initial response period. At present, certain procedures must be followed to obtain the use of a County vehicle including 10 day prior authorization for overnight use. Frequently pool vehicles are not available, especially during summer months.
4. Only two portable radiological monitoring kits are available. (These were given to the County by Con Ed) Nine more kits would be needed as well as TLD's and readout equipment for environmental monitoring.
5. Present available personnel are not adequately trained to do field monitoring, sampling, dose projections, and correlation of data.
6. The Westchester County Department of Labs & Research does not have laboratory facilities available for radiologic analysis of air, water, and soil samples. Samples would have to be transported to Albany for analysis and under special arrangements with the New York State Dept. of Health.
7. Sampling materials and supplies are not available specifically for this purpose; they should be and should be dedicated to this purpose.

Responsibility - provide public health and sanitation services.

Water Supply - assure water used by residents of Westchester County is safe for potable purposes in the event of a disaster at Indian Point resulting in radioactive fallout within a 50 mile radius of Indian Point.

Concerns

Initially, ground water supplies, particularly those obtained from deep aquifer or rock wells, would not be contaminated from a release of radioactive material to the atmosphere and may not be depending on the extent of the release and other factors. These water supplies can be continued in operation subject to later testing for contamination. Use of water from local surface water supply sources, within the 50 mile limit will have to be terminated, until such time as testing proves them to be safe for consumption. This includes NYC's Croton Aqueduct, and Reservoir system.

Systems that obtain water from the NYC Catskill and Delaware Aqueducts would be able to continue to draw water from those sources since the source is for the most part outside the 50 mile radius. A small southern portion of Ashokan Reservoir is at its closest point, 48 miles from Indian Point. It should be noted that the use of several local reservoirs, in the Catskill/Delaware systems within the 50 mile limit, including West Branch, Kensico and Hillview Reservoirs will have to be terminated by bypassing such reservoirs (piping for which is available) until testing proves them to be safe for consumption. Water in storage tanks and distribution systems on public water supplies can be continued in service, with restrictions on use, since they are protected from atmospheric fallout (storage tank vents can be equipt with filters or special air intakes to reduce contamination potential). Continued addition of water to the systems from the source may have to be terminated pending testing to prevent introduction of water contaminated above levels safe for human consumption.

Public water systems using local surface supplies or NYC's Croton Aqueduct System may be able to obtain water from adjacent or nearby sources through existing or potential interconnections where such sources obtain water from ground water sources or the NYC Catskill or Delaware Aqueducts.

Reference is made to a report entitled "Emergency Considerations, Community Water Systems, Hudson River Level B", dated March 7, 1977 which report investigated and listed existing interconnections of each public water supply, present along with the possibility of such interconnections serving the entire public water supply system in an emergency.

Review of the material contained in the "Level B - Study" relative to supply's drafting from the Croton system or local surface sources indicates as follows:

- New Castle, North Tarrytown, Tarrytown and the New Rochelle Water Company and supplies using Kensico reservoir have Catskill connections which can serve their entire system.
- Ossining, Mt. Kisco, Briarcliff Manor have local wells as well as interconnection however, severe water restrictions will have to be enforced since the amount of water available will be limited.

- Irvington, Yorktown, Peekskill, Pocantico Hills and Port Chester have no local well supplies. Existing interconnections cannot adequately serve water to the entire service area of these supplies.

Those supplies that cannot obtain water from their own sources, emergency sources or interconnections will have to be supplied with water from outside sources via tank trucks or by provision of water bottled at milk plants preferably outside the 50 mile radius or in other appropriate locations. The use of local milk plants would be dependent upon the extent of contamination and testing of the plant's equipment.

Needs

- Presently only the State Health Department Laboratory in Albany and certain private laboratories perform analyses for radioactive contaminants. In the event of a disaster this lab can be expected to be tremendously backlogged as it serves the entire state. Local laboratory facilities to analyze for radioactive contaminants will be required in addition to staffing to collect samples from affected public water supplies.
- A detailed plan of operation from each water supply indicating how they will supply potable water during a disaster. Such plan should include, but not be limited to the following: a review of the area of service and capacity of existing interconnections; identifying potential interconnections and estimate the time and materials necessary to implement in areas where public water is not expected to be available provide mechanisms for using tank trucks or distributing bottled water.

Recommendations - provide for needs, i.e.:

1. Establish a listing of available tank trucks and/or similar water transportation and storage equipment.
2. Require the development of the emergency plans by water purveyors with assistance from the County Health Department.
3. Provide sufficient laboratory capacity and staffing to deal with the volume of samples that will be generated.

Time Frame

Some of the emergency planning is already underway due to the drought, particularly recommendations 1 and 2.

Recommendation 3 will require at least one year to plan and establish.

Determine proper protective response options to implement based on protective action guides, projected doses, dose rates, contamination levels, etc. The initial recommendations concerning protective actions to be taken will be made by the Nuclear Facility Operators.

Needs-

Independent accident assessment and analysis by the County i.e., personnel and/or computers to analyze field monitoring and sampling data so as to base decision making process on our own information.

Concerns-

At present, we are totally dependent on the nuclear facilities for most of the above data. This data is the basis for implementing the response options such as: sheltering, evacuation, etc. These decisions should be made based on our own data since the County is responsible for the health and safety of its people.

Recommendations-

Install appropriate computers in the County EOC and provide highly technical training to those who will be receiving, correlating and interpreting data.

To control and minimize radiological exposure of emergency response personnel and potentially affected members of the general public by:

1. Protecting emergency personnel from excessive exposure to radiation and by decontamination of exposed individuals.
2. Performing radiological monitoring of evacuees including recording estimates of radiological exposures if necessary.

Needs-

1. Purchase, adequately distribute, store and maintain adequate anti-contamination clothing, personal dosimeters and charges, T.L.D.'s and readout equipment, radioprotective iodide, respirators and/or self-contained breathing apparatus, exposure records, etc.
2. Develop, institute and maintain a system for maintaining exposure records of emergency response personnel.
3. Provide radiological health training and refresher course for all response personnel and for those operating decontamination sites.
4. Recruit and train medical doctors, nurses, decontamination specialists to staff decontamination sites.
5. Purchase, adequately distribute, store and maintain adequate personal monitoring instrumentation.
6. Establish and equip pre-designated decontamination sites.
7. Purchase, adequately distribute, store and maintain adequate medical and decon supplies (showers, towels, soap, brushes, change of clothes, etc.).

Concerns-

1. Items named in #'s 1, 5, 7 under "Needs" are not available.
2. A system of recording exposure to emergency response personnel would have to be established; preferably computerized.
3. There is no on-going training program by which emergency response personnel, medical doctors, nurses, etc. presently receive adequate radiological health training.
4. Adequate sites for decontamination of contaminated response personnel and affected members of the public are not presently designated.

Recommendations-

1. Purchase, adequately distribute, store and maintain items named in #'s 1, 5, 7 under "Needs" above.
2. Establish exposure recordkeeping system; preferably computerized.
3. Initiate and continue specialized radiological health training programs for emergency personnel, M.D.'s, Nurses and other specialized personnel

including aspects of ~~decontamination and monitoring.~~

4. Establish and adequately supply and maintain decontamination sites.

Time Frame-

All of the above recommendations require funds and resources not presently available.

While initial activities to implement them can start relatively soon, it would take at least one year to implement them assuming funds and resources are available.