



ALFRED B. DEL BELLO
County Executive

June 2, 1982

Mr. Nunzio Palladino
Chairman
Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Palladino:

For two full years we in Westchester County, New York, have worked cooperatively with our local utility companies, New York State officials, and three other counties to develop a 10 mile radius emergency response plan for the nuclear power plants at Buchanan, N.Y. All of this was required by your August 19, 1980 NRC regulations 10 CFR parts 50 and 70 and guidelines NUREG/0654/FEMA REP-1.

These emergency response plans for Indian Point were drafted by two consulting firms hired in June of 1980 by the local utility companies, Con Edison and PASNY. We offered consultation and advice to the consultants from our county departmental professionals, including environmental health, disaster and emergency services, public safety, hospitals, public works, social services, and others. In some cases, advice was accepted and in other cases it was rejected or ignored.

Third drafts of the plan were released in December of 1980 and in February of 1981 Westchester County provided detailed and comprehensive comments and criticisms of the draft plan, as did the Regional Assistance Committee (RAC) team from FEMA. On April 21, 1981 your Commission took enforcement action by activating the so-called 120 day regulatory clock, whereby if the plan deficiencies were not corrected within 120 days, further NRC enforcement action, including ordering to show cause why the plants should not be shut down, could be subsequently taken by your Commission.

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(2)

The County received further revisions of the plan in August of 1981 in response to the NRC action. We commented again at length on the revised plans in September, 1981. Thereupon, FEMA declined to do another full RAC review of the revised plans, and unfortunately, your Inspection and Enforcement division summarily declared the plans "adequate". The State of New York accepted the plans for planning purposes, although we did not. I then supported a lawsuit filed by the Union of Concerned Scientists and the New York State Public Interest group to compel a full RAC review of the revised plans to force review of deficiencies we knew continued to exist. The lawsuit was dismissed on the basis that the plans were still continuing to be improved.

To test the plan, which was also required in the NRC regulations, the four counties around Indian Point, and the State, and the utilities held a major exercise at Indian Point on March 3, 1982, which was evaluated by federal officials. The official results of that drill are now in, as evaluated by both FEMA and our own departmental professionals from 8 different county agencies. Copies of all of these County departmental reviews are attached.

As chief executive officer for Westchester County, the drill proved three things to me; 1) The counties exhibited 100% effort and cooperation with the state and utilities to make the revised plans work to the extent possible; 2) Certain elements of the plan, with further modifications, such as public notification and plume pathway monitoring, are largely possible; However, 3) It is clear that a full evacuation of 130,000 Westchester residents from within the 10 mile emergency planning zone in 8 hours time is not now workable. My transportation professionals advise me this part of the emergency response plan will not work as currently drafted, and my review of the situation affirms that.

It is of utmost importance that we be candid and forthright with the public about such conclusions. In so far as evacuation is concerned, there are just too many unanswered questions, dependencies on part-time, and possibly unavailable people serving as bus drivers, and reliance on people and resources outside of the County's or the bus companies' command and control. The full evacuation plan envisions using 490 buses in 2 waves, to evacuate thousands of people over roads unfamiliar to the drivers, under possible conditions of extreme emotional or environmental stress. There are hospitals, nursing homes, dozens of schools, and other institutions to be evacuated under a full scenario that leaves me little confidence that it would or could occur in anywhere near the projected 7 to 9 hours time.

(3)

We do not operate within the County under a unified military type command system for non-county emergency and local municipal agencies, nor do we have military type sanctions for failure to be at assigned duty station in an emergency. A duty deemed ultra-hazardous by civilian work forces, when one's own family may be perceived to be in jeopardy, may not find many who will respond to drive buses or man congregate reception centers. It seems that for every problem that is addressed with regard to the transportation and evacuation part of the plan, new problems and questions surface. Traffic load carrying capacities of our roadways are clearly based on assumptions rather than full engineering analyses for each evacuation route.

Compounded with all of this is the fact that we have not received the financial resources from the state that we need to make any of the important elements of the emergency response plan workable in fact. Although state legislation was passed last July to create a \$1.2 million emergency planning and preparedness fund, the counties have not been funded for the radiological equipment, the training, or communications systems (besides telephones) needed to make the potentially workable aspects of the plan implementable in fact.

Further, even if we receive in the four county area a proportionate share of the \$1.2 million statewide emergency fund, the fact is this proportionate amount will be grossly inadequate to cover our needs.

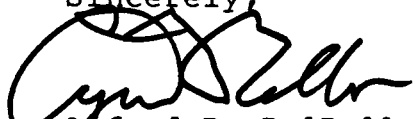
Basically, what I'm asserting is that for 2 years the people of Westchester County have been told by State and Federal authorities and the utilities that an effective emergency response plan for Indian Point was in the making, that "a seat in the lifeboat for every passenger" would be the policy. For 2 years the people of Westchester County waited patiently for such a plan to be drafted. We have seen attempts at such a plan, but the results are that only some improvement in communications and coordination of emergency services have occurred. Working with the plan is now being referred to as a "process" rather than an end result. People are being asked to hope that it will eventually be made workable rather than being assured that it will work by a given date. This is totally unacceptable.

(4)

From the beginning of the heightened sensitivity of this issue in our region of New York State and the creation of our Four County Nuclear Safety Committee, our purpose has been to work on safety issues and to report publicly as fairly and openly as we can. We have always raised major, serious concerns and will continue to do so. We will also present our latest concerns and conclusions, at the June-July NRC hearings on Indian Point. These hearings must not just serve as a substitute for enforcement action that can and should be taken by your Commission, however.

For all of these reasons, and with the March 3rd exercise results in hand, I request that your Commission now initiate the 120 regulatory clock against Indian point, to put the utilities and the state on notice that the plans must be revised again. I further request that your enforcement order make clear that these evacuation plans be made workable, or the licenses will face further enforcement action, including possible closure of the plants.

Sincerely,



Alfred B. DelBello
County Executive

ABD/jan

cc: All Commissioners, NRC
New York State Disaster Preparedness Commission
New York State Radiological Preparedness Group
Con Edison
PASNY
Orange County
Putnam County
Rockland County

DEPARTMENT OF TRANSPORTATION

INDIAN POINT EMREGENCY DRILL; CRITIQUE

CRITIQUE OF THE INDIAN POINT EVACUATION PLAN

I. Dimensions of the Transportation Element of the Evacuation Plan

At present there appears to be a public misconception that the only buses needed for the evacuation are transit buses presently operated by bus companies under contract to the County.

The current evacuation plan requires the availability of approximately 492 vehicles (buses and vans) and drivers in order to respond to any potential scenario. Only 28% of the vehicles, as indicated in Table One below, are operated by transit companies. The other 72% of the vehicles required for a full scale evacuation are operated by private school bus companies and school districts.

TABLE ONE

Type of Operator and Maximum Number of Vehicles
Required for Evacuation

<u>Type of Operator</u>	<u># of Vehicles</u>	<u>% of Total Vehicles</u>
Private School Bus Companies	229	47%
School Districts	125	25%
Transit Companies	<u>138</u>	<u>28%</u>
	492	100%

For comparative purposes, the current evacuation plan will require twice the number of buses operated during rush hours in Westchester County's transit system.

II. Cooperation of the Private Bus Companies and Drivers

Concerns

1. The Westchester County Department of Transportation has no jurisdiction over bus drivers which are employed by private bus companies. Therefore, the Department cannot command bus drivers or bus companies to perform in an emergency situation.
2. The majority of bus drivers involved in this plan are not full-time drivers (guaranteed 40 hrs./wk.) like those employed by our transit operators. Many of the drivers for the school bus companies are retired, single parents or housewives driving buses to supplement their incomes.

- (A) In the case of Vanguard Tours, Inc., a private school bus company required to provide 31% of vehicles and drivers during the evacuation, a significant number of drivers fall into the categories mentioned above. These drivers may be more likely not to volunteer or just simply place a higher priority on personally evacuating their own families instead of driving buses during an evacuation of the general population.
- 3. During the non-school months, private school bus companies lay off the majority of their drivers thereby severely limiting the supply of needed drivers.
 - (A) In the case of Vanguard, approximately 90% of the drivers are laid off during July and August. These drivers either collect unemployment, find other jobs or take vacations.
- 4. The "key issues" as to the number of drivers who will voluntarily provide their assistance is "professional training" and "adequate compensation."
 - (A) Since late 1981, the County has been promised by the State that professional trainers will be hired and will follow a curriculum with lesson plans previously submitted to the Department by the Radiological Emergency Preparedness Group.
 - (B) This curriculum included an:
 - a. overview of the County Radiological Emergency Response Plan;
 - b. explanation of the role of the bus company;
 - c. explanation of the role of the bus driver;
 - d. overview of the risks and control measures that can be taken by emergency personnel.
 - (C) To date, no satisfactory training has taken place.
 - a. On less than 16 hours notice we were informed that the professional trainers we had expected at the February 24, 1982 session were not coming. A contract problem developed with the firm of Stone and Webster and the Department had to "wing" the training regarding curriculum items a, b, and c.

- b. The Department staff, the bus company managers and drivers who attended the February 24 meeting all felt that the presentation by the N.Y. State health official regarding "risks and control measures" was too long; too technical; did not address what a bus driver is likely to encounter; and would not have enlisted any volunteers from the group.
- c. Since the training session will require approximately four to five hours classroom time, the issue of compensating bus company personnel must be addressed. Certainly no bus company will bear the cost of paying hundreds of employees to attend training sessions.
- d. Compensation for the use of equipment, fuel and manpower must be addressed if the bus companies are expected to participate in a real emergency or in future, more intensive drills.
 - (A) One company (Vanguard) has recommended that triple time with a minimum be guaranteed in order to enlist bus company personnel.
- e. Finally, other issues like insurance liability, compensation for fuel suppliers, etc. are still unresolved concerns.

Recommendations

"Professional training" is mandatory and "compensation" must be guaranteed.

1. Training Sessions should at the very minimum be conducted at least once a year.

The County should not accept responsibility for the Plan until the State or Utility, who control the funding to reimburse the bus companies for expenses incurred, has entered into a Memorandum of Understanding or contract with the bus companies. The Memorandum of Understanding or contract should:

1. clearly identify the role the bus companies are to play and require the companies to sign-off that they accept the role;
2. address compensation issues for expenses incurred by the companies in the performance of their responsibilities;

3. identify manpower lists of volunteers who are willing to participate in a real emergency.

III. Operational Concerns

Two Wave Evacuation

Under the scenario of "School In Session" the plan calls for a two wave evacuation. In the first wave, buses move from their garages and/or staging areas to schools in the affected ERPA's. Students board the buses and are taken to reception centers outside the ten mile radius. Students are then discharged and buses theoretically re-enter the EPZ and begin the second wave evacuation of the general public along designated bus routes or evacuate people housed in special facilities.

Concerns

1. Under the two wave evacuation scenario the general public and special facilities' population will not be evacuated until all students have been evacuated to reception centers.
 - (A) Although the plan does not address the issue, the Department feels that significant delays will occur in the evacuation of students because the natural reaction of parents will be to drive to schools themselves to rescue their own children. We therefore envision buses tied up in traffic trying to get in and out of the schools. The effect of this problem will be added delay time in the evacuation of the general public.
2. After students have been evacuated to reception centers, we will be forced to hold buses at the reception centers or staging areas before we begin the second wave evacuation of the general public. Buses must be held in order to provide advanced notice through the Emergency Broadcast System (EBS) so that the general public can be ready and waiting when the buses arrive.
 - (A) Buses could leave immediately from the reception centers to the evacuation bus routes but because an EBS announcement must go through a long communication chain-of-command, buses must be held 30-45 minutes so that they don't arrive and leave before the public has been notified of leaving times. Incidentally, there are 96 bus routes inside the 10 mile radius with the possibility of 96 different estimated times of arrivals that might have to be broadcast to the public.

- * (B) During the simulation, we were notified that one of the buses was carrying contaminated people. Should buses and drivers become contaminated, drivers will be required to at least shower and the interiors and exteriors of the buses will have to be washed before they can re-enter the EPZ and evacuate the general public. Since none of the reception centers have automatic washers, added delays will be encountered in the washing of buses.
- * 3. We have been advised by the consultants who developed the plan that re-entry into the affected zones will not be a problem--that people sitting in bumper-to-bumper traffic will not cross the yellow line of a two lane highway to escape traffic jams, accidents or broken down vehicles.
- (A) The Department believes re-entry will be difficult and that buses will encounter contra-flow traffic travelling in the wrong lanes.
- (B) It is uncertain at this time whether bus drivers will be willing to re-enter areas that people are evacuating because of their potential added exposure to radiation.
- * 4. During the preparation for the drill, the Utility's consultant indicated that reception center personnel may commandeer buses to transport any overflow of evacuees after the first wave to other reception centers or congregate care centers.
- (A) Under no circumstances should anyone other than WCDOT staff or bus company personnel control the movement of buses. Without the sole control of our buses, "pre-assigned" general population evacuation routes are not feasible; communication between the drivers, dispatchers, the Department, public information officers, and EBS radio personnel will be significantly compounded; and the evacuation of the general population potentially delayed.

Recommendation

The Department recommends that the consultant study the feasibility of a one wave, simultaneous evacuation of students, the general public and the population of special facilities. We acknowledge that this recommendation will probably require doubling the number of buses and drivers needed but will have the desirable benefits of eliminating all the aforementioned problems associated with a two wave evacuation and cut evacuation time by 50%.

1. Attachment 3, pages Tr 3-1 through Tr 3-7 of the evacuation plan lists over 100 additional carriers that operate within Westchester County but does not indicate the fleet size of any carrier. However, it seems that the potential number of buses needed for a single wave evacuation exist. Whether or not we can count on a doubling of buses and drivers will depend on training and compensation.

IV. General Concerns

- * 1. The Utility's transportation consultant should provide the Department with estimated travel times for bus movements listed below in order that the bus companies and the Department can co-ordinate estimated times of individual bus arrivals with County Information Officers and personnel from the Emergency Broadcast System:
 - (A) travel time from the garage to the assigned school;
 - (B) travel time from the assigned school to the reception center;
 - (C) travel time from the reception center back into the EPZ to the first bus stop on the general population evacuation route;
 - (D) travel time from the first bus stop to the last bus stop;
 - (E) travel time from the last bus stop to the assigned reception center.
- * 2. To date, all the evacuation bus route maps have not been submitted to the Department. Of those submitted, some are incorrect or not easy to follow. Also, the maps do not show the route the bus should follow to operate from the garage to the assigned school if a two wave evacuation becomes necessary.
- * 3. During the simulation, the Department was notified by a representative of the Coast Guard that they would not send in a cutter to clear pleasure craft from the affected area of the Hudson River unless the Coast Guard received protective clothing and were equipped with an on-board monitoring team to analyze the levels of radioactivity.
 - (A) If protective clothing is deemed essential by health officials all bus drivers and similar emergency personnel should likewise be out-fitted.
 - (B) At present, dosimeters and charges aren't available for bus drivers or dispatchers.

4. Field inspections should be conducted by the Utility's transportation consultant to correct errors in the plan regarding: wrong directions to intersecting roads; incorrect travel headings, i.e. north vs. south; and the physical suitability of parkway segments to accommodate buses.
 - * (A) The evacuation route showing vehicular movement from the Saw Mill Parkway (southbound) to I-287 (eastbound) does not exist.
 - * (B) Part of a peripheral bus route showing movement southbound on Church Street in White Plains is incorrect. Church Street is one-way northbound.
5. Continuous verification must be made on: institutional populations, status (opened vs. closed), etc. Errors were found in the plan regarding underestimates of client populations and the number of buses needed. Similar errors were discovered in the status of schools which are shown as operational but in reality are permanently closed.
 - * (A) Particular errors concerning "school status" include the Roosevelt School in Ossining, the Wiltwyck School in Yorktown, and the McKinley Elementary School in Peekskill. These schools are officially closed, yet they are listed in the Plan as schools that should be evacuated.
 - * (B) The status of day care centers is very dynamic so that during a given year numerous centers may be opened or closed. Therefore, a regular updating of these institutions is critical.
 - * (C) Northern Westchester is growing in terms of both population and planned housing starts. Since new dwelling units, especially multi-family developments, represent potential evacuation targets, a systematic accounting of new units is also critical to keeping the Plan current.
6. Pages TR1-22 and 23 of the plan show that "various school districts outside the EPZ" are responsible for providing buses to evacuate people at the BOCES-Yorktown Heights Center and the Fox Meadow Center. None of these school district operators are identified or represented in the designated "evacuation fleet" that WCDOT has at its disposal. Therefore, it should be clarified what roles the County, BOCES, Fox Meadow and the school districts outside the EPZ will play in the evacuation of these facilities.

7. All communication between the County and the Federal Aviation Administration should be conducted through the Department of Public Works instead of the Transportation Department since Public Works supervises the operation of the Westchester County Airport.
- * 8. Conrail personnel involved in the pre-simulation meetings did not feel that the Utility's transportation consultant satisfactorily represented Conrail's role or their potential role in the evacuation plan.
9. The plan should pre-assign railroad stations where northbound and southbound services should be terminated depending on which ERPA's are affected. These stations should be shown on the consultant's bus route evacuation map and should be easily accessible by bus.

V. Communications

1. It is clear that the communications arrangements made for notifying would-be evacuees by bus need revision. When an estimated departure time is developed for each bus, it is relayed from the dispatcher through WCDOT personnel and forwarded to the press center via telephone by voice. At that point a statement is written, typed, duplicated, and distributed to the media for broadcast. On two occasions, more than 40 minutes was required solely to dictate the information over the phone to press center personnel regarding one bus route. Also, the repeated handling of information offers significant possibility of error.
 - (A) The press center should be by-passed in the communications chain for this information. The Department of Transportation's designated employee should either make bus announcements directly on the air or a data communications link should be established for transmission of hard copy in ready-to-announce form. This link should be direct from the Department of Transportation in the EOC to the Emergency Broadcast System or designated radio station.
 - (B) Analysis should be made of the Emergency Broadcast System's ability to release all information from all relevant sources in a timely fashion, with consideration given to designating a single radio station for transportation information. In the worst possible case, with all 96 bus routes being operated, a minimum of 24 minutes air time would be required for bus announcements (15 seconds per bus route). This does not include repeating announcements, which surely is necessary.

2. The plan requires that the Transportation Department receive all requests for transportation for emergency medical services and relay those requests to hospital personnel so that they can contact ambulances, ambulettes or van carriers to provide transportation.
 - (A) All such requests should go directly to a Grasslands' hot-line number and cut the red tape in half.
 - (B) This re-assignment of responsibility would leave the Transportation Department free to handle all bus evacuation inquiries from the general public who can't interpret the evacuation booklet, lost or mislaid it.
3. The Department's Telephone Information Assistants must be provided with maps showing the evacuation bus routes on a street grid in order to direct people living on specific streets to their correct evacuation route.
4. Radio communication between dispatchers and bus drivers is a basic requirement to the successful implementation of any evacuation plan. Under the current plan a number of reception centers are located outside the range of radio coverage for five of the eight bus companies. Table Two shows the number and percentage of reception centers outside the area of radio coverage for the eight potential bus operators.

Table Two

<u>Bus Operator</u>	<u>Total Number of Assigned Reception Centers</u>	<u>Number of Reception Centers Outside of Radio Range</u>	<u>% of Reception Centers Outside of Radio Range</u>
Vanguard	8	2	25%
Chappaqua	5	0	0%
Westchester School	3	0	0%
Hendrick Hudson	6	2	33%
Croton Harmon	5	3	60%
Lakeland	6	4	66%
Beacon	1	0	0%
Liberty	7	3	43%

- (A) Since many of the bus drivers will be operating in unfamiliar territory, the possibility of some drivers getting lost, as happened in the simulation, is a very real possibility. Similiar occurrences during a real evacuation, breakdowns, or accidents happening outside of the coverage area of the radios, like in Putnam and Dutchess Counties, will require the driver to abandon his vehicle in search of a telephone.

- (B) Since a number of reception centers are outside the area of radio coverage, drivers will have to communicate with their dispatchers by telephone. Under the two wave evacuation scenario the driver will have to call his dispatcher once he arrives at the reception center and a second telephone call will have to be placed back to the driver to instruct him when to leave to begin the evacuation of the general population. This cumbersome communication procedure will require a dedicated phone at the required reception centers and require dispatchers to operate both a radio and telephone communication system.

STATE OF NEW YORK



EXECUTIVE DEPARTMENT
NEW YORK STATE POLICE

April 13, 1982

TROOP K
POUGHKEEPSIE

Alfred B. DelBello
County Executive
County Office Building
White Plains, New York 10601

Dear Mr. DelBello:

Zone Sergeant R. L. Odell forwarded your memorandum of March 18, 1982 to my office for action. In this memorandum you requested a written critique from the State Police liaison to the Westchester County EOC. As the State Police held a critique with all members who participated in the exercise the day after the exercise, I will submit a critique with the State Police perspective with regard to its operations with Westchester County.

This critique will not include the physical problems you have with the County EOC as I am sure you are well aware of them. The desk, phone and radio area assigned to the State Police were sufficient for the exercise.

Some of the problems noted by our members were:

- A. The Westchester County EOC staff were not receiving timely information with regard to the incident and/or actions being taken. If they were receiving timely information, they were not passing it on to the agencies staffing the EOC.
- B. There was a lack of sufficient detailed maps of the Indian Point area.
- C. Several traffic control points as listed in the "Westchester County Radiological Emergency Response Procedure" were not, in fact, as stated.

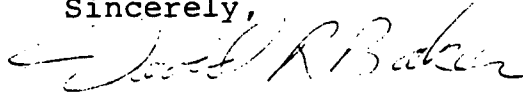
D. There was little consultation between the Commissioner of Public Safety and the State Police liaison as was evident when the County activated its mutual aid plan. The State Police at that time had more than sufficient personnel to cover the requirements of the Town of Cortlandt. It was learned later by our liaison that the mutual aid was to be used in the Town of Cortlandt.

E. No request was made of the State Police by Westchester County for any assistance other than the posts that were agreed upon before the exercise.

It is hoped this information will be of assistance to you in your future planning. It is also hoped that some of the above mentioned problems can be settled by mutual agreement.

If the State Police can be of any assistance to you in this matter, please contact my office.

Sincerely,



David R. Baker
Captain - Troop K

DEPARTMENT OF HEALTH

INDIAN POINT EMERGENCY DRILL; CRITIQUE

EOC - Commissioner's Comments

1. No direct contact with Dr. Axelrod and New York State Health Department. This deficiency must be remedied. It is essential to have frequent and uninterrupted conversations with Albany to assist in the decision making on both sides. It is cumbersome and restricting to have to deal through (William Hennessy on technical matters.)
2. No direct line to four (4) County Health Commissioners. Again essential as the emergency plays itself out and feedback from the field monitors begins to come in.
3. Differential time lag between information received and acted upon in Albany and time received in Westchester County EOC. On many occasions Westchester County received pertinent data from the plant and from the Health Department's on-site staff person from 5 - 15 minutes before it was received in Albany. This not only proved confusing, but in a real emergency, might mean the difference between an effective protective action and an ineffective or inappropriate action.
4. Inability to communicate with the staff in the field other than through police radio. Again cumbersome and inefficient. Could mean unnecessary exposure for the field staff if wind direction changes suddenly. Also means considerable delay in mobilizing the teams at onset of emergency - (Nuclear or otherwise).
5. The Red Cross alerted their volunteers prior to the issuance of the EBS bulletin and the blowing of the sirens. I believe this was inappropriate and could have caused panic and confusion before all of the rumor control and crowd control measures were in place.
6. In general the staff worked well and efficiently, but could use more training.

Dr. Williams' Comments - (In charge of the decontamination procedures and stationed at the EOC).

From my perspective at the Emergency Operation Center (EOC), the major difficulties encountered involved:

April 15, 1982

J. Robert Dolan Executive Officer

Critique of the Indian Point Nuclear Disaster Drill, 3/3/82. (Cont'd.)

1. The question as to when the Reception Decontamination Center at White Plains High School was to be activated. Red Cross activated their Congregate Care Center long before evacuation was ordered. Health and Social Services waited for the evacuation order as per Dr. Curran's directions.
2. There were not enough telephones for everyone which made it difficult at times to receive and make outgoing calls.
3. There was difficulty interpreting the conflicting reports from the White Plains Decontamination Center coming from Social Services. Reports of bus loads of people being unloaded at the wrong place (not true) and contaminated people in the Congregate Care Center (again not true) were confusing.
4. The enormous amount of time involved in getting equipment together, setting up training and coordinating the decontamination activities for my part prior to the actual drill involved about six weeks of heavy involvement at about 50% time effort.
5. The confusing telephone notifications coming from the New York State Regional Office which usually arrived after we already received this information at the EOC from the plant and our staff person at the facility.

On the positive side, however, I felt that the Health Department Personnel participating in the exercise took their roles very seriously and performed them in a professional and commendable manner.

Mr. Weber's Comments-

1. Generally, the exercise went well in spite of delays in receipt of radiological information from the utility. Had we not had a staff person at the Indian Point Emergency Operating Facility, we may not have received the data necessary to perform dose projection calculations. The failure of the utility to provide this data to the County was a serious omission that must be corrected.
2. Notification to this department by the Regional Office, New York State Department of Health of the emergency status at Indian Point (not part of the County plan) and confusion concerning notification of key staff in the initial stages of the exercise contributed to unnecessary delays in alerting staff and manning posts. Two things must be done to avoid this in the future; (a) the notification procedure must be followed, and (b) a meeting must be scheduled with the Regional Office of the New York State Department of Health to clarify their role.
3. A procedure must be established and implemented to provide a flow of information between the Health Department representative

April 15, 1982

Critique of the Indian Point Nuclear Disaster, etc.

Mr. Weber's Comments (Cont'd.)

in the EOC Operations Room and our offices. This is important so that our office and field staff are informed and can arrange for support activities.

4. Dose assessment staff expressed disappointment that decisions were being made concerning protective action measures based on discussions with the State staff and without their input through recommended actions. The lack of information at the County level referred to in number one about contributed to this; however, we must work on this to improve operations.
5. A staff member from the Public Water Supply program should be in the radiological assessment room to ensure contact with local water supplies as appropriate.
6. Improvement in maintenance of logs is necessary in several areas. Due to the rapid flow of messages and the short time for carrying out activities, adequate maintenance of logs was not always possible. Consideration should be given to assigning a clerk to the radiological assessment room for this purpose, to maintain messages in an orderly and organized format for ready reference and to record pertinent information on status boards.
7. Forms used by the dose assessment team should be updated as necessary and reproduced in pads so carbon copies can be readily made to assist with the essential flow of information. All necessary forms must be available - we learned well into the exercise that we were not provided with a useful and necessary form.

During the exercise, one field monitoring team reported that a FEMA monitor directed that they proceed to the emergency work decontamination center, with a stop at the State Police Headquarters, even though they were directed to obtain further field monitoring data. This action by the FEMA monitor was absolutely inappropriate. Fortunately, the team reported it and action was taken by Dr. Curran in the EOC to negate the FEMA monitor's action.

With respect to the overall implementation of the plan, the following must be addressed in the immediate future and on a continuing basis:

- .Provision of adequate staff, County employees and citizen volunteers, to operate the EOC, do field monitoring and to staff the emergency worker contamination site and all reception centers for all shifts.
- .Provision of adequate and dedicated communications equipment.

Mr. Weber's Comments (Cont'd.)

- .Provision of training, including periodic reviews and exercises, for all involved personnel; including cross-training for purposes of flexibility and understanding.
- .Provision of necessary equipment in sufficient quantity to do the job, and staff to maintain it in a ready state for use at any time.
- .Provision of a means of communication with staff during their routine assigned duties to ensure prompt notification in the event of plan implementation.
- .Determination of the participation responsibilities of Department staff - voluntary or mandatory - so staffing for other than an exercise can be firmly established.
- .Development of procedures regarding department responsibilities for food and water supplies, sampling and re-entry operations after evacuation.
- .Provision of at least one full time staff person in the Bureau of Environmental Quality to continue development of needs to fully implement the plan, maintain equipment, assist with recruitment and training and other necessary activities to maintain this Department in a readiness state in the event the plan must be implemented beyond the unusual event stage.

I am pleased to state that I am proud of the participation and interest displayed by the staff of the Bureau of Environmental Quality and the Bureau of Public Health Protection that took part in the exercise. They demonstrated an interest and ability that spoke well of themselves and the Department.

Field Monitoring Teams and Dose Assessment Teams.

Mr. David Bell's Comments - (He is county liaison officer stationed at the facility.)

This writer met with Field Monitoring Team and Dose Assessment Team personnel on March 9 and 11, 1982, respectively to critique our performance during the March 3, 1982 exercise. The following comments were offered by the two groups:

Field Monitoring -

1. More training is needed on field equipment and its use and on field procedures and how they relate to other responsibilities of our Department and County, i.e. personnel would like to be more familiar with the entire County Plan to see where they fit in.

Mr. David Bell's Comments-(Con't.)

2. The teams indicated the need for periodic updates during an emergency to keep them advised of current meteorological data, status of protective actions taken, evacuation routes being used, general conditions of the plant, and overall activities of the County and State. Since they are the ones in the field, and most likely to be subject to a passing plume, they would like this information as it is their safety which is at stake. In addition, they want to be sure that the individual who is directing their activity from the eoc is adequately trained and can make sound judgements.
3. The individual who communicates with the teams from the EOC must have a working knowledge of radiation terms and values, instruments, and the Plan itself. Without this knowledge, most information can be lost or misinterpreted while being relayed to and from the field teams.

Proposed Solution to 1, 2, 3 above -

Provide a direct radio link between the field teams and the field team coordinator in the EOC, e.g., handy talkies and base station. This would eliminate a great amount of lag time in transmitting field data, would reduce the chance for misinterpreting data, and would provide the teams direct access to an individual with a working knowledge of radiation terms, the Plan and current status of the emergency.

4. With regard to re-entry procedures, it was suggested that additional monitoring sites be established which could be used to determine the safety of re-entry to the area following a radioactive release.

Proposed Solution -

A list of re-entry monitoring sites can be established and included in the field procedures manual. These sites can also be designated on the maps included in the field kits.

5. Field teams would like a mechanism by which they are reminded to check their personal dosimeters on a regular basis.

Proposed Solution -

A note can be provided on the field data sheet to remind personnel to check and record dosimeter readings at each monitoring site.

6. Field personnel would like the method for sample collection written into the procedures manual, i.e., for water sampling, is the sample drawn from the surface or sub-surface, is the

Dave Bell's Comments - (Cont'd.)

water mixed first, is sample taken from the shore or middle of water body, etc.

Proposed Solution -

Contact should be made with the NYSDH, Division of Labs and Research to determine appropriate sampling techniques.

7. The plan calls for eleven field teams. At present, we do not have enough equipment or trained personnel to make up these teams.

Proposed Solution -

Provide adequate training for personnel; purchase necessary equipment.

8. The personal dosimeters available are not of the appropriate range and some of the CDV equipment needs calibration.

Proposed Solution -

Purchase appropriate dosimeters and obtain newly calibrated CDV equipment.

Dose Assessment -

1. Initially, there was a lack of information coming from the utility, i.e., release rates. This was somewhat the result of the late arrival of the County liaison officer to the utility's EOF. (Failure of callout system which has since been rectified (ASC)).

Proposed Solution -

County dose assessment personnel should be able to communicate directly with the State's personnel in Albany without having to go through the So. District of ODP.

2. The dose assessment team must be advised of what decisions have been made by the County/State with regard to protective actions for the public. Very little information regarding decisions and the "readiness" of other County departments and agencies was available to the dose assessment group.
3. It was felt that perhaps the availability of more phone operators and food and water program personnel in the dose assessment room would enhance the functioning of the group.

Proposed Solution -

4. Dose assessment personnel must have extensive training so as to have the flexibility to assume other functions and roles of

Dave Bell's Comments - (Cont'd.)

dose assessment should another member of the team not be available.

Proposed Solution -

Provide needed training.

5. Access to the dose assessment room must be limited during a drill or actual emergency.

Proposed Solution -

Provide specific identification to those who should be provided access. Without such identification, an individual cannot be permitted entrance.

6. Should an emergency occur during working hours when personnel are in the field or off hours when personnel are unreachable via phone, there must be means by which to contact needed personnel.

Proposed Solution -

Provide a pager system whereby personnel can be contacted at any time.

In addition to the above comments, I would make the following regarding the County liaison officer to the utility:

1. The liaison officer must have access to each and every red phone transmission made to the County by the utility so that he knows exactly what information is being provided to the County.

Proposed Solution -

Provide a procedure whereby the liaison officer is notified each time the red phone is used by the utility and a means by which he can monitor each message as it is being transmitted.

2. The liaison officer, as well as other dose assessment personnel, must be trained with regard to plant parameters and monitors and their significance to plant status.

Proposed Solution -

Provide such training

3. The liaison officer was notified at the Unusual Event Stage but not at the Alert Stage - the stage at which he is to report to the EOC. This led to late mobilization of field and EOC personnel. (since rectified)(ASC)

Dave Bell's Comments - (Concluded)

Proposed Solution -

Firm up notification procedure with the County Police.

The following general comments are made:

1. More training is needed in all areas of the Plan so as to have all those involved personally confident that they can effectively carry out their assigned function or fill in for other functions if needed.
2. Appropriate and adequate (type and amount) equipment must be provided so that assigned functions can be carried out safely and effectively.
3. More personnel are needed in all areas of the Plan, especially for second shift replacement. Volunteers from the community could be utilized if properly screened and trained.

* Probably the most important aspect of the Plan which needs to be resolved immediately is the question of whether participation by the County employees in the activities of the Plan is voluntary or mandatory. Until this question is resolved, we have no idea of the personnel resources available to us in the time of emergency. I cannot overstress the importance of resolving this question especially in light of the unwillingness of some of our personnel to participate in the drill. It is my own feeling that proper training and education may yield more volunteers but this matter still needs to be officially resolved.

Decontamination Sites -

Dr. Williams' Comments -

The biggest problems were basically as follows:

1. Lack of, or inadequacy of, equipment, including dosimeters, geigercounters and equipment needed to decontaminate personnel.
- * 2. Lack of security at White Plains High School; although the White Plains Police did show up at the site, they were apparently inadequately trained as to what their role was and did not function effectively, even when requested.
3. Difficulty with the press, disregarding contaminated areas in the Decontamination Center at White Plains. (The press should not have been given permission to visit these centers.)
4. Difficulty contacting White Plains Decontamination Center from the EOC. Social Services was using both telephones. (Theirs and ours.) This delayed termination of the Center's Activi-

Dr. Williams Comments - (Cont'd.)

ties for almost a half hour.

5. The lack of subjects at the White Plains Center for Decontamination. It had been prearranged with students at the White Plains High School to go through decontamination, but due to the fact that the Decontamination Center was not set up at exactly the time predicted prior to the drill, (since exact information was unavailable) these students were not available for decontamination and other subjects had to be recruited.
6. The inappropriateness of the Federal observer at the Fire Training Center Decontamination Center hiding the radioactive source in his leather boot and expecting radioactivity from this source to be detected by our personnel. The heavy leather boot absorbed the radiation from the source and it could not be detected with the geigercounters.)

Dr. Franklin Hall's experiences -

He was in charge of the Emergency Workers at the Westchester Fire Training Center Site No. 1 Decontamination Center.

At 8:40 A.M. on March 3, 1982, Dr. Hall received a call from Thomas Meade of the New York State Department of Health New Rochelle Regional Office. Mr. Meade informed Dr. Hall that an unusual event had occurred at the Indian Point Nuclear Plant at 8:15 A.M. that morning. Since he did not state that it was an exercise, Dr. Hall called him back and informed him of this omission, and instructed him to inform the one who gave him the message of same.

At 8:55 A.M., Dr. Hall received a call from Mr. Calvin Weber, informing him that the exercise had proceeded to an alert standby. Dr. Hall then contacted the members of his Decontamination Team to advise them of the alert standby. This team consists of R. Flannery, Administrator; J. Burke, Roving Monitor; B. Barnett, Entrance Monitor; M. Holton, Female Decontamination Monitor; J. Perucci, Male Decontamination Monitor; M. Hudson, Record Keeper; C. Heuber, Vehicle Scanner.

At 10:35 A.M., Dr. Hall received a call from Dr. C. Williams, instructing him to activate his Site No.1 Decontamination Center. Dr. Hall contacted the entire Team once again, and instructed them to proceed to Site No. 1 at the Westchester Fire Training Center in Valhalla. By 11:00 A.M. all Team members had arrived and proceeded to set up with signs, tables, ropes, etc. the Decontamination Center. Dosimeters were distributed and charged. Individual exposure record cards were filled out and five CDV 700 radiation detection instruments were assembled with batteries, and tested.

At 11:35 A.M. Dr. Hall contacted Dr. C. Williams and informed her that the Decontamination Center was set up and prepared to receive its first vehicles and clients for monitoring. During the entire

Dr. Franklin Hall's experiences - (Cont'd.)

drill, which lasted until 5:30 P.M., 19 clinics were monitored, with only one contaminated (palms of hands). He was taken to the Decontamination area and after washing his hands twice, his contamination of .3 MRs was reduced to .05 MRs.

During the drill, 10 vehicles were scanned and found to be free of contamination. At various intervals during the day, there were three state observers, and one FEMA observer. The FEMA observer had concealed a Comeman Mantle inside his high top leather shoe. This was not detected by the monitoring device, since it emitted only beta rays. When he removed the mantle from his shoe, it was easily detected. Beta particles have a very short penetration potential and could be stopped by a thick leather shoe. (ASC)

At the end of the drill, at 5:30 P.M., all dosimeters were read, with no radiation in evidence.

Contact was made at least one an hour to report to Dr. C. Williams at the EOC and another report was made when the client with the contaminated palms was detected.

In general, the drill went smoothly, and the Team worked together extremely well, and showed a great deal of interest.

I feel that the Team learned a great deal from this practice drill, and that we could easily have handled five times as many clients.

One of the state observers commented that the monitors were moving too fast, and another state observer remarked that they were moving too slowly. So, there does seem to be some disagreement between two of the state observers as to methodology for monitoring. (ASC)

A news photographer appeared at the door at 4:00 P.M., but was not admitted by Dr. Hall, even though he stated that he had permission from the County Police and a county worker to enter and take pictures. He did proceed to take pictures from the outside of the building.

Dr. Mary Lane's Comments - (She was in charge of the Reception Center decontamination activities at the White Plains High School)

I. Problems:

A. Plethora of observers -

- 2 from Fed.
- 1 from nuclear consulting firm that works with state
- 3 or 4 from independent citizens group

B. Lack of equipment in the beginning -

tables, chairs, rope, etc. - which we understood were

Dr. Mary Lane's Comments - (Cont'd.)

supposed to have been in the area; they had to be transported from somewhere else.

C. Dr. Ed. Lamanna, in charge of the Social Services contingent began giving us orders the moment we arrived - regarding monitoring his people for radiation, etc. We had not known that we would be relating to him. He kept making pronouncements, some of which were erroneous.

D. The Red Cross had spent the morning setting up the Boy's Gym in the basement as congregate care facility, We had thought to use corner of Gym as holding area for unsuccessfully decontaminated persons. As it turned out, it would have been better to use the wrestling Gym on ground floor level for this as well as for First Aid.

E. Reporters, photographers, and cameramen -

One from New York Times with camera, escorted from the basement area, through our clean area into our contaminated area by someone who said he was with Red Cross but turned out not to be. Said she had been given clearance by "media center", refused to be scanned - took pictures and disappeared, saying she had a deadline.

Cablevision people were more cooperative; insisted also they had been given clearance; stated Red Cross expected them; went through the scanning in order to get to them. Came back at end of day for pictures.

F. We had no security. We had to fuss with these people. Apparently two police officers were somewhere on the campus but refused to stand at our entrance. (White Plains Police)

G. Virtually no citizens came through. The busload of people thought by the EOC to be on its way never materialized. One bus came from Peekskill, carrying one observer. There were no direction signs (or policemen) to tell them where to go. They wandered around and around, then both driver and passenger came in wrong entrance; monitor had to leave area to scan them. Vehicle monitor scanned bus after driver had left it.

Second bus arrived at front entrance carrying one observer; driver asked to wait there until vehicle monitor available. Waited awhile, left, told federal observer had children to pick up.

H. The students who had been asked to come through were no longer available in the afternoon. Wrestling coach had been promised the gym by 3:30 - students found small groups of students to go through the system in order to move things along. We pretended to find

April 15, 1982

Dr. Mary Lane's Comments * (Cont'd.)

contamination on 2 of them just to send them through the decontamination specialists.

I. Federal observer had asked to go through system with one clean and one contaminated person, but he had gone on to look at other areas of the facility when the students came through.

J. One of the social services workers got on our only telephone at 3:55 and remained until 4:25 - her supervisor had told her to do it, calling names in to somebody. This was the time during which EOC was trying to call us to say the exercise was ended.

II. Federal observer had me walk him through the diagram to show him where we would do what. He also asked the following questions, some of which I felt competent to answer, some not:

1. .What will happen to the bags of contaminated waste at end of emergency?
2. .How would we communicate with similar reception centers, or would we?
3. .What procedure is followed for possibly contaminated vehicles?
4. .What happens to the records at the end of the emergency?
5. .What is procedure for someone who is unsuccessfully decontaminated?
6. .How will we handle accumulation of contamination during the day?
7. .How will we adjust the G-M counters to take into consideration this accumulation? (I had no idea what he was talking about until after he had left me and I discussed it with other members of the team.)
8. .What mechanism for directing citizens to the proper place?

III. Positives:

Our team worked well together. All were pleasant, cooperative, and I think, efficient.

The office secretary was pleasant and cooperative as was the custodian.

The wrestling coach and the students were patient.

April 15, 1982

Dr. Mary Lane's Comments - (Concluded)

IV. Summary:

Confusion regarding relationships with other divisions and other personnel. No security or other assistance from police. No citizens to screen. Insufficient orientation to some of the questions raised by Mr. Rodriguez.

I want to stress Mr. Bell's comments on pg. 8 . A decision must be made at the County Executive level in all four (4) counties as to whether or not county personnel participate on a mandatory or voluntary basis.

Anita S. Curran, M.D.,

ASC:jhh

cc: Hon. Alfred B. BelBello

DEPARTMENT OF PUBLIC SAFETY SERVICES

INDIAN POINT EMERGENCY DRILL; CRITIQUE

The following comments and suggestions are the result of a de-briefing of all key participants in the Public Safety Department. The order-of-listing is not reflective of any particular priority, emphasis, or relative importance.

I E O C

A) The room is too small for the number of people who have to work there; results in excessive noise levels.

B) There are inadequate toilet facilities to service those who must be in attendance there.

C) Even with the supplementary heating devices, on cold days, working there for extended periods will be exceedingly difficult for many people.

Perhaps an alternative site should be developed for future use, e.g. the proposed Armory at Valhalla - outside the ten (10) mile zone, ample parking, secure building.

II Equipment

A) Radio Communications. Inadequate; the various police departments in the ten (10) mile zone do not share a common communications frequency. In an attempt to communicate via radio, we equipped each department with a hand radio on our frequency, and we positioned the communications van to serve as a repeater. While all participating departments were able to receive our transmissions from Hawthorne, return transmissions from the field were poor or inaudible (Ossining, Croton, Briarcliff, New Castle, among others). If the phone lines went out, as well they might from overload in an



J. Robert Dolan

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March 30, 1982

II Equipment (continued)

actual radiological emergency, we would have had no means of receiving any feedback regarding events occurring in the field. We desperately need a common radio frequency (MRD Program). In the meantime, we will pursue other possible means of establishing radio communications (Con Ed frequencies/trucks; ham operators, etc.).

B) The communications operator who was assigned to operate the radio at the EOC experienced great difficulty. She had a twenty-four (24) inch work space; no head set for her radio; numerous persons congregating in her vicinity, raising the noise level; and no volume control switch on her radio to raise the level of weak messages which were being received from the Buchanan area (radiological monitoring reports).

C) Telephones. Inadequate at CWP, Hawthorne. The communications room at Hawthorne is not equipped with sufficient phones or space to permit the entire emergency operation to be located in one area. Hence, it was necessary to 'sub-contract' notifications, and return reports, to persons manning phones in various rooms around the building.

A sufficient area for work space, in the communications room, can be established by the removal of a number of non-essential file cabinets and lockers. Additional room will be obtained by removing the MODAT computer and its related equipment, to Purchase and Supply.

Arrangements for that move are underway, and at the same time we can move our stand-by base from the Sheriff's old building to our headquarters. This move will save us \$315.52 per month in tie-line payments. There will be a one-time cost of \$100.00 for Motorola to re-connect the base at our headquarters.



J. Robert Dolan

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March 30, 1982

II Equipment (continued)

EQUIPMENT COST

	<u>Monthly Rental</u>	<u>Installation</u>
4 I.B.M. (Separate Phone Lines)	\$ 32.60	\$ 72.00
4 R.S.C.C.W. (Relays)	28.44	46.32
3 K.V. Sets (multi-phone lines)	36.54	468.24
3 Headsets	30.00	90.00
4 Touchtone Lines	17.40	Additional
3 Touchtone Sets	2.49	Additional
Total	\$ 147.47	\$ 676.56
10 months at \$147.47	\$1,474.70	
Installation		<u>676.56</u>
Total expenditure for next 10 months		<u><u>\$2,151.26</u></u>
Tie line savings 10 at \$315.52	\$3,155.20	
Expended for additional phones		<u>2,151.26</u>
Savings		<u><u>\$1,003.94</u></u>

If the equipment were to be purchased in the manner described, it would be cost effective and would allow the people that would be involved in a nuclear incident or drill to operate from the same area in the Hawthorne building. We are also trying to ascertain the cost of headsets for the radio operators, in order to reduce the noise level in the room. At present, switchboard operators are supplying incoming callers with direct line numbers that can be utilized; this will, to some extent, cut down on switchboard traffic and assist us in emergency situations.

D) Maps. Insufficient in content and number. We need maps which identify, at a glance, the various access control points and evacuation-facilitation points. Further, we need maps of the ten (10) mile area, to give to emergency workers who will be summoned, on a mutual aid basis, to assist in the various operations required. These people (police, fire, and other volunteers) will, for the most part, be unfamiliar with the northwest part of the county and they will need good, accurate maps to function.



J. Robert Dolan

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March 30, 1982

II Equipment (continued)

E) Dosimeters - Insufficient and inadequate. We do not have sufficient instruments to issue same to all emergency workers. Those that we do have are not of the proper range or sensitivity to be useful. For all practical purposes, we have none, and need thousands.

F) Protective Clothing - Decontamination of police uniforms and equipment would be greatly simplified by the issuance of jumpsuits to cover leather goods and firearms. Moreover, such would serve to better identify non-uniformed detectives, pressed into service.

G. Sirens - Low volume, didn't operate. This condition is well known and needs no further elaboration here.

III Training

Insufficient. If we had a true radiological emergency at Indian Point today, we could not mount any kind of meaningful response because our officers throughout the county, have had no training or preparation to deal with this kind of emergency. They do not understand the elements of radiological events, nor their proper role in dealing with same. We need an immediate in-depth training program to prepare them. Similarly, the fire services and other emergency workers will require such training, if they are to be effective.

IV Information Needs and Failings

A) Phone lists; found to be inaccurate. These listings of persons to be summoned, must be routinely updated, at least each month, with immediate information regarding personnel changes being forwarded to ODES for dissemination, to insure accuracy.

B) Road Construction/Obstruction. A central repository must be established for the collection of this information on an ongoing basis, in the county generally, and particularly in the ten (10) mile area. When an emergency occurs, we need immediate, accurate information as to the condition of roads and highways. Perhaps the various public works departments in the county could be persuaded to routinely forward brief reports regarding road work, to either the County DPW or Hawthorne. *



J. Robert Dolan

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March 30, 1982

IV Information Needs and Failings (continued)

C) Message Sheets and Logs. There was some confusion regarding this. Records were made of messages that were already transmitted; these message sheets were forwarded to the communications room at the EOC where they were again transmitted. Some clearer understanding is required of the message handling/recording system at the EOC.

D) Wind Direction. The frequent announcement of wind direction and degrees, by itself is meaningless. Whenever wind direction is discussed, the projected affected ERPA's should be included, as a matter of course.

E) Changes in Evacuation Routes. When an evacuation route, listed in the Indian Point brochure which was mailed to residents, is to be changed due to plume direction, this information must be made part of the EMS broadcast. This information was not so disseminated during the drill.

F) The general 'up-dates' for the benefit of all the departments in the War Room of the EOC were not given often enough, and sometimes, because given by different persons, resulted in the repeat of old information or the contradiction of data previously given. These updates should be given by the County Executive, every half hour or as close thereto as possible; they should be brief and to the point (information regarding whole body and thyroid levels is really not meaningful for most participants). The presence of the County Executive would insure that we are all operating with up-to-the-minute data, which he presumably above all others, has.

V Miscellaneous

- * A) The plan provides for unnecessary traffic control points. Some are mis-labeled as to Town or Village; others don't exist at all. We are undertaking a review of this matter and will develop our own traffic plan in due course. What we will lack here is essential data with which to decide whether or not evacuation of such large numbers of people is practical or manageable. I hear various numbers being bandied about as to how long it will take to evacuate Peekskill or other communities



J. Robert Dolan

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March 30, 1982

V Miscellaneous (continued)

or ERPA's. I know not how these numbers were derived. Further, any such assessments could only be speculation since there are so many variables involved and optimum conditions will never prevail.

Past experience suggests that spontaneous evacuation will take place at the first sign of a real emergency, and we just can't predict what the result will be.

cc: A. Marasco
D/C Robert Wilson

DEPARTMENT OF PARKS, RECREATION AND CONSERVATION

INDIAN POINT EMERGENCY DRILL; CRITIQUE



4 City Task Force - 3/2/82
DRILL

C.M.
ADD TO LIST
[Signature]

March 16, 1982

TO: Mr. J. Robert Dolan
Executive Officer

FROM: Commissioner Joseph Caverly

RE: Indian Point Drill

In regard to the Parks, Recreation and Conservation Department's role in the Indian Point Drill on March 3, 1982, everything went well. I feel it was very valuable to experience this simulated drill. The numerous communications to the northern superintendent, Tony Colao and his staff, were dispatched immediately instructions carried out and we were promptly notified of the action taken. The tracking of the wind was most effective it gave us a visual reception of the fallout area and the changes that took place throughout the day. It was helpful to double check our actions with the Public Safety Department as to barricading the parks and later the simulated evacuation. We are aware that a whole different set of circumstances would take place if an emergency occurs in the summer. We do not have indoor shelters that we could house the patrons. It would be necessary to evacuate the beach at Blue Mountain Park and if the area was endangered, Croton Point Camp Echo for the handicapped, as well as the Family Camp area and the special permit groups, would have to be evacuated and could not return until the all clear signal was given.

I noted during the drill that the Croton Point siren did not sound, everything else functioned as planned. The telephone communications were excellent and the overall information was carefully and precisely dispatched to our department and returned to the field personnel.

I feel it was very worthwhile to go through this simulated experience and to know what to expect if an emergency should occur.

[Signature]
JOSEPH CAVERLY
Commissioner

JC:AD
cc: Deputy Comr. Arles



February 25, 1982

C.E.
cc: Dave
Smith

TO: ANTHONY MARASCO
OFFICE OF DISASTER AND
EMERGENCY SERVICES

FROM: JAMES E. ARLES *JEA*
DEPUTY COMMISSIONER

RE: FEBRUARY 17th EMERGENCY DRILL

We had no specific problems with reference to our operations during the February 17th drill. Our communications with Croton Point Park and other park locations were good and our personnel were on hand for response as required.

The one area that could pose a problem is that of "sheltering". By nature of our operations in County parks and golf courses "sheltering" is impossible except for those who reside at the site. The majority of park patrons would be required to remain outdoors. Therefore, my instructions to the park superintendent at the time of "sheltering" were to require park patrons to leave the site. This could possibly be interpreted as an official evacuation notice. If you have any suggestions as to how this might be handled differently, please advise me.

cab
cc: Alfred B. DelBello
County Executive
Joseph Caverly
Commissioner

WESTCHESTER COUNTY MEDICAL CENTER

INDIAN POINT EMERGENCY DRILL; CRITIQUE

CRITIQUE OF INDIAN POINT

1. Commissioner Weinstein did not receive call/notifying him of official call up.
2. Ambulance communications was extremely difficult-base station at COB I was low power and gave limited geographic coverage, could not speak to ambulances or Peekskill Hospital or disaster van. We had to rely on WCMC ER for relaying of information to disaster van.

Anticipate central coordination system at Fire Training Center will clear this up but EOC base station will have to communicate to northern sections of county thru Fire Training/EMS communications center.

3. Hospitals and EMS had only one phone to share between them and were forced to use other departments phones when available for more than 100 calls out and resultant difficulties with calls coming back in.

There was lack of understanding regarding use of telephone operators and telephone switching arrangements in the EOC. Call back arrangements were not understood by users.

4. Needed an intercom system between EMS/hospitals table in EOC and EMS radio dispatcher in radio room.
5. Need either proper ventilation/air filtration for smokers and/or smokers room near EOC.
6. Toilet facilities where inadequate with no paper towels or towel rack.
7. Need continual coffee, cups, coke and food or at least vending machines.
8. No log forms were available, no carbonized memo forms were available. Need some system with clipboards, binders to keep forms in order and together.
9. Clock in radio room not easily readable. Suggest large 24 hour digital readout clock perhaps also in EOC.
10. Information on front boards in EOC was confusing.
11. Needed more room in EOC to spread out maps, papers and seating. Suggest moving EOC storage area to provide more space.
12. No provision made to coordinate decontamination facilities with host facilities in Dutchess County to receive patients from nursing homes in EPZ.
13. Host facility for Mohegan Manor was Noxon Road Elementary School in Poughkeepsie which had no knowledge of their role and responsibility.

LOG FOR INDIAN POINT DISASTER DRILL

March 3, 1982

Department of Hospitals/EMS

.M.

8:45 Department of Hospitals/EMS notified by County Police

9:06 Site area emergency declared

9:11 EMS/Hospital representatives in EOC

9:22 Peekskill Hospital alerted -define patient population information.

9:22 FDR Hospital alerted - " " "

9:25 Mohegan Ambulance - standby at station for further instructions

9:27 Croton Ambulance - " " " "

9:33 Cortlandt Nursing Center alerted-define patient population information

9:35 Ossining Ambulance-standby at station for further instructions

9:38 Verplanck Ambulance- " " " "

9:40 Stony Lodge Hospital alerted-define patient population information

9:41 Peekskill Ambulance-standby at station for further instructions.

9:41 Bethel Springvale Inn alerted-define patient population information

9:43 Mohegan Manor alerted- " " " "

9:45 Yorktown Ambulance-standby at station for further instructions.

9:45 Asthmatic Childrens Cntr.alerted-define patient population information

9:50 Somers Ambulance-standby at station for further instructions.

9:50 Briarcrest Nursing Hm. alerted-define patient population information

9:52 Victoria Home alerted - " " "

9:53 Briarcliff Ambulance-standby at station for further instructions

9:55 Westledge Ext.Care alerted-define patient population information

9:59 Field Home alerted- " " "

10:01 Marrs Nursing Home alerted " " "

LOG FOR INDIAN POINT DISASTER DRILL (cont)

10:05 Country Hse.West. alerted-define patient population information

10:08 Danish Home alerted " " "

10:09 Abbey Richmond Ambulance-How many vehicles can you provide?

10:10 Cedar Manor alerted-define patient population information

10:11 Brandywine NH alerted- " " "

10:12 Skyview Haven NH alerted " " "

10:13 Maryknoll NH alerted " " "

10:14 AA Ambulance-How many vehicles can you provide?

10:15 Sleepy Hollow NH alerted-define patient population information

10:15 Shelter hospitals and nursing Homes

10:16 Peekskill Hospital - alerted to shelter

10:20 FDR Hospital - " "

10:25 Cortland NH - " "

10:28 Mohegan Manor NH - " "

10:30 Westledge NH - " "

11:36 Order to evacuate ERPA's

11:38 Called Mohegan Manor to evacuate

11:40 Called Cortland NH to evacuate

11:44 Called Noxon Rd. School to prepare to accept patients

11:46 Called Kent NH " "

11:49 Ordered ambulances for 14 patients

11:49 Yorktown ambulance - proceed to evacuate as per radio instructions

11:52 Verplanck ambulance " " "

11:54 Ordered busses to move patients

11:59 Ordered trucks to move wheelchairs

11:59 Peekskill ambulance-proceed to evacuate as per radio instructions

LOG FOR INDIAN POINT DISASTER DRILL (cont)

P.M.

- 12:04 Called United Hospital to place ER decontamination area on standby
- 12:04 Ossining Ambulance - proceed to evacuate as per radio instructions
- 12:07 Croton Ambulance - " " " "
- 12:09 Called Peekskill Hospital to place ER decontamination area on standby
- 12:15 Called Dutchess Co. Dept. of Health-to establish vehicle and
wheelchair monitoring and
decontamination sites at schools
and nursing homes.
- 12:21 Called St. Francis to alert to possible patient transfer
- 12:29 Called Vassar Brothers to alert to possible patient transfer
- 12:47 Called Nyack as EMS Area Resource Hospital
- 12:55 Called St. Lukes as " "
- 1:02 Called White Plains Hosp. as " "
- 1:09 Called WCMC to coordinate radio messages
- 2:00 Called WCMC to prepare 2nd shift
- 3:00 Alerted to prepare for re-entry
- 3:10 Called Mohegan Manor to re-enter
- 3:12 Called Cortland to re-enter
- 3:14 Called Noxon School to re-enter
- 3:16 Called Kent NH to re-enter
- 3:18 Ordered busses to transport patients
- 3:20 Ordered trucks to transport wheelchairs
- 3:21 Called Peekskill to alert them of termination
- 3:22 Ordered ambulances for 14 patients
- 3:25 Called FDR to alert them of termination
- 3:30-4:00 Called all nursing homes to alert them of termination.

RECEIVED
MAR 15 1982

RADIO LOG

E.M.S. RADIO, WESTCHESTER E.O.C.
March 3, 1982

FREQUENCIES: F1 - 155.340
 F2 - 155.280
 F3 - 155.400
 F4 - 155.220

OPERATOR: Edward J. Creem Jr.
ON DUTY: 09:30AM

NOTE: No telephone for EMS Communicator

09:40AM Attempted to communicate with Comm Van on F3. No answer.

09:42AM Hear Phelps communicating with Ossining Ambulance on F3. Not able to hear Ossining Amb.

09:48 Touch toned Peekskill Hospital on F3. No response.

09:53 Touch toned Peekskill Hospital on F3. No response.

09:54 Heard Phelps communicating with Verplanck Ambulance. Could not hear Amb.

10:00AM Touch toned Dobbs Ferry Hospital. "Loud & Clear" both ways.

10:01AM Touch toned Lawrence Hospital. "Loud & Clear" both ways.

10:02 Touch toned Mt. Vernon Hospital. Signal OK.

10:04AM Yorktown Amb. called in - Signal weak and scratchy. Barely readable.

10:06AM Touch toned New Rochelle Hospital. Signal OK.

10:14AM Touch toned Northern Westchester Hospital. Signal OK.

10:15AM Touch toned Peekskill Hospital. No contact.

10:16AM Touch toned St. Agnes. Signal OK.

NOTE: Many RF and Intermod problems on Radio F-3

10:17AM Touch toned St. John's Hospital -- twice. No contact.

10:19 Touch toned St. Joseph's Hospital. No contact.

10:20 CD 3 called in to EOC 3 times. Not able to hear EOC.

10:24 Test w/Scarsdale Amb while enroute to Lawrence Hospital. Test OK.

10:25 Touch toned United Hospital. Loud and Clear.
10:26 Called CD-3 on F3. No contact.
10:27 Touch toned WCMC. Signal OK.
10:28 Touch toned White Plains Hospital. Signal OK.
10:29 Touch toned Yorkers General. Signal OK.
10:30 Touch toned Putnam Hospital Center. No contact.

NOTE: Little or no information forwarded to EMS Communicator on status of the Drill.

10:37 Touch toned Nyack Hospital on F1. No contact.
10:38 Called CD3 on F3. No contact
10:39 Monitored Abbey 1 with New Rochelle Hospital. Heard both sides.
11:05 Touch toned W.C.M.C. No one available to relay messages to units in Buchanan Area CD3.
11:17 Touch toned W.C.M.C. No answer.
11:20 W.C.M.C. called EOC. Asked for instructions on how to contact CD3.
11:21 WCMC made contact with CD3.
11:24 Contact with Dr. Jacobius at White Plains. ER - Dr. Schwartz discussed Hospital drill with him.
11:27AM Contact with White Plains ER on F3 and F2 to test ability to switch channels.
11:35 Touch toned W.C.M.C. Asked them to attempt to contact Peekskill, Verplanck, Briarcliff, Yorktown, Ossining, and Somers ambulances.
11:36 W.C.M.C. attempted contact with the above listed Ambs. Only Peekskill, Verplanck and Yorktown responded.
12:25 Talked with Y.V.A.C. by phone. They called in on F4. Able to hear them OK. They could not hear E.O.C.

NOTE: High powered and over modulated base on F4, totally blocking out comm on F4.

12:43 Mobile 1 called White Plains ER White Plains Hospital Receiver still on F2.
EOC touch toned White Plains ER. Advised them to contact Mobile 1 on F3.

12:45PM Called CD3 on F3. No contact.

12:48 Monitored Lawrence Hospital in comm with an amb.

12:58 Received call from Ossining Amb 30. Their 10-20 Rt 9A and Chappaqua Road. Not readable in Ossining. Had tried calling EOC several times from Ossining.

NOTE: Frequent problems of Intermod.

Approx. 2:00PM Ed Creem left E.O.C.

DEPARTMENT OF SOCIAL SERVICES

INDIAN POINT EMERGENCY DRILL; CRITIQUE

It is difficult to access with accuracy the results of our participation in the March 3 exercise.

In meetings with our staff participants (a high achiever group with above average drive and morale) the overall tone was favorable. However, senior staff personnel were unanimous in seeing a number of negatives, and it is our response to these areas that will determine the Department's ability to function effectively; either in future more sophisticated drills, or in the event of a real evacuation scenario.

Ignoring the fact that we have no adequate planning for staff notification in the event of an emergency outside of working hours (both weekday night-time and week-end plans must be developed, as well as a plan to man 6 centers) several problem areas were identified.

1. Although the Radiological Emergency Response Plan clearly states that the Reception Center Administrator is in charge of the Reception Center, Health, Red Cross and local or County Police often acted as equals, rather than as task units with the Administrator in charge. It is imperative that someone issue clear, unequivocal instructions making the Administrator "Chief" of the Area.

We will re-emphasize this point to all our DSS people in future situations. We will also confer with Mr. Marasco to insure that all other agencies' briefing officers are aware of the need to emphasize this point.

2. There were continuing breaches of decontamination security. It now appears that police officers will be required at each Center both to direct traffic and to respond to instructions from the the Center Administrator.
3. Routing of all incoming traffic via decontamination requires:
 - a) Tighter security on site
 - b) Vastly improved on-site signing indicating paths and rules.
 - c) Additional staff to control wanderers.
 - d) Improved signing on approach roads to bring traffic on site only via certain routes.

We believe we can handle items a and c. Item b will require coordination with the Department of Health. Item d appears to be

March 3, 1982 Indian Point Drill (Continued)

part of the Police Traffic Control function, and we will discuss responsibility with Mr. Marasco.

4. Gymnasiums are apparently poor reception areas. A more realistic approach would be opening one end of a building - persons entering would flow by Health and then into Social Services with DSS functions set up in classrooms, the Administrator located in the school offices, and the Gym and Auditorium being used as holding areas for processed evacuees who were not continuing further via their own transportation.

In on-going discussions with School Administrators we will attempt to convey the importance of this revised approach. At this time we believe the primary objections will be the disruption of classes if future drills are held on days school is in session, and custodial overtime on other dates.

5. People are going to bring pets. We are considering preparing a list of animal hospitals and veterinarians with boarding facilities, we will also survey each Reception Center area in hopes of finding a suitable pet-segregation area.
6. There were no maps to facilitate the movement of traffic to Congregate Care Centers. Somehow, they were forgotten but our staff improvised by photocopying maps.

Obviously, the above approach is unsatisfactory in a more complex situation, especially since the "map supply" is the controlling factor in opening and filling Congregate Care Centers. We will confer with Mr. Marasco relative to production and stocking responsibility.

7. The Rapid Resolve form is too long and yet it lacks adequate information to be of assistance in family reunification. (Query - is all that heading information really necessary? Query #2 - why not combine with carbon sets so Department of Social Services' initial registration is accomplished at the same time?) Also needed is better spouse identification in a specified place. Much of the rapid resolve information was first taken at initial entry and then repeated on the form; why not a walk-through form with detachable carbon for initial entry documentation?

We will confer with the other agencies (Health and Red Cross) about a mutually satisfactory "improved form."

8. Communications (other than external telephone lines) were a

March 3, 1982 Indian Point Drill (Continued)

problem. Only the availability of extra Red Cross Walkie Talkies prevented Department of Social Services' chaos within the Reception Center.

It is obvious we under-estimated the internal communications` problem. Considering the additional problems if we were to be actually impacted by a large crowd of evacuees, an issue of 6 DSS walkie talkies per Reception Center seems vital.

9. Badly needed by Reception Centers are good, clear maps of the entire area, allowing instant comprehension of exactly what is being evacuated, and by what routes to where.

We will discuss supply availability and procurement with Mr. Marasco.

10. Communications again, there was no chalk board or bulletin board for the Public Information area at the Reception Center, no P.A. system - no loud-hailers for staff use.

Again, these are supply problems. We will discuss the availability of portable units with the schools, we have added three electric bull-horns per center to our required supplies` list. (The importance of the bull-horn as an authority symbol, in dealing with rumors before panic sets in, and in maintaining de-contamination security against accidental trespass cannot be over-emphasized.)

11. There was no briefing room/briefing area, or confidential communications area, for DSS staff to use. (This is vital to rumor and crowd control in an emergency.)

In future drills, a secure area with adequate communications will be designated.

12. Telephone lines: continuing confusion. We must have several dedicated lines per Reception Center as well as for DEOC. These should be plugs with no phones but known #s (so an emergency directory exists) into which "on-site stored" DSS phones could be plugged in an emergency.

Planning is underway to equip a conference room in our new building as a DEOC. Included in the plan will be portable computers to be used for parent-spouse relative or child relocating.

We must think in terms of adequate phone lines for the Reception

March 3, 1982 Indian Point Drill (Continued)

Center. We are reserving lines for our current DEOC; although they are not adequate in number we will have them in case of an emergency until we can do better.

13. Due to poor layout planning the only non-contaminated route between clerical headquarters and the powder room was in itself an odyssey.

Clearly, this problem emphasizes the issue raised in Point 4, the inherent conflict between a totally valid drill (which uses large areas of the school) and the school's administration's desires for as little disturbance as possible.

The ideal solution may be to hold all future drills on days school is not in session.

14. Perhaps of more importance there was no planning for food for the Center staff. In a large drill or real emergency problems with "local deli delivery" should be anticipated.

If we are able to secure storage space at the Reception Centers, coffee and some canned food could be stored. In addition we could possibly work something out with the Red Cross for food for our staff.

15. Supplies - In a larger, or night-time or week-end Drill situation we will require "on-site supply kits" staff can open and use. There will be no time to haul in PARF check printers, blank checks, telephones, paper, pencils, rapid resolve forms, traffic direction signs, walkie talkies, etc.. Supplies must be in place at the Reception Center when the emergency begins.

Again, we will contact the school Reception Center regarding storage space for supplies; checks etc. will be looked into by DSS staff.

16. Staffing - We were well above the levels called for in the Response Plan. All of our people were highly motivated volunteers and yet we were quite clearly short-handed. Allowing for vacations, illness, out-of-town, etc. we must have 15 to 20 people on each Reception Center team to allow adequate coverage on a night-time or week-end drill.

We are looking at alternate ways of staffing the Centers. It is quite possible that it will be necessary to use staff from each District Office. Two District Offices are within the 10 mile or

March 3, 1982 Indian Point Drill (Continued)

less radius and would be closed; that staff might be used. We will devise a plan. Training will be necessary for all staff. Hopefully we can use staff who participated in the pilot to train.

In reviewing the problem areas and looking at the necessary supplies and equipment, it appears tht we would need approximately \$10,000 to begin with.

In summary, as a demonstration the drill went well and we learned a lot but if we were asked to open six Centers tomorrow we are not ready.

DEPARTMENT OF PUBLIC WORKS

INDIAN POINT EMERGENCY DRILL; CRITIQUE

The purpose of this memorandum is to provide you with a critique of events on the "Drill Day" affecting this Department's responsibilities and activities:

1. Communications within the radio room could be measurably improved. The noise level generated by many of the volunteers in undisciplined transmissions adversely affected emergency communications. We recommend that those assigned to operate in the radio room be given detailed training and instructions upon what their function is, and what proper radio procedures are. No such training has ever taken place, nor did the consultants attempt to provide any ongoing instructions during the drill. Many of the volunteers appeared compelled to continually transmit to justify their "importance" to the drill. We recommend that consideration be given erecting partitions within the room as sound barriers, and providing operators with head sets and noise cancelling mikes.
2. Confusion surrounded some instances where County and local Police contacted both local and County Road Maintenance directly requesting barricades at certain areas. Neither County Public Works nor Police had clear knowledge of the status of such requests. We recommend that requests by County and local Police be channeled to the "war room" Police, thence to Public Works.
3. Confusion surrounded the transport of wheelchairs from an evacuated nursing home to a place designated by the Department of Hospitals. Subsequent requests for return of the wheelchairs, by the Department of Transportation, indicated the evacuees having been taken to a location other than their wheelchairs.
4. Several types of communication forms were distributed. No instructions have ever been given as to how, when, and why each form is to be used.

Indian Point Emergency Drill; Critique

March 22, 1982

Page 2

5. Personnel participating from the Division of Road Maintenance have never been given adequate training by the consultant. Their response in an actual event remains questionable.

cc: Arthur Freed
Frank T. Kearney

DEPARTMENT OF CORRECTION

INDIAN POINT EMERGENCY DRILL; CRITIQUE

In response to your memorandum of February 8th. please note that it is uncertain whether this Department is authorized to receive prisoners from local lockups without a judicial order of commitment. The arraignment status of a prisoner appears to be less of a factor than the commitment order. We have requested clarification from the state Commission of Correction. (See enclosed.)

Please be assured, however, that unless we receive a definitive ruling to the contrary, this Department, in the event of the occurrence of an incident entailing imminent danger, will accept such prisoners for housing. Insofar as your simulated drill is concerned, your plan may incorporate the transfer of non-committed prisoners to the Correctional Complex.

Please advise if I can be of any further assistance in this matter of material concern.

cc: Alfred B. DelBello, County Executive ✓
Daniel P. Guido, Commissioner, Public Safety
Samuel Yasgur, County Attorney



ALBERT D. GRAY, JR.
Commissioner
Department of Correction

February 10, 1982

Mr. George King
Counsel
NYS Commission of Correction
Tower Bldg., Empire State Plaza
Albany, N.Y. 12223

Re: Nuclear Emergency
Pre-Arraigned Prisoners

Dear Mr. King:

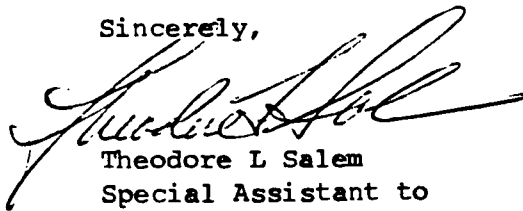
Enclosed please find material in our possession regarding the NRA required drill. The drill, scheduled for March 3rd, does not require an actual transfer, however, the procedural mechanism for its implementation must be in place.

At issue is this department's authority to receive and hold pre-arraigned prisoners without a judicial commitment from ten specified lockups falling within ten miles of Indian Point. While during the heat of an emergency, it may be possible to suspend normal requirements, I am nonetheless concerned about the liability of what can amount to unlawful imprisonment.

I am uncertain whether the Commission can grant a substitute jail order if a local lock up became uninhabitable. If so, can such an order be "activated" upon declaration of a nuclear disaster and evacuation without specific notification to the Commission.

Your guidance will be greatly appreciated.

Sincerely,



Theodore L. Salem
Special Assistant to
the Commissioner

Enc.

cc: Alfred B. DelBello, County Executive ✓
Albert D. Gray, Jr., Commissioner
Daniel P. Guido, Comm., Public Safety
Samuel Yasgur, County Attorney