10/20/88

MEMO: Bill Lazarus, Chief, EPS

FROM: Craig Conklin, EPS

SUBJECT: Hands On Training for Transportation Providers for the Pilgrim EPZ

All training observed was conducted by Boston Edison Company consultants. This training, including individual lessons plans, is approved by MCDA. The training instructors were knowledgeable and proffessional. All attendee's were cooperative and several demonstrated a high retention level from previous classrom training.

9/24/88

Cresent Ambulance (Trans Network). There were 13 attendee's, with 4 women. All attendee's were EMT's. Training consisted of a combination of classroom lecture and actual performance of tasks. The lessons covered were: Introduction to Radiation; Introduction to Emergency Response; Dosimetry; and Implementing Procedures. Risk and consent, for both the drivers and company, were adequately covered. Hands on training included use of dosimetry and appropriate forms and actual running of routes. The routes were run on a sunny, warm saturday late morning to early afternoon. Maps and instructions were provided and a bus was run from Cresent Ambulance in Brockton to the Martinson JRHS Staging area in Marshfield (37 minutes), to the Baypath Nursing Home in Duxbury (22 minutes), to the Cardinal Cushing Hospital in Brockton (46 minutes). This provider will normally have two individuals in each ambulance. The maps and instruction provided were accurate and no problems were encountered running the entire route.

10/8/88

Swansea Ambulance. There were 13 attendees, with 8 women. All attendee's were EMT's. Training consisted of a combination of classroom lecture and actual performance of tasks. The lessons covered were: Introduction to Radiation; Introduction to Emergency Response; Dosimetry; and Implementing Procedures. Risk and consent, for both the drivers and company, were adequately covered. Hands on training included use of dosimetry and appropriate forms. Actual routes were not run, however routes were analyzed and map reading techniques employed. This provider will normally have two individuals in each ambulance.

8811210061 XA

10/9/88

Stavis Ambulance Service. There were 5 attendee's, with 3 women. All attendee's were EMT's. Training consisted of a combination of classroom lecture and actual performance of tasks. The lessons covered were: Introduction to Radiation; Introduction to Emergency Response; Dosimetry; and Implementing Procedures. Risk and consent, for both the drivers and company, were adequately covered. Hands on training included use of dosimetry and appropriate forms and actual running of routes. The routes were run on a sunny, cool sunday late morning to early afternoon. Maps and instructions were provided and a bus was run from Stavis Ambulance in Brookline to Silver Lake HS staging area in Kingston (65 minutes), to the Sister Divine Providence Nursing Home in Kingston, to the Cardinal Cushing Hospital in Brockton (57 minutes). This provider will normally have two individuals in each ambulance. The maps and instruction provided were accurate and no problems were encountered running the entire route.

10/10/88

Rogers Bus Company. There were 8 attentee's, with 4 women. Some attendee's were from Engle Bus Company. All attendee's were bus drivers. Training consisted of a combination of classroom lecture and actual performance of tasks. The lessons covered were: Introduction to Radiation; Introduction to Emergency Response; Dosimetry; and Implementing Procedures. Risk and consent, for both the drivers and company, were adequately covered. Hands on training included use of dosimetry and appropriate forms and actual running of routes. The routes were run on a sunny, warm holiday monday late morning to early afternoon. Maps and instructions wer provided and a bus was run from [illegible]ers Bus Company in Hanover to the Martinson JRHS staging area in Ma[illegible]ield (12 minutes) and to Bus route M-4 and return to the staging area (50 minutes). Bus route M-4 included Marshfield and Duxbury beaches. This provider will normally have one individual in each bus. The maps and instruction provided were accurate and no problems were encountered running the entire route.

(13)

LESSON LEARNED Plant Pub. mtgs

LP APPROVAL SUMMARY

	Module/Agency	sent to State	Approved	PRIORITY
1	(1-1) Intro to Radiation			
1	(1-2) Intro/Emerg. Response			
1	(2-1) Dosimetry	1/15/88	3/21/88	
1	(2-2) Survey Meters			
1	(2-3) Siren Activation			
1	(2-4R) BECONS	1/22/88	1/25/88	
1	(2-4CSP) BECONS	1/22/88	1/25/88	
3	(7 P) Dept. of Public Works	3/17/88	4/22/88	
1	(14 P) Day Care/Prvt Schools	7/7/88	7/11/88	
5	(12) Transportation Providers	7/7/88	7/20/88	
5	(4 C) Fire Department	7/7/88		
4	(9 T) EMS	7/7/88		3
1	(20-3) State PIO	8/8/88		
2	(6 B) Civil Defense	8/8/88		
1	(14/C,D,K,M) Daycares/ Private Schools	8/8/88		
1	(7 T) Dept. of Public Works	8/8/88		3
1	(19 T) Board of Health	8/8/88		
1	(7 B) Highway Dept.	8/8/88		
2	(21C) Shelters	8/8/88		
4	(11C) School Dept.	8/8/88		
1	(26-1S) Mass. DPW	8/8/88		
1	(5 P) Police Dept.	9/1/88		
4	(9 C) EMS	9/1/88		
4	(20) EPZ Media Centers	9/1/88		
7	(3 P) EOC	9/22/88		2
3	(6 P) Civil Defense	9/22/88		
5	(12P) Transportation	9/22/88		2
1	(19P) Board of Health	9/22/88		2
2	(21P) Shelters	9/22/88		
1	(20-5) News Statement Writing	9/22/88		
1	Digital Notification Network	9/16/88		1
4	(4 T) Fire Dept.	10/4/88		1
1	(19C) Council on Ageing	10/4/88		
6	(3 T) EOC	10/4/88		1
2	(6 T) Civil Defense	10/4/88		3
4	(10T) Reception Center	10/4/88		3
1	(23T) Animal Control	10/4/88		3

LP Approval Summary

Module/Agency	sent to State	Approved	PRIORITY
(5 T) Police Dept	10/6/88		1
(12T) Transportation	10/6/88		3
(9 P) EMS	10/13/88		2

MICHAEL S. DUKAKIS
GOVERNOR

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE DEPARTMENT
CIVIL DEFENSE AGENCY AND OFFICE OF EMERGENCY PREPAREDNESS
400 WORCESTER ROAD
P.O. BOX 1496
FRAMINGHAM, MASS. 01701-0317

ROBERT J. BOULAY
DIRECTOR

I

TO: Secretary Charles V. Barry
Executive Office of Public Safety

ATT: Peter Agnes, Assistant Secretary
Executive Office of Public Safety

FROM: John L. Lovering, Deputy Director
Massachusetts Civil Defense Agency and
Office of Emergency Preparedness

DATE: October 11, 1988

SUBJECT: Feasibility Study Involving the Suitability of the State Department of Public Works Garage located in Wellesley, MA as a Potential Reception/Processing Center for Evacuees in the Event of an Accident at the Pilgrim Nuclear Power Station, Plymouth, MA.

JLL/kmb
Attachments

cc: Director Robert J. Boulay
MCDA/OEP

BACKGROUND

The 10 mile Emergency Planning Zone (EPZ) for all Nuclear Generating Power Stations was established in 1979 as a result of the issuance of new Nuclear Regulatory Commission (NRC) and Federal Emergency Management Agency (FEMA) Guidelines. These Planning guidelines were promulgated in a document known as NUREG 0654 and were finalized and issued in October 1980. Consequently, new radiological emergency response plans were developed for a potential accident at the Pilgrim Nuclear Power Station located in Plymouth, MA. Three (3) Reception/Processing Centers were established for evacuees from the five (5) emergency planning zone (EPZ) communities of Plymouth, Carver, Kingston, Duxbury and Marshfield namely:

- State Hospital, Taunton, MA.
- Bridgewater State College, Bridgewater, MA.
- Hanover Mall, Hanover, MA.

The public officials of these communities agreed to "host" the Reception/Processing Centers and accepted the obligation of the operation of the processing centers. In 1986, the owners of the Hanover Mall (a private sector facility) requested to be relieved of the Hanover Mall's assignment as a processing center for evacuees and the Commonwealth Massachusetts Civil Defense Agency and Office of Emergency Preparedness (MCDA/OEP) granted this request.

A subsequent study produced by the Boston Edison Company (BECO), the owners of the Pilgrim Station purported that the two (2) remaining reception centers located in Taunton

and Bridgewater, MA would be sufficient in the event of an evacuation of the EPZ communities. The Commonwealth MCDA/OEP nothwithstanding this report from the utility takes the position that a third processing center is necessary in order to take full advantage of the road system leading away from the EPZ communities. MCDA/OEP is convinced that the availability of a 3rd northern processing center results in a more effective departure program thereby enhancing the public's safety in the event of an accident requiring total evacuation of all 5 EPZ communities simultaneously.

In MCDA/OEP's search for a northern Reception Center to replace the Hanover Mall, it became obviously apparent that the best site would be to find a processing center that would have a minimum impact on the community in which it would be located so the following ideal criteria was established:

NEW FACILITY CRITERIA

1. The facility be beyond the 15 mile distance from the EPZ communities as recommended by FEMA.
2. The facility be owned by the State.
3. The facility be preferably located adjacent to an interstate or State highway thereby eliminating the travel by assigned evacuees over community roadways.
4. The facility be operated by State personnel and consequently avoid community operational responsibility as a 'host community'.
5. The facility could accommodate and would serve evacuees from the towns of Marshfield, Duxbury, and the Saquish Neck-Gurnet District of Plymouth, MA.

On the basis of the above criteria a facility survey was conducted by MCDA/OEP

RESULTS OF THE SURVEY

The MA State Department of Public Works garage located at the intersection of Route #128 (Interstate #95) and State Route #9, located in Wellesley, MA appeared to be an ideal site based on the above stated criteria. Distances from EPZ communities involved:

- Marshfield - 34 miles from Exit 12 of Route 3 at Route 139.
- Duxbury - 38 miles from Exit 11 of Route 3 at Route 14.
- Saquish/Gurnet Plymouth Line - 48 miles from the bea of the Saquish-Gurnet area of Plymouth, MA

Consequently MCDA/OEP requested of you Mr. Secretary to allow us to conduct a feasibility study in order to determine whether the facility and State Personnel under the provisions of Executive Order #144 could perform the mission of receiving and processing evacuees from the above named EPZ communities with a high degree of operational capability providing appropriate public safety response services/activities in the event of an accident at the Pilgrim Power Plant.

FEASIBILITY STUDY PROCESS

Ms. Judith Kazunas MCDA/OEP Agency Planner was assigned as the coordinator of the feasability study effort:

Step #1

A request was made of BECO to survey the facility in cooperation with facility Superintendent John Sullivan in order to determine whether this four (4) plus acre site and its buildings could be utilized as a processing center

for evacuees. ATTACHMENT A reflects the basics of the BECO survey with their recommendations for physical enhancements to the main building which is a garage, and reflects other operational resources identified.

Step #2

A meeting was held on March 31, 1988 with the State Agency representatives (Executive Order #144), Red Cross, Civil Air Patrol, et al to task the representatives with the feasibility study guidelines/operational assignment tasking and that they study the potential objectives and inform MCDA/OEP if the missions were feasible. A follow up meeting was held with the same group for the purpose of ascertaining State agencies concerns relative to missions assigned. The agenda for this meeting and other related meetings with pertinent meeting material and requirements are contained in ATTACHMENT B.

Written responses from the State Agencies, Civil Air Patrol, Red Cross, et al are contained in ATTACHMENT C and reflects their official comments/concerns to whether the missions/tasks assigned are feasible. A written communications contained in ATTACHEMENT C from:

National Guard
Public Health (Radiation Control Program)
MCDA/OEP Communications Officer
Department of Education
Department of Public Works
Department of Mental Health
Department of Public Safety
Public Health (Emergency Medical Services)
MA Bay Transportation Authority
Civil Air Patrol
American Red Cross

CAUTION: IN MANY INSTANCES THE AGENCY REPRESENTATIVES COMMENTS ADDRESS OPERATIONAL PLANNING CONCERNS GOING BEYOND THE ORIGINAL FEASIBILITY REQUEST AND THE REVIEWER OF THIS REPORT SHOULD TAKE THIS INTO CONSIDERATION.

Step #3

Analysis of all of the activities and materials emanating from Steps 1 and 2 and the beginning of the formulation of this report which involves a recommendation.

Step #4

Indicated in the material and information we have analyzed is a concern for the distance the Wellesley State DPW facility is away from the EPZ communities which it would serve. As a result I assigned Donald Remark an MCDA/OEP planner to ascertain nationwide if there are other situation/plans that would reflect the same or similar distances. The results of that study appear to indicate three (3) Reception Centers in other states are at least 35 miles from nuclear power plants and ten (10) plants in other states have reception centers 40 to 50 miles away from the nuclear power plant.

We have requested that the related States Emergency Management Agencies of Virginia, Florida, Maryland, New York, Illinois, Kansas and Louisiana send us copies of their response plans in order that we be familiar with the public safety features of these individual state reception facility utilitization plans. The preliminary results of Mr. Remarks efforts can be found in ATTACHMENT E.

GENERAL

Allow me to emphasize that local officials of Wellesley ie. Selectmen, Civil Defense Director, Police and Fire Chiefs and Legislative Representatives were informed of the

feasibility study, its objectives and goals. Particular care was taken to ensure that State employees assigned to the MA Department of Public Works Garage Wellesley, MA./their Union Representatives were periodically briefed. Miscellaneous letters/records which could be considered important for the record are contained in ATTACHMENT D.

CONCLUSIONS

The results of the feasibility study contained herein appear to indicate that a plan with implementing procedures coupled with an honest to goodness operational capability and a recurring training, and exercise program for related State agency personnel et al can be developed for the utilization of this fa..lity as a processing center for evacuees from the towns of Marshfield, Duxbury and the Saquish-Gurnet Area of Plymouth. The development of this plan is predicated on:

- A committment by the Commonwealth of Massachusetts to assign full time personnel to the Director MCDA/OEP from the State Agencies involved as determined by the Director MCDA/OEP for the purpose of assisting in the overall plan development.
- Contractural planning assistance personnel from the Boston Edison Company for the purpose of producing the written documents.
- A realistic BECO sponsored enhancement program for the Wellesley State DPW facility in order that the site can be utilized as a processing center. It's only a garage now, and has to have significant physical improvements in order to perform the emergency response functions. State agency supplementary resource requirements should also be considered by BECO.

CONCLUSIONS (Continued)

- A training program for the State Agency personnel assigned et al supported by BECO.
- A preliminary public information program for all local/state officials involved, especially for the officials and townspeople/residents of Wellesley which reside adjacent to the facility.
- I call your attention to a letter from the Wellesley Board of Selectmen found in ATTACHMENT D which should be answered. As an answer I suggest forthwith a meeting with the Secretary of Public Safety for local and state officials in order that these key people be briefed.

RECOMMENDATION

That the Secretary of Public Safety allow MCDA/OEP to continue to pursue this planning endeavor for the purpose of producing the plan. The Secretary of Public Safety continue to withhold any final designation of this State DPW facility as a Reception/Processing Center unless and until MCDA/OEP can absolutely certify that the plan is workable, implementable and enhances and does not detract from the public safety of the people involved in the event of an emergency necessitating its implementation.

Respectfully recommended
John L. Lovering

BOSTON EDISON
Emergency Operations Facility
Obury Heights
Plymouth, Massachusetts 02360

J

December 23, 1987
EPC87-988

Mr. Peter Agnes, Jr.
Commonwealth of MA
Assistant Secretary of Public Safety
One Ashburton Place - Room 2133
Boston, MA 02108

Dear Mr. Agnes:

By letter dated October 26, 1987 Boston Edison Company transmitted information to you in response to certain issues identified in the Federal Emergency Management Agency's (FEMA) August 4, 1987 "Self-Initiated Review and Interim Finding for the Pilgrim Nuclear Power Station" (SIR). The purpose of that letter was to provide information for submission to FEMA in an effort to facilitate FEMA's review of the resolution of the SIR issues. We are now forwarding additional information in response to the FEMA SIR issues.

In particular, we are enclosing a copy of a report entitled "Reception Center Feasibility Analysis" dated December 22, 1987 which addresses subissue B.1 as identified in the "Boston Edison Company Action Plan and Schedule for Providing Assistance in Addressing FEMA Issues" dated September 17, 1987 (Boston Edison Action Plan). In subissue B.1, FEMA stated that "a new reception center must be found to replace Hanover." (Page 19 of SIR). The Action Plan stated that an "evaluation of the feasibility of using two reception centers" would be undertaken. (Page 12 of the Boston Edison Action Plan). The enclosed report documents that analysis.

The analysis summarized in the enclosed report assesses the capability of the two reception centers designated by the Commonwealth -- Taunton State Hospital (Taunton) and Bridgewater State College (Bridgewater) -- to monitor the population for contamination in the Pilgrim plume exposure pathway emergency planning zone (EPZ) in accordance with applicable federal guidance. While the report addresses other aspects of reception center operations, the primary purpose of the analysis was to determine whether the objective of that guidance could be achieved using two, rather than three, reception centers. The report also provides planned traffic routes out of the EPZ and estimated travel times, and identifies traffic access and control points.

It is important to stress that the report does not purport to address the entire reception center planning process, but is instead only a step in that process. As you know, Boston Edison is assisting the Commonwealth and local governments in upgrading their plans and procedures and is confident that appropriate plans and procedures governing the operation of reception centers will be developed.

The analysis summarized in the attached report was conducted by planners provided by Boston Edison, in coordination with Taunton and Bridgewater officials, and concludes that the Taunton and Bridgewater facilities (with appropriate renovations and equipment procurement) have the capability of monitoring the requisite number of persons evacuating from the EPZ in the event of an emergency at Pilgrim. Thus, the report addresses FEMA's concern that a third reception center be found to replace Hanover Mall. Boston Edison will continue to work with town and facility officials to assure that appropriate plans and procedures governing reception center operations are developed, and will provide whatever resources are necessary to support reception center operation.

We understand that, as stated in the Action Plan (page 12), the Commonwealth is continuing its review of the possibility of identifying a third reception center. If those efforts result in the identification of such a center, Boston Edison will be pleased to cooperate in its implementation, including the procurement of necessary facilities and equipment, the development of necessary plans and procedures, and the training of personnel. While such implementation steps are being taken, the enclosed feasibility analysis demonstrates that the available two reception centers can adequately serve any emergency needs.

If you have any questions, please do not hesitate to contact either me or Albert Samano at (617) 747-0439.

Sincerely,

Ronald A. Varley
Staff Assistant to Sr. V.P. - Nuclear

RAV/dlw
ID#988
Attachment

cc: R. Boulay - MCDA
S. Varga - NRC
R. Hessman - NRC
NRC Region 1
Senior NRC Resident Inspector
Mayor Richard Johnson - Taunton
R. Spearin - C.D. Director - Taunton
D. Canepa - Chairman - Board of Selectmen - Bridgewater
D. Ford - C.D. Director - Bridgewater
E. Meaney - Bridgewater State College
Taunton State Hospital - Administrator

RECEPTION CENTER

FEASIBILITY ANALYSIS

Boston Edison Company

December 22, 1987

I. Introduction

In the Federal Emergency Management Agency's (FEMA) August 4, 1987 "Self-Initiated Review and Interim Finding for the Pilgrim Nuclear Power Station", a number of issues were identified with respect to the state of offsite emergency preparedness for the Pilgrim Nuclear Power Station (Pilgrim). In Boston Edison Company's September 17, 1987 "Action Plan and Schedule for Providing Assistance in Addressing FEMA Issues", Boston Edison identified a number of discrete "subissues" which collectively comprise FEMA's concerns. Subissue B.1, in particular, stated that "a new reception center must be found to replace Hanover." In response, the Action Plan stated that an "evaluation of the feasibility of using two reception centers" would be undertaken. Boston Edison Action Plan at 12. This report summarizes that analysis.

At the outset, it is important to clarify that the purpose of a reception center is to provide a location where monitoring, decontamination and registration of evacuees can be performed, rather than to provide long-term congregate care for the EPZ population. Accordingly, except for activities such as vehicle decontamination that can, if necessary, take place during the

recovery and reentry phase of an accident, a facility designated as a reception center will only be utilized for the relatively short period of time needed to monitor, decontaminate as necessary, and register evacuees. Such a facility would not be used for longer-term needs (such as non-emergency medical care, temporary quartering, or other social services), which would be provided by congregate care centers to which evacuees would be referred.

The principal purpose of this report is to assess the capability of Taunton State Hospital (Taunton) and Bridgewater State College (Bridgewater) to monitor the population evacuating from the Pilgrim plume exposure pathway emergency planning zone (EPZ) in accordance with applicable federal guidance. While the report summarizes the overall process of managing traffic and monitoring, registering and decontaminating evacuees, as described in greater depth in Appendix A to this report, the federal guidance provides that reception centers should be capable of monitoring 20% of the population evacuating from the EPZ in about 12 hours. Thus, the central purpose of the analysis is to evaluate the capability of the Bridgewater and Taunton facilities to achieve that objective.

The assessment was conducted by planners provided by Boston Edison, in coordination with Taunton State Hospital and Bridgewater State College officials, and those officials have concurred with the conclusions stated in this report.[1] The report also provides (in Attachment 2) preliminary results of traffic management analyses currently being undertaken by KLD Associates,

[1] Given the recent resignation of the Bridgewater State College President, Boston Edison is continuing to work with the current College administration in order to ensure that its views are reflected in any plans to utilize the College as a reception center.

Inc., to assess, among other things, the ability of the road system outside the EPZ to accomodate the anticipated traffic to the two facilities, and thus to support timely monitoring of evacuees. Attachment 2 provides planned traffic routes, estimated travel times and traffic management plans (including an identification of access and control points).

This report concludes that the Taunton and Bridgewater facilities have the capability to monitor persons evacuating from the EPZ in accordance with federal guidance, and that those facilities could effectively serve as reception centers. In fact, although the federal guidance provides that there should be sufficient reception center capacity to monitor 20% of the population "to be evacuated" in an emergency, and an evacuation of the entire EPZ is extremely unlikely, the analysis shows that the Bridgewater and Taunton facilities can accomodate 20% of the entire EPZ population. Thus, the analysis was based upon conservative assumptions.

Facility renovation (principally at Taunton) and equipment procurement for both facilities will be necessary. A listing of anticipated personnel, and resource needs is included as Appendix B. In addition, the preliminary results of the traffic management analyses (Attachment 2) show that anticipated traffic flow into Taunton and Bridgewater can be accomodated and that timely monitoring of evacuees at the reception centers can be supported.

The next section of this report describes the general analytical approach that was used in the evaluation. Section III summarizes the analysis and results for Bridgewater and Section IV summarizes the analysis and results for Taunton. Conclusions are presented in Section V.

K

CITY OF TAUNTON
DEPARTMENT OF CIVIL DEFENSE
CITY HALL
15 SUMMER STREET
TAUNTON, MASSACHUSETTS 02780

ROBERT C. SPEARIN
DIRECTOR

October 5, 1988

Mr. Peter Agnes, Jr.
Assistant Secretary
Executive Office of Public Safety
One Ashburton Place
Boston, Massachusetts 02108

Dear Mr. Agnes:

On Monday October 3, 1988 my office received a draft copy of a document entitled "A Report on Progress Made in Emergency Planning for Response to an Accident at Pilgrim Nuclear Power Station". Comments were requested by October 7, 1988. This is an extremely short turnaround time for a report that is over 100 pages in length. Our comments are, by necessity, based on a very cursory review.

Specific comments are as follows:

1. Section VII.G, page 61, pertains to Taunton. In the second paragraph of that section it refers to the fact that renovations to Taunton State Hospital have not been undertaken. It is only fair to point out, that Boston Edison has been prepared to conduct these renovations for quite some time, pending authorization by State DCPO. Further, I have stated that I would use at least some portions of this facility in an emergency even if the renovations were not complete.

2. The last paragraph of Page 61 states that, "the Taunton Civil Defense Director has expressed his concern that plans are being made to provide services for only 20% of the EPZ population...." and that anything over 20% would be addressed on an "ad hoc" basis. This paragraph in no way reflects the statements I made during my interview with Mr. Agnes.

   The Taunton plans and procedures were drafted to meet NUREG-0654 and FEMA guidance memoranda as they pertain to receiving, monitoring and decontamination of evacuees. I am fully aware of the planning criteria, support it, and feel my plans are more than adequate. In fact, after being questioned repeatedly at that meeting by MCDA officials I mentioned that I felt confident our emergency personnel could handle more than the 20% planned.

   "Ad Hoc", is not an appropriate term since existing plans and procedures establish a framework and planning basis for expanded emergency operations.

By way of more general observations regarding the report, it appears to grossly understate the working relationship of Boston Edison emergency response personnel and the City and overstates the role MCDA has played in determining response policy, strategy and problem solving. Further, the report tends to stress perceived problems and neglects to highlight the progress made to develop comprehensive plans and procedures, initiate a training program, construct emergency operations centers and put needed equipment in place. Although this program is not complete, it is certainly well-established and moving in a positive direction. There are no outstanding program issues that we feel would interfere with implementation of workable plans and procedures.

Sincerely,

Robert C. Speare
Director

cc: Mayor
R. Varley

BOSTON EDISON
Executive Offices
800 Boylston Street
Boston, Massachusetts 02199

October 26, 1987

Ralph G. Bird
Senior Vice President — Nuclear

Mr. Peter Agnes, Jr.
Commonwealth of Massachusetts
Assistant Secretary of Public Safety
One Ashburton Place - Room 2133
Boston, MA 02108

Dear Mr. Agnes:

As you and I recently discussed, periodic submittal of the information developed in response to the issues identified in the Federal Emergency Management Agency's (FEMA) August 4, 1987, "Self-Initiated Review and Interim Finding for the Pilgrim Nuclear Power Station" (SIR) should facilitate FEMA's review of the resolution of those issues. Accordingly, we are forwarding a copy of a report entitled "Pilgrim EPZ Public Beach Population Analysis," dated October 14, 1987, which addresses subissues C.1 and C.2, as identified in the "Boston Edison Company Action Plan and Schedule for Providing Assistance in Addressing FEMA Issues," dated September 17, 1987 (Boston Edison Action Plan). We are also enclosing for your consideration a draft letter of transmittal to FEMA and a suggested distribution list.

In subissue C.1, FEMA requested, "(1) an updated geographical description of the beaches (within the Pilgrim EPZ) and their capacity." (Page 26 of SIR) The Boston Edison Action Plan (Page 14) stated that preliminary estimates of the expected maximum number of people on the public beaches within the EPZ had been developed and were being verified. It also stated that updated geographical descriptions of the beaches were being developed. The results of those efforts in response to FEMA's request are contained in the enclosed report.

In subissue C.2, FEMA requested, "(2) a detailed analysis of the beach population, including the number of permanent and temporary residents and the number of day visitors, together with their geographical dispersion." (Page 26 of SIR) The Action Plan (Page 15) stated that the geographical dispersion of the population of each of the public beaches was being developed.

It also indicated that a breakdown between permanent and temporary residents and day visitors did not need to be developed since the current planning process is based on the conservative assumption that sufficient sheltering capacity will be identified for the entire beach population. Thus, the enclosed report provides the information requested by FEMA as to geographical dispersion of the population on the public beaches within the EPZ.

PILGRIM EPZ PUBLIC

BEACH POPULATION ANALYSIS

KLD Associates, Inc.

October 14, 1987

The purpose of this report is to respond to certain issues raised in the Federal Emergency Management Agency's (FEMA) August 4, 1987 "Self-Initiated Review and Interim Finding for the Pilgrim Nuclear Power Station (SIR)." In particular, the report addresses SIR subissues C.1 and C.2 as identified in the "Boston Edison Company Action Plan and Schedule for Providing Assistance in Addressing FEMA Issues" dated September 17, 1987 (Boston Edison Action Plan).

Subissue C.1 stated:

> FEMA and the RAC ... must receive the following additional information: (1) an updated geographical description of the beaches and their capacity.

Attachments A-G are relevant portions of United States Geological Survey quad sheets (modified as described under Subissue C.2 below) which identify each of the major public beaches in the EPZ as follows:

Attachment A - Brant Rock Beach and Green Harbor Beach

Attachment B - Duxbury Beach

Attachment C - Saquish Neck

BOSTON EDISON
Executive Offices
800 Boylston Street
Boston, Massachusetts 02199

Ralph G. Bird
Senior Vice President — Nuclear

June 30, 1987
EPC# 87-356

Mr. Peter W. Agnes, Jr.
Assistant Secretary of Public Safety
The Commonwealth of Massachusetts
Executive Office of Public Safety
One Ashburton Place
Room 2133
Boston, MA 02108

Dear Mr. Agnes:

The attachments to this letter are Emergency Preparedness Materials developed recently by my staff based on our understanding of perceived weaknesses in offsite planning. We believe this information resolves the major concerns being addressed by the Federal Emergency Management Agency in their self-initiated review: Beach Population and Sheltering, Mobility Impaired and Transportation Dependent Individuals, Special Facilities Planning and a Northern Reception Center.

We recommend that your agency send this information directly to FEMA for consideration during their self-initiated review. Prompt review of this information should preclude an unnecessary negative finding concerning offsite emergency planning for the protection of the health and safety of the general public around the Pilgrim Station, and in turn avoid creating unnecessary public concern.

We also recommend that the Massachusetts Civil Defense Agency use this information to update the State's Emergency Plan and Procedures as well as those of the five towns within the ten mile Pilgrim Emergency Planning Zone. We are prepared to assist you in quickly achieving this objective.

R. G. Bird

JFC/cae
Attachments

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

JUN 12 1987

Edward A. Thomas, Chairman
Regional Assistance Committee
Federal Emergency Management Agency
John W. McCormack Post Office and Court House
Boston, Massachusetts 02102

Dear Mr. Thomas:

SUBJECT: EVACUATION TIME ESTIMATE AND BEACH POPULATION SHELTERING, MOBILITY IMPAIRED AND SPECIAL FACILITIES FOR THE PILGRIM NUCLEAR STATION

Enclosed for your review and consideration is a letter from Boston Edison Company to the NRC, and its attachments, "Evacuation Time Estimate and Beach Population Sheltering", "Mobility Impaired", and "Special Facilities". This information addresses some of the outstanding issues related to the Pilgrim Nuclear Power Station emergency planning zone and may be useful in your review of Pilgrim emergency preparedness issues. Should you have any questions concerning the enclosed material, please feel free to contact me at (215) 337-5200 or FTS 488-1200.

Ronald R. Bellamy

Ronald R. Bellamy, Chief
Emergency Preparedness and
Radiological Protection Branch

cc w/encl:
W. Lazarus
J. Schumacher

8811210067 4A 38pp.

EVACUATION TIME ESTIMATE
AND
BEACH POPULATION SHELTERING

The following information resolves FEMA concerns involving an updated Evacuation Time Estimate and the sheltering of beach populations within the EPZ. This information updates that presented in the 1981 Commonwealth of Massachusetts Radiological Emergency Response Plan and the 1985 Radiological Emergency Response Plans for the Town of Carver, Duxbury, Kingston, Marshfield and Plymouth.

I. Evacuation Time Estimate

A. Summary of the Issue

An Evacuation Time Estimate (ETE) for the Pilgrim Nuclear Power Station was performed in 1981. This ETE was based upon the 1970 Census data. An updated ETE should be prepared based upon consideration of the most recent census data (1980), a traffic pattern analysis and a population density analysis (with attention to summer beach and tourist populations).

B. BECo. Response

BECo. has contracted with KLD Associates (July 1986) to provide an updated ETE. This firm is recognized nationally as an expert in providing evacuation time estimates and comprehensive traffic management plans. Their computer models have been validated against Washington D.C. intercity traffic flows and are presently used by FEMA as part of their Integrated Emergency Management Information System (IEMIS). KLD has conducted ETE's for utilities including Long Island Lighting Co. (Shoreham), Public Service of New Hampshire (Seabrook), Toledo Edison Co. (Davis-Besse) and Rochester Gas and Electric Co. (Ginna). Their analytical work has been substantiated by several ASLB hearing panels.

While the final ETE report for the Pilgrim Nuclear Power Plant is scheduled for receipt by BECo. in June 1987 (ref 1), substantial preliminary information was obtained during meetings and telephone conversations with KLD in May. The report's table of contents (attachment 1) and summary of analytical methodology (attachment 2) are provided as the results of these discussions. Information gathered during these meetings and the final report will be made available to the town and state emergency planning personnel.

Table 1 provides comparative Evacuation Time Estimates for several nuclear facility sites using conservative assumptions (see the Table 1 footnotes). The Pilgrim estimates are on the low side of the norm and within the expected bounds for this population.

TR-2011A

FOR INFORMATION ONLY

PILGRIM STATION

EVACUATION TIME ESTIMATES

AND

TRAFFIC MANAGEMENT PLAN UPDATE

Prepared by

KLD Associates, Inc.
900 Erneet Dr.
Huntington Station, NY 11746

Prepared for

Boston Edison Co.
Offsite Emergency Preparedness Group
5 Industrial Park Road
Plymouth, MA 02360

August 25, 1982 Rev. 0

FOREWORD

The Evacuation Time Estimate and Traffic Management Plan for Pilgrim Station presented herein is a document which has undergone extensive reviews since August, 1987 when a draft report was issued. The contents of the report were updated to reflect comments received from a variety of sources; State and local agencies, town RERP committees, and the general public. The contents of the RERPs and Implementation Procedures, developed to date, were used to update the planning assumptions utilized. The Evacuation Time Estimate and Traffic Management Plan remains a "living document" to be revised as planning assumptions change, new information becomes available, or as population and development patterns within the area change over time.

This document references the use of three reception centers; Bridgewater State College, Taunton State Hospital, and a proposed site in Wellesley. The proposed Wellesley site is currently being studied to determine its feasibility. It is important to note that the number and location of reception centers does not effect the ETE as long as the reception centers are located a sufficient distance from the Emergency Planning Zone boundary.

Pilgrim Station

Evacuation Time Estimates

and

Traffic Management Plan Update

List of Effective Pages

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Shelter Implementation Program Summary

MARSHFIELD

Shelter Implementation Program Summary

Purpose of Shelter Implementation Program:

To provide an alternative to evacuation where such actions will result in greater dose savings than if the public were evacuated.

Shelter Implementation Program Summary

Three Goals of the Shelter Implementation Program:

- Meet Federal Regulations
- Utilize a Joint Effort by State/Town/Utility
- Provide a Systematic program to Implement Short Term Sheltering

NRC & FEMA Regulatory Requirements

NUREG J.10.M:

Requirement that sheltering effectiveness in the EPZ be addressed ...to allow planners to put data in the hands of local officials sufficient for the development of shelter implementation plans for all areas of the 5 EPZ towns.

10 CFR 50.47 (b) (10)

and

44 CFR 350.5 (a) (10)

...and require that a range of protective actions be developed for the plume exposure zones (EPZ).

Shelter Implementation Program Summary

Short term Sheltering

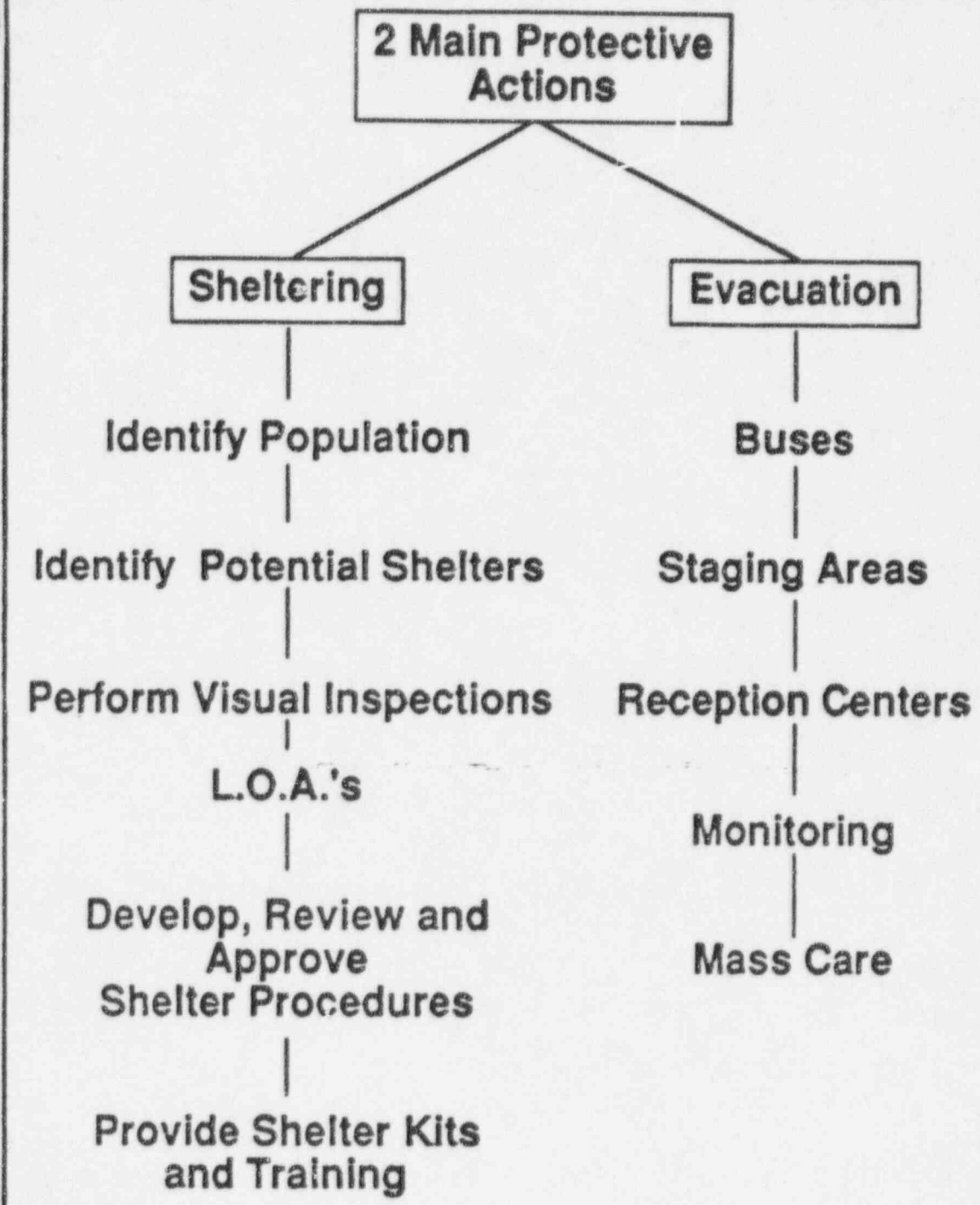
- An approximate period of one to two hours
- No sleeping or feeding arrangements

VS

Mass Care Sheltering

- Can last for longer periods of time
- Involves sleeping and feeding arrangements
- Often carried out with the protective action of evacuation

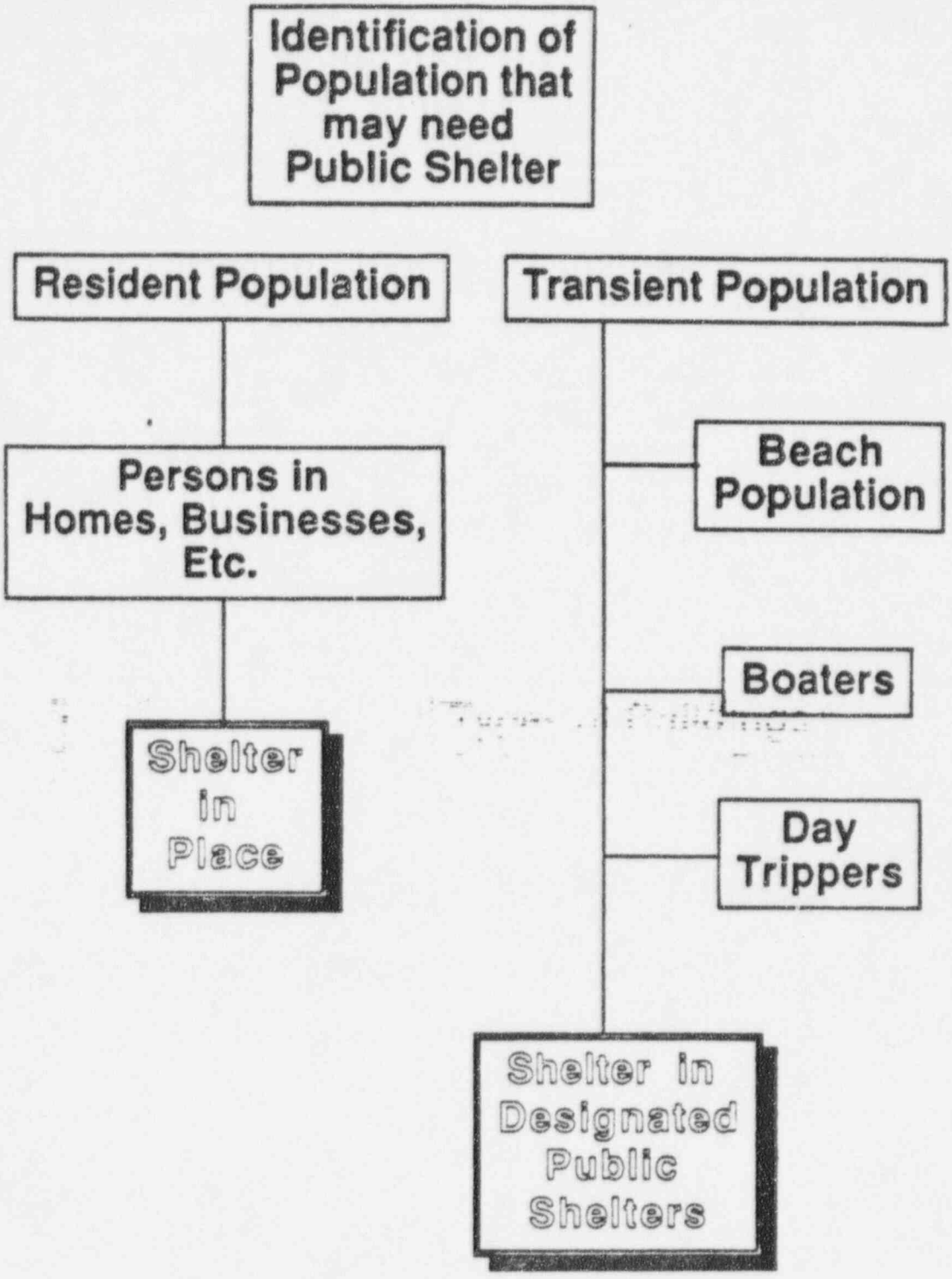
Shelter Implementation Program Summary



Shelter Implementation Program Summary

- Identification of Population that may need Public Shelter
- Identification of Potential Public Shelters
- Visual Inspection of Buildings
- Letters of Agreement with Building Owners
- Shelter Procedure Development, Review and Approval
- Provision of Shelter Kits for Shelter Coordinators / Training

Shelter Implementation Program Summary



Shelter Implementation Program Summary

Identification of Potential Public Shelters

Criteria:

- Location
- Good Shelter Protection
- Suitability for use
- Size

Types of Buildings

- Municipal
- Semi-Public
- Private Sector
  - Commercial
  - Non-Profit

Shelter Implementation Program Summary

Perform a Visual Inspection

Determine Usable Space

- Measure Total Square Footage
- Apply Room Usability Factors

Determine Shelter Capacity

- Divide Usable Space By FEMA 10 ft2
- Allow for Normal Population in Building
- Arrive at # of Persons that could be Sheltered in Building During Normal Operation Hours (In Addition to Normal Population)

Shelter Implementation Program Summary

Marshfield Shelters

1 Municipal Building

3 Semi-Public Buildings

---

4 Shelters

(21A)

Shelter Implementation Program Summary

Marshfield

Peak Populations for Beach Areas

*Green Harbor	2,609
*Brant Rock	1,211
Boaters	170
Day-trippers	660
Total	4,650

* Based on information received from local officials, there are no commercial parking lots at Green Harbor or Brant Rock, the majority of beach goers have houses nearby, and the non-resident population for these areas comprises approximately a third of the total peak population. A third of the peak population for Green Harbor is 869; for Brant Rock is 403. The total non-resident population for both locations is 1272.

Shelter Implementation Program Summary

Shelter Letters of Agreement

- Voluntary Participation by Building Owners
- Protection Against Liability for Building Owners

Attachment 1

Marshfield - Beach Areas and Shelters

Beach/ Recreational Areas	Peak Population	Shelters	S&W Est. Ft2	Calculated net usable ft2	Capacity During Off-hours	Population During Operating hours	Capacity during Operating hours
Green Harbor Boater Population	2,800 170	Public 1. Governor Edward Winslow School	25,000	19,210	1,010	N/A *	N/A *
		Semi-Public 2. Our Lady of The Assumption Church	4,950	10,130	1,010	0 **	1,010
Brant Rock	1,211	Public None					
		Semi-Public 3. St. Ann's by the Sea	11,300	10,850	1,080	0 **	1,080
		4. Brant Rock Union Church	1,000	2,240	200	0 **	200
		Private None					
Day-trippers	880						
Total	4,650			42,430	4,200 ***		2,290

* These items are "not applicable" since the beach population to be sheltered "during operating hours" (i.e.; during the school year) is very low.

** After consultation with church officials, no deductions from available capacity have been taken for building populations due to the short hours these buildings are in use.

*** Based upon information received from local officials, there are no commercial parking lots at Green Harbor or Brant Rock; the majority of beach goers have houses nearby, and the non-resident population for these areas would comprise only a third of the total peak population. A third of the peak population for Green Harbor is 869; for Brant Rock is 403. The total non-resident population for both locations is 1272.

Attachment 2

Municipal Authorization

for

Governor Edward Winslow School

See attached Sheet

BUILDING: Governor Edward Winslow School/Marshfield
ADDRESS: Regis Road off Careswell St. (Rte. 139)
INDIVIDUAL(S) IN CHARGE: Fred Hubbard, Administration
Alan Scott, Maintenance

Thank you for assisting the Office of Emergency Preparedness by providing emergency resource information necessary for short term shelter planning in the event of an accident at Pilgrim Nuclear Power Station or any other emergency.

Your cooperation in providing information was most helpful in completing shelter survey forms and in ascertaining shelter space for the public should an emergency arise.

Please review the completed shelter survey form to ensure that the information recorded is accurate.

A visual inspection of Governor Edward Winslow School was taken to determine a USABLE SHELTER AREA of 19,210 square feet.

TRANSIENT POPULATION CAPACITY:

Off-hours/off season: 1,910

Alan Scott
Fredrick C Hubbard

SIGNATURE(S) OF INDIVIDUAL(S) IN CHARGE OF BUILDING

April 4, 1983

(DATE)

Attachment 3

Letters of Agreement

(See Attached Sheets)

1. Saint Ann's by the Sea

2. Our Lady of the Assumption

3. Brant Rock Union Chapel

FACILITIES AS SHELTERS DURING
A RADIOLOGICAL EMERGENCY AT
PILGRIM NUCLEAR POWER STATION

This Agreement is made this 22nd day of March, 1988, by and between St. Ann's by the Sea (RC), at Marshfield, and Boston Edison Company, a Massachusetts electric company, with its principal place of business at 800 Boylston Street, Boston, Massachusetts 02199.

WHEREAS, Boston Edison Company ("Boston Edison") is the owner and operator of the Pilgrim Nuclear Power Station ("Pilgrim Station"), located in Plymouth, Massachusetts; and

WHEREAS, it is in the public interest that in the event of a radiological emergency at Pilgrim Station that members of the public have adequate short-term emergency shelter facilities; and

WHEREAS, the shelter facilities described herein are owned by Roman Catholic Archdiocese of Boston ("the Owner") have been determined to be suitable for the purposes of providing emergency shelter; and

WHEREAS the Owner has agreed to make said facilities available for an emergency shelter in the event of a radiological emergency at Pilgrim Station;

NOW THEREFORE, in consideration of the mutual promises and agreements contained herein, the parties agree as follows:

1. Permission to Use Facilities: The Owner agrees that in the event of a radiological emergency at Pilgrim Station and Upon the direction of the Emergency Operations Center for the Town of Marshfield (Town), the facilities described in Section 2 may be used by the general public as an emergency shelter.

2. Shelter Facilities: The Owner's facilities which may be used as an emergency shelter ("Shelter Facilities") are described as follows: St. Ann's by the Sea (RC) (Church building and Parish Center
591 Ocean St. building available for sheltering)
Marshfield, MA

3. Shelter Facilities Capacity: Based upon applicable standards and inspection by Boston Edison, the Shelter Facilities have a capacity of up to 1,080 persons.

4. Responsibilities of Owner: When directed by the Emergency Operations Center for the Town to activate the Shelter Facilities, the Owner shall do the following:

a) Post in a visible, public area the shelter placard, which is contained in the Shelter Procedures Kit; and

b) Use best efforts to follow and carry out the Shelter Procedures, which are contained in the Shelter Procedures Kit.

5. Leased Premises: In the event the Shelter Facilities are on premises which are leased by the Owner, the Lessee, by signing this agreement, agrees to fulfill the responsibilities of Owner as set forth in Section 4.

6. Shelter Manager: The Owner or, in the case of Leased Premises, the Lessee may designate a Shelter Manager. The Shelter Manager's name, address and telephone number shall be provided to the Emergency Operation Center for the Town; and he or she shall be the primary person to contact for all matters pertaining to the Shelter Facilities.

7. Obligations of Boston Edison: Boston Edison shall do the following:

a) Provide a complete Shelter Procedures Kit and other pertinent emergency instructions and information as may be necessary to assist the Owner, Lessee and Shelter Manager; and

b) Provide one tone alert radio; and

c) Indemnify, defend and hold harmless the Owner, Lessee and Shelter Manager for and against any claim, damage, action, suits, losses, costs or expenses for loss or damage to property, or injury to persons, including death, and reasonable attorneys' fees, caused by, connected with, or arising out of the actions or omissions of the Owner, Lessee or Shelter Manager in

connection with the use of the Shelter Facilities as an emergency shelter during a radiological emergency at Pilgrim Station.

IN WITNESS WHEREOF, the parties have hereunto set their hand and seal on the date first stated herein.

Boston Edison Company

By R.G. Bird

R.G. Bird

Its Senior Vice President _ Nuclear

Roman Catholic Archdiocese of Bostc
(Owner's Name)

for Patrick J. Lennon Attorney
Owner

Lessee (If Shelter Facilities are on Leased Premises)

Shelter Manager

Letter of Agreement

Brant Rock Union Chapel

(In Process)

Letter of Agreement

Our Lady of the Assumption

(In Process)

Attachment 4

Marshfield Shelter Procedures

Shelter Manager	IP-10
Shelter Coordinator for:	
Governor Edward Winslow School	IP-41
Brant Rock Union Chapel	IP-42
Saint Ann's by the Sea	IP-43
Our Lady of the Assumption	IP-44

Secy

Federal Emergency Management Agency

Region I J.W. McCormack Post Office and Court House
Boston, Massachusetts 02109

August 22, 1988 AUG 23

Charles V. Barry, Secretary
Executive Office of Public Safety
Commonwealth of Massachusetts
One Ashburton Place
Boston, Massachusetts 02108

Peter:
Would you give me an

Dear Mr. Barry:

This is in response to your letters of May 27 and July 7, 1988, concerning offsite radiological emergency planning and preparedness for the Pilgrim Nuclear Power Plant. The efforts of the Commonwealth of Massachusetts and the local communities to upgrade plans and preparedness around Pilgrim are recognized and appreciated by the Federal Emergency Management Agency (FEMA). Informal technical assistance reviews of the draft local radiological emergency response plans for Plymouth, Carver, and Kingston, Massachusetts and of the Reception Center Plan for Taunton, Massachusetts were completed by FEMA and the results were forwarded to Mr. Robert Boulay, Massachusetts Emergency Management Director, on March 30, 1988. The results of the informal technical assistance reviews of the Bridgewater Reception Center Plan and the Duxbury Radiological Emergency Response Plan were forwarded to Mr. Boulay on August 3, 1988, and August 8, 1988, respectively. Informal technical assistance plan reviews have now been completed for all of the Pilgrim emergency planning zone (EPZ) communities except for Marshfield. The Marshfield plan and the plan for a third reception center have not yet been submitted for review.

The reviews indicate that there has been some progress made in improving and upgrading the local plans. Overall, however, the plans remain incomplete, lack specific details in certain areas, and do not include required implementing procedures. In addition to these issues in the local plans that must be addressed, the status of the Massachusetts Civil Defense Agency Area II Plan and the Commonwealth of Massachusetts Plan must be clarified. The Area II Plan is now obsolete in many respects and needs upgrading and republishing. By our records, the July 1981 edition of the Commonwealth Plan remains the effective version, since the 1984 revised edition was never implemented. Since the Commonwealth and Area II Plans both contain elements that affect and are critical to the local plans and their implementation, a full formal technical review of offsite planning for Pilgrim cannot be completed by FEMA until revised Commonwealth and Area II Plans are submitted along with complete supporting local plans. As indicated in our letters to Mr. Boulay, full implementing procedures, Letters of Agreement, revised Public Information Brochures, and training modules must also be submitted for a full, formal technical review.

We encourage you to continue pursuing your goal of developing the best possible emergency plans for protecting the public health and safety in the vicinity of the Pilgrim Nuclear Power Plant. We can also appreciate the intricacies of the process and interaction among the State and local jurisdictions and the licensee that is required to develop such plans. We are again requesting, however, that you provide a schedule or milestones indicating when the overall offsite planning

process for Pilgrim will be completed and when revised plans will be submitted to FEMA for formal review. We do not believe that this action would be arbitrary or that it would imply that considerations other than public safety are paramount. In fact, we have found schedules and milestones to be useful for planning purposes and for monitoring progress at other sites and we believe that the Commonwealth, the local jurisdictions, and the licensee could better organize the planning effort and would find that producing a schedule would help facilitate the process.

In your letter you questioned whether the plans that are ultimately developed will provide reasonable assurance that adequate protective measures "can and will" be taken to protect the public. You also requested that FEMA provide you with a statement of the criteria FEMA intends to employ in making a determination of reasonable assurance associated with a review of the plans for Pilgrim. FEMA continues to use 44 CFR 350 as the basis for its reasonable assurance finding. If the intent of FEMA's regulation 44 CFR 350 and the planning standards and related evaluation criteria contained in NUREG-0654/FEMA-REP-1, Revision 1, are met, based on the professional judgment of FEMA and other Federal reviewers, then we are able to make the determination that emergency plans adequately protect the public health and safety by providing reasonable assurance that appropriate protective measures can be taken offsite in the event of a radiological emergency. As a point of clarification, 44 CFR 350 does not require a FEMA reasonable assurance determination that protective measures "will" be taken, only that they "can" be taken.

In regard to your discussion of planning options and dose savings, the overall objective of any radiological emergency response plan related to a nuclear power plant is to assure reasonable and feasible dose savings for a spectrum of radiological accidents that could produce offsite doses in excess of Protective Action Guides (PAG's). A PAG is defined as a projected absorbed dose to individuals in the general population which acts as a trigger point to warrant protective action. A PAG under no circumstances implies an acceptable dose. The Nuclear Regulatory Commission (NRC) confirmed the above position in a ruling on July 24, 1986, and stated that emergency planning requirements do not require that an adequate plan achieve a pre-set minimum radiation dose-savings or a minimum evacuation time for the plume exposure (10-mile) EPZ in the event of a serious accident (Long Island Lighting Co (Shoreham Nuclear Power Station, Unit 1) 24 NRC 22 (CLI-86-13, 1986). The protective actions taken after a nuclear incident are intended to minimize the radiation exposure of the general public resulting from the incident, and thus achieve dose savings in comparison to actions taken on an ad hoc basis without emergency planning. Even the best emergency plans and preparedness cannot assure that radiation exposure will not occur for the worst case accidents.

In your letter you raised the issue of the beach population in the vicinity of Pilgrim and questioned whether FEMA continues to stand by the findings of the Self-Initiated Review and Interim Finding. There are several factors that will be considered by FEMA in reviewing the revised Pilgrim plans regarding the beach population and other special populations within the EPZ. One factor involves Planning Standard J in NUREG-0654/FEMA-REP-1, Revision 1, which requires that a "range of protective actions" be considered in developing offsite radiological emergency response plans. As part of the Pilgrim plan revision process, FEMA expects offsite officials to develop protective action options, based on site-specific characteristics and local capabilities, and to provide the technical

rationale for whatever protective action option or options are selected and adopted as the most appropriate planning approach for the site. It is FEMA's position that a "range of protective actions" could be satisfied by evacuation alone.

Also, in the Self-Initiated Review and Interim Finding FEMA stated, based on certain factors, that protective actions for the beach population "may well be adequate currently and, if not, readily correctable." It may be, based on the relatively low numbers of people who may be without shelter, that nearby buildings could be identified to offset the difference. It is our expectation that once this option is fully explored, an adequate sheltering plan for the transient beach population can be developed. However, if this is not the case, to require sheltering for the transient beach population as a condition of a finding of reasonable assurance is inconsistent with the precept that emergency planning requirements do not require that an adequate plan achieve a pre-set minimum radiation dose savings or a minimum evacuation time. This approach is being applied to all EPZ's nationwide. Thus, our response to your question as to whether or not we stand behind our finding is twofold: 1) we continue to believe that an adequate sheltering plan for the transient beach population can be developed for the limited circumstances where sheltering would be the preferred protective action; and 2) that this issue, in and of itself, would not support a negative finding for the aforementioned legal and policy reasons and for the technical reasons stated below.

In severe accident sequences, the total dose potential is comprised of several components. These are the direct exposure from immersion in the plume, cloud-shine from a plume overhead, exposure from inhalation of the plume, and ground-shine from deposited radionuclides. The exact relationship among the various components will vary with time and distance from the point of release. In severe accident sequences, however, the ground-shine component is most likely to be the major contributor to total dose if no protective actions are taken. In those cases, if the dose reduction strategy is sheltering first, followed by an evacuation after plume passage, the total dose reduction would not be as great as that for the immediate evacuation strategy.

In an immediate evacuation, to move the population relatively short distances in a cross-wind direction would greatly decrease or eliminate exposure. Even moving the population downwind relatively short distances would decrease the dose rate by a factor of 3 or 4. The sheltering part of the strategy reduces dose primarily from the plume immersion and inhalation component. It is generally accepted, depending on the quality of the shelter, that the effectiveness of a shelter to reduce the inhalation exposure degrades after two hours. At some point, sheltered individuals would have to be relocated. During this evacuation after plume passage, individuals previously sheltered would still receive the ground-shine dose, potentially the major component. Therefore, sheltering followed by evacuation is likely to be a less effective means of achieving dose reduction than evacuation alone, particularly for severe accident sequences.

Generally, the closer an area is to the point of release of radiation the greater the potential dose savings that can be achieved by early evacuation. By implementation of the immediate evacuation strategy, dose reductions greater than those to be derived from a "shelter first-evacuate later" concept can be obtained by movement of the population relatively short distances, even in the extremely unlikely case in which the plume track and the evacuation routes coincide.

In addition to the factors outlined above, the NRC Staff has advised FEMA that its interpretation of NRC emergency planning regulations is that the regulations

do not require that sheltering be provided for all accidents, at all times, and at all locations within the plume exposure pathway EPZ. Stated differently, the NRC Staff views the regulations as not requiring that there be a range of protective actions that includes both sheltering and evacuation options, for all accidents, at all times, and at all locations within the EPZ. NRC has also advised FEMA that its regulations are not contravened by the absence of shelter in the case of the beach population.

In consideration of FEMA's interpretation that "range of protective actions" could be satisfied by evacuation alone, the potentially greater dose savings from an immediate evacuation versus sheltering strategy, and the NRC's interpretation of its regulations, the lack of sheltering for a special segment of the population will not, by itself, necessarily be cause for a negative reasonable assurance finding. These standards were applied to reviewing planning for the beach population in the Seabrook case and are being applied to all reviews nationwide.

Mr. Richard Krimm's recollection of the quotation in your letter is that the statements were made in the context of sheltering as a preplanned, chosen protective action and referred to sheltering for the permanent population. We expect the Commonwealth of Massachusetts and local jurisdictions to consider a range of protective action options and to technically justify those options that are selected as the Pilgrim plans are revised and upgraded. In selected instances, sheltering may be a logical and appropriate approach.

I would like to reiterate, as stated earlier, that FEMA encourages the development of a comprehensive schedule for completion of the emergency plans for Pilgrim and that this process is not "arbitrary" nor does it imply "that considerations other than public safety (are) paramount." If the schedule, once developed, needs to be adjusted subsequently in order to improve the plans, FEMA could accomodate such modifications.

Once again, additional technical assistance from FEMA will be readily available to you should you desire it in completing the Pilgrim planning effort. If you need any additional information, please contact me at 223-9540 in Boston.

Sincerely,

Henry G. Vickers
Regional Director

FEMA ISSUES

ISSUE 1	SUBISSUE	STATUS
A.1	Private schools and day-care centers not identified in town plans.	Complete TAB E
A.2	Plans and procedures needed.	Plans, procedures in place and transportation arranged. TAB E
A.3	Early dismissal and evacuation concerns.	Plans describe early transfer. TAB E
A.4	Letters of Agreement (LOAs) needed.	LOAs have been signed. Need state approval. TAB G page 47/48
A.5	Driver training.	Drivers are being trained. TAB G & TAB H.
ISSUE 2		
B.1.	Reception center needed.	Two centers identified, improvements are recommended. Northern Center determined feasible by the Commonwealth. TAB I, TAB J & TAB G page 32
B.2	Plans and procedures needed to register and monitor evacuees.	Complete. TAB E

FEMA ISSUES

ISSUE 3	SUBISSUE	STATUS
C.1	Updated geographical description of beaches and their capacity.	Complete. In the plans and procedures. TAB E and TAB L
C.2	Analysis of beach population.	Information incorporated into plans and procedures. TAB E
C.3	Estimate of time to evacuate (ETE).	Revised ETE completed. TAB L
C.4	Shelter details.	Shelter information updated. LOAs signed. TAB M
C.5	Accessible shelters.	Shelter Implementation Program in place. TAB M
ISSUE 4		
D.1	Procedures and current information needed to identify mobility impaired.	Complete. TAB E
D.2	Transportation needed.	Transportation resources available. TAB L
D.3	LOAs needed.	LOAs signed. Need state approval. TAB 6 page 42/48

FEMA ISSUES

ISSUE 5	SUBISSUE	STATUS
E.1	Plans and proocedures and ETE needed for transportation - dependent population.	Complete. TAB E and TAB L
E.2	Resources needed.	Complete. TAB E
E.3	LOAs needed.	LOAs signed. Need state approval. TAB G page 47/48
ISSUE 6		
F.1	Lack of progress.	Complete. CONCLUSION
F.2	No updates to state plan.	State Area II plan provided to FEMA. TAB E
F.3	No training.	Training in progress. TAB G and TAB H
F.4	Inadequate public information.	Interim provided, final in process. TAB H
F.5	No Annual Letters of Certification (ALC).	Future ALC incorporated in upgraded EP program. TAB E
F.6	State and local plans are inadequate.	State position. Cooperating in improvements.
F.7	State unable to answer questions from public.	Cooperating in improvements.
F.8	KI policy not clearly stated.	Complete.

P

TESTIMONY BEFORE THE SENATE

LABOR AND HUMAN RESOURCES COMMITTEE

REGARDING THE PILGRIM NUCLEAR POWER STATION

DR. THOMAS MURLEY, DIRECTOR

OFFICE OF NUCLEAR REACTOR REGULATION

U. S. NUCLEAR REGULATORY COMMISSION

PLYMOUTH, MASSACHUSETTS

JANUARY 7, 1988

- The Draft Massachusetts Civil Defense Authority Area II Plan is complete and in review. Submittal to FEMA is expected in January 1988.

- The draft of the Commonwealth Plan is approximately 75% complete.

Additionally, Boston Edison submitted an exemption request to NRC on the requirements for conducting their Biennial Full Participation Exercise. This exemption was approved, December 9, 1987, with the stipulation that the exercise be conducted no later than June 30, 1988.

As I stated in a recent letter to Mr. Malaguti of the Plymouth Board of Selectmen, NRC will not permit Pilgrim to resume operation until we determine that the health and safety of the public can be protected. The determination whether to restart the Pilgrim plant will involve consideration of each of the emergency planning issues identified by FEMA. In particular, resolution of the deficiencies identified with respect to the evacuation of schools and daycare centers and the evacuation of special needs and transporation dependent population must be demonstrated prior to power operations. The quality of offsite energency preparedness at the Pilgrim plant will depend heavily on how well the Commonwealth of Massachusetts is able to

Q

29. The problems concerning evacuation of so remote an area [i.e., Saquish], especially under adverse weather conditions, have not been addressed at this time. For instance, elevating the Saquish access road should be considered if such action would not be prohibited by environmental regulations. During extreme high tides this road is virtually impassable by any vehicle. (p. 43)

COMMENTS: Provisions for the evacuation of Saquish have been incorporated into the draft plans and procedures, and include roles for the Plymouth Police Department, Saquish Special Police, Plymouth Harbor Master, Duxbury Public Works Department, Duxbury Harbor Master and Duxbury Police Department. The Duxbury Police Department has not yet concurred with its draft procedure.

With respect to the "virtual impassability" of the Saquish access road during high tides, that condition occurs on approximately two days a month for about two hours on each occasion. In any event, based upon numerous discussions with the Saquish Association and aerial photography commissioned by Boston Edison, we believe that with the addition of a simple cross-over between the front beach road and back road, full access can be provided to and from Saquish at all times. There are of course details that must be worked out but, we are continuing to discuss this matter with the Saquish Association.

September 30, 1988

Mr. Ronald Bellamy, Safeguards
Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA. 19107

Dear Mr. Bellamy:

As you know, Duxbury Citizens Urging Responsible Energy is opposed to the restart of the Pilgrim Nuclear Power Station. However, regardless of our position on that issue, we support the development of the best emergency response plan which can be achieved due to the fact that 16 years of highly radioactive waste remains on site at Pilgrim.

The town of Duxbury's Emergency Response Committee has made an extraordinary commitment, as have many individuals to insure that the public's health and safety are provided for in the event of an emergency at Pilgrim. Nonetheless, our plan is far from implementation, and it remains to be seen, as the Governor has stated, if workable plans can be developed to safely provide for the evacuation of the population within ten miles of Pilgrim. We object to the NRC and Boston Edison conclusion that draft plans in any state are satisfactory to protect this area.

We are pleased to provide the enclosed report, photographs and nautical charts prepared by Duxbury resident, David Quaid. We concur with his findings and commend him for tireless efforts to present factual information on the problems of evacuation and sheltering of the beach/transient populations. In addition, Mr. Quaid has offered to provide tours of the Gurnet/Saquish area to interested officials.

We trust that you will give these materials careful consideration when making decisions on emergency planning. We look forward to your comments.

Sincerely yours,

Mary C. Ott Donald M. Muirhead Jr.

Mary C. Ott
Co-Chairmen

Donald M. Muirhead Jr., M.D.

cc:
Governor Michael Dukakis
Senator Edward Kennedy
Senator John Kerry
Congressman Gerry Studds
Assistant Secretary Public Safety, Peter Agnes
Selectmen: Duxbury
Mr. Cramer, Federal Emergency Management Agency

8811210074 153pp.

David L. Quaid, ASC
21 Summer Street - P.O. Box 1617
Duxbury, MA 02331-1617

September 17th. 1988

REPORT ON PROBLEMS OF EVACUATION AND SHELTERING OF BEACH/TRANSIENT POPULATIONS DUE TO THE PROXIMITY OF PILGRIM 1 STATION.

This report and the aerial photographs contained with the report were occasioned by the irresponsible letter of October 21st., 1987 to the Nuclear Regulatory Commission concerning beach/transient populations by Admiral Bird of Boston Edison. Quote: "In our submittal of June 4th., 1987, we conclude that adequate planning is possible for sheltering beach/transient populations (estimated at approximately 9000 people). Our position was then, and remains, that there is more than sufficient sheltering capacity available for sheltering the population of concern".

In a letter to Chairman Zech, of the NRC, I asked for representatives of his agency and of Boston Edison to tour the beach areas with me to see for themselves that absolutely no sheltering, whatsoever, exists and that much of the beach area harboring a large summer population is just three miles, downwind from Pilgrim 1 Station. Dr. Ronald Bellamy, Chief, Facilities Radiological Safety and Safeguards Branch made an appointment with me and on March 10th., 1988, we toured the entire area. It being winter most of the area was quite abandoned except for some all-year residents at Gurnet Point. He mentioned that he would like to see the area on a summer's weekend.

The aerial photographs were made to fulfill his request and those of others. The photos enclosed were made on July 3rd., 1988, during the period between 2:30pm and 3:30pm. The day was chilly so the beaches were about 50% under-utilized. This fact is obvious, when considering the photos of the 1/2 empty town parking lot and the same condition at the Duxbury Public Beach lots. Mr. Albert Samano, Supervisor of Off-site Safety, reported at a Duxbury Emergency Response Committee meeting, that BECO in 1987 had also made an "overflight", on a pleasant summer's weekend, of the beach areas near Pilgrim 1 Station and from the photographs estimated the beach population at 16000 people.

Photo #1:
Shows the proximity of Pilgrim 1 Station to Gurnet Point, slightly over three miles distant. The NRC estimates that the speed of a radioactive plume from a reactor accident would be 10 miles per hour, which would allow but 20 minutes to evacuate the area. During the summer months the prevailing winds are from the southwest making the beach area downwind of the plant for the entire season of maximum recreational use.

Photo#2:
Is typical of the Duxbury Beach road. As can be seen, the road is cabled for its entire length to preclude access to the conservation areas. This fencing is broken in only two places along 4 miles of road for access to the beach and are are referred to locally as crossovers. These crossovers are in extremely soft sand, under some

conditions even four-wheel drive become stuck.

Photo#3:
One of only two crossovers in 4 miles of beach.

Photo #4:
At bottom of photo, a car can be seen exiting a crossover to the beach. The vegetation and the dunes are protected by fencing both on the beachside and the roadside. Cars exiting from the beach can leave only through the crossover at the bottom of the picture or through the one out of frame at the top.

Photo #5:
At this hour on a holiday weekend, 2:30pm, the parking lot would normally be full and overflow cars turned away at the far end of the bridge. The chilly day held down attendance.

Photo #6:
The entire parking lot is normally full at this hour, capacity, 2500 cars. When viewing these photos a factor of +1/3 to +1/2 should be added to obtain a realistic impression of the population.

Photo #7:
It was estimated by the Gurnet/Saquish security that there were 3500 people and 400 to 500 vehicles on Saquish Beach on the afternoon of July 3rd., 1988.

Photo #8:
During the monthly astronomically high tides, the marsh area between Gurnet Point and Saquish Beach is inundated preventing vehicular traffic across road at [A] and the back road at [C]. [B] is the one-lane soft sand principal access to Saquish Beach. At the best of times getting through [B] without meeting another vehicle coming from the other direction is by chance. Someone must back up. In an emergency [B] would prove to be avery difficult situation indeed.

Recommendation for Saquish Beach: The roads at [A] and [C], see Photo#8, must be raised for all-weather access. The gap at [B] must be double-tracked to make evacuation at all possible.

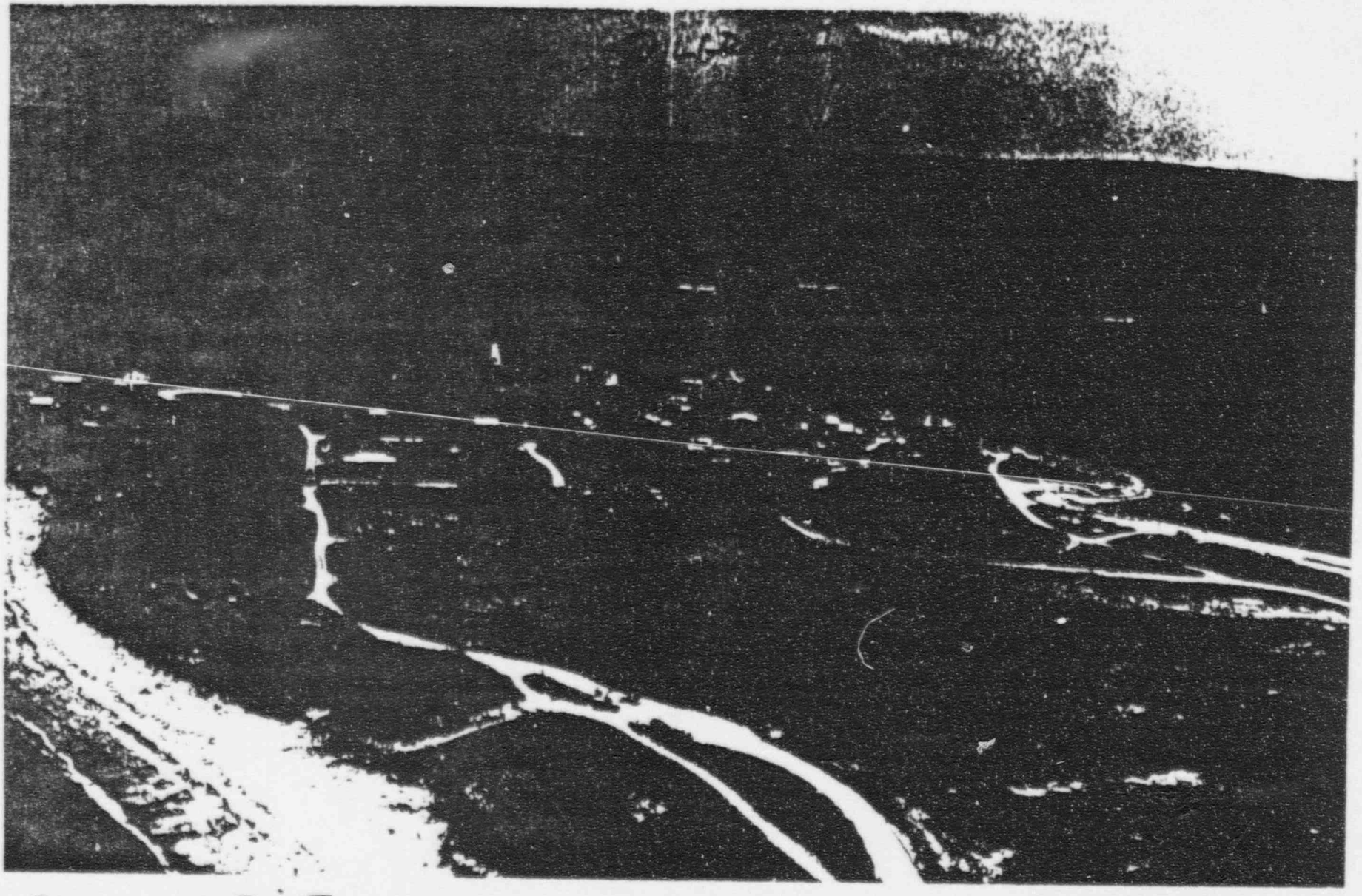
For Duxbury Beach: An additional crossover to make a total of three.

General recommendation: Due to prevailing southwest summer winds, close Pilgrim 1 Station, June 1st. to October 1st, yearly.

Respectfully submitted,

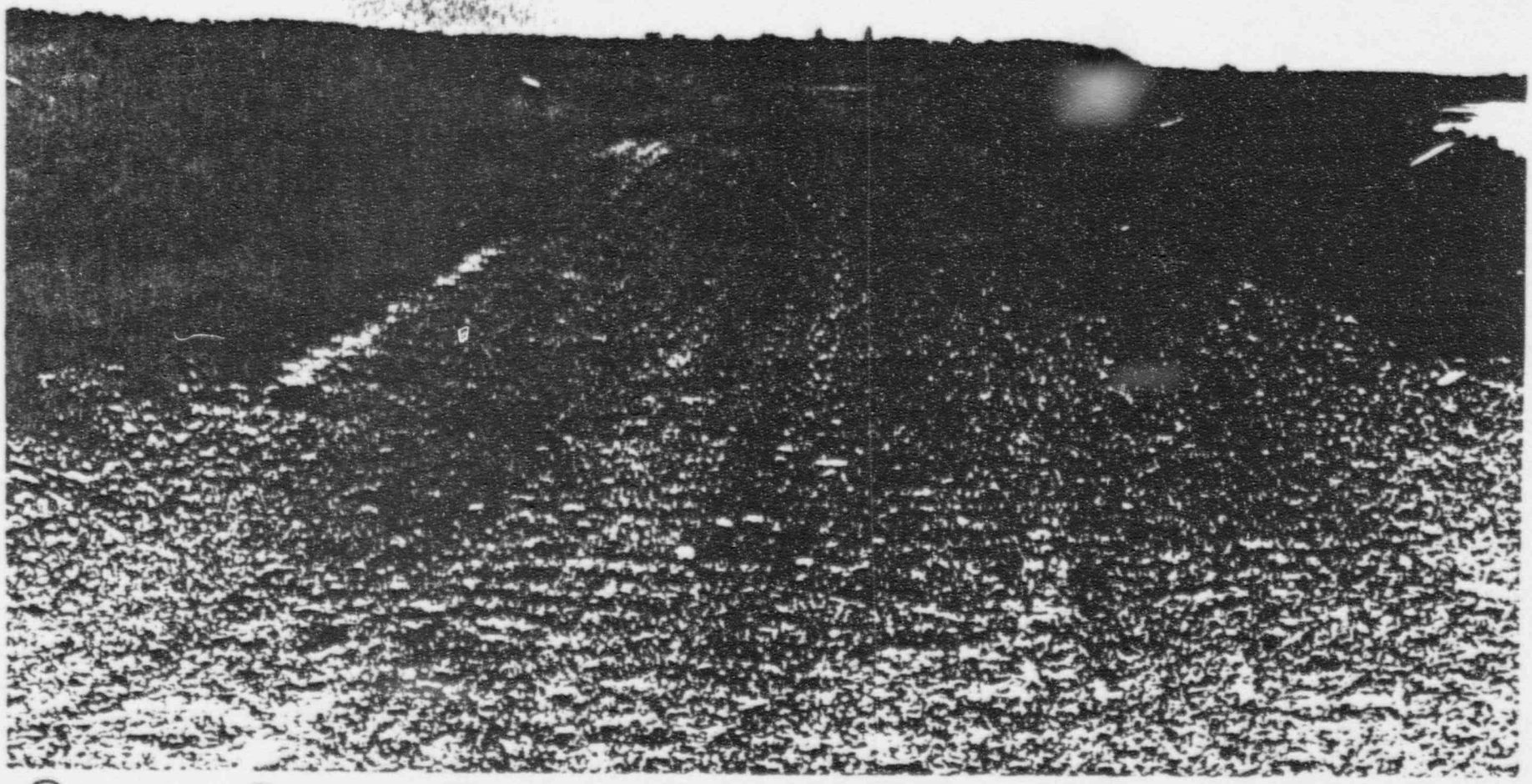
David L. Quaid

David L. Quaid
Resident of Town of Duxbury/Gurnet Point.

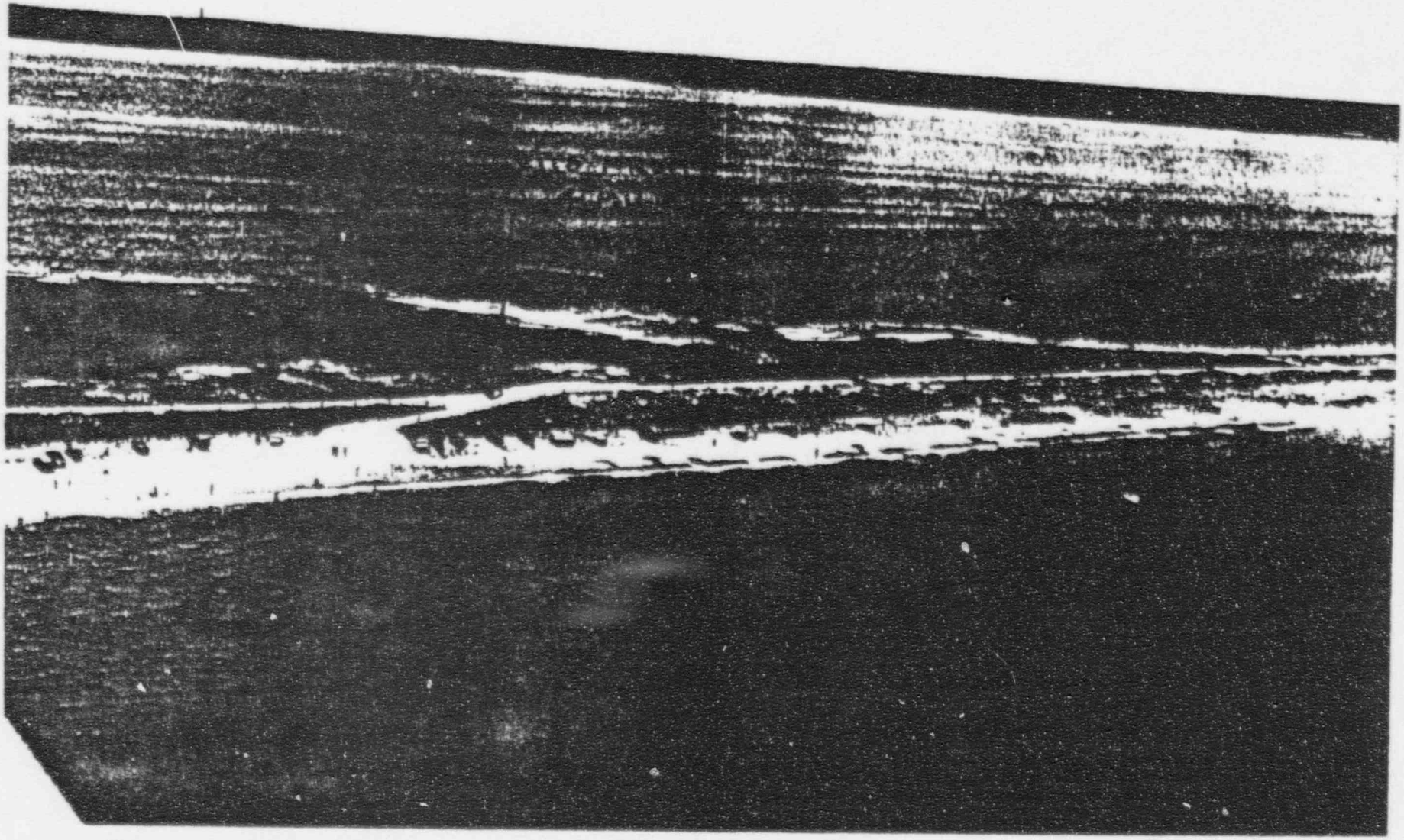


GURNET POINT

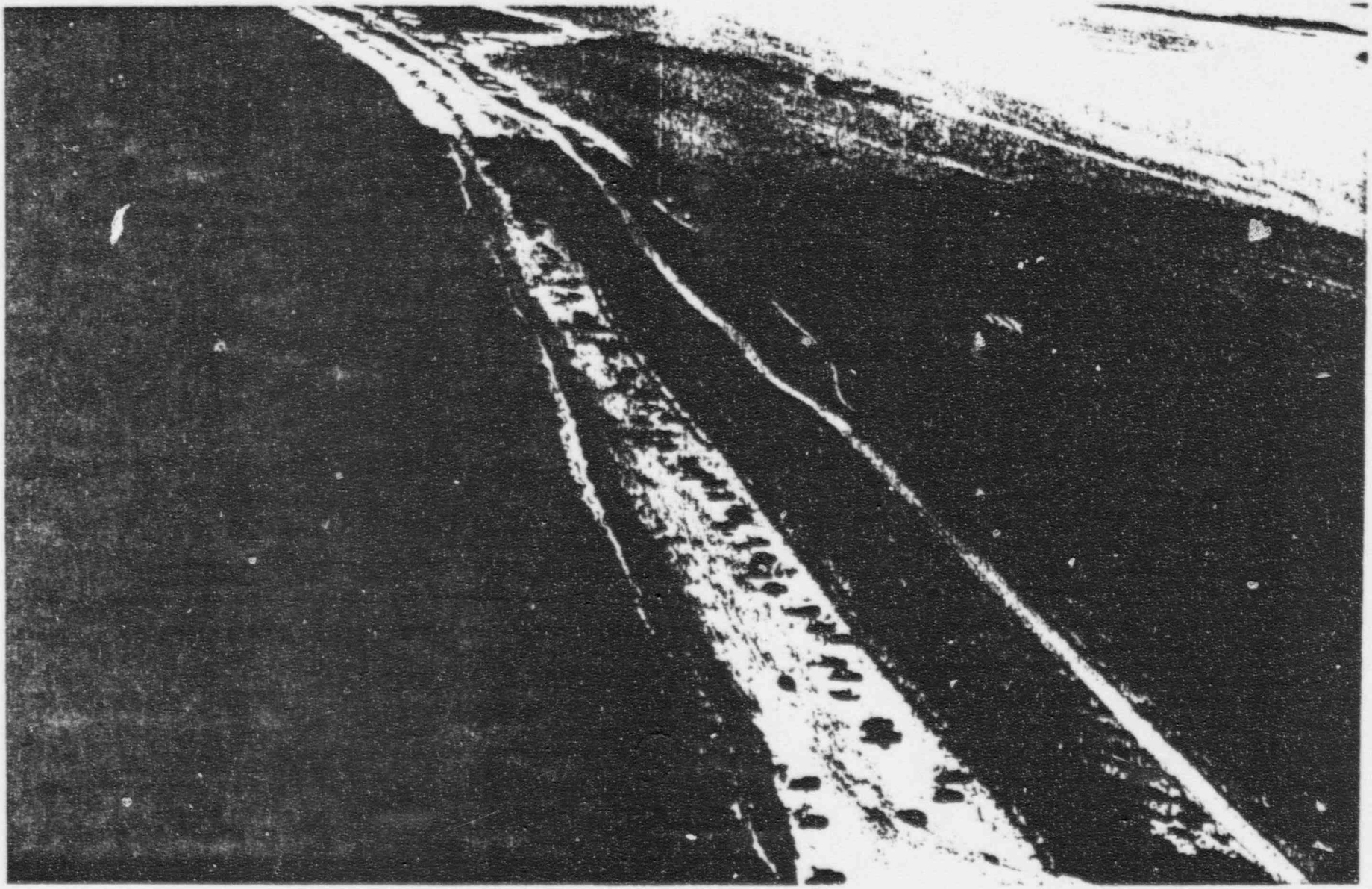
#1



DUXBURY BEACH ROAD #2

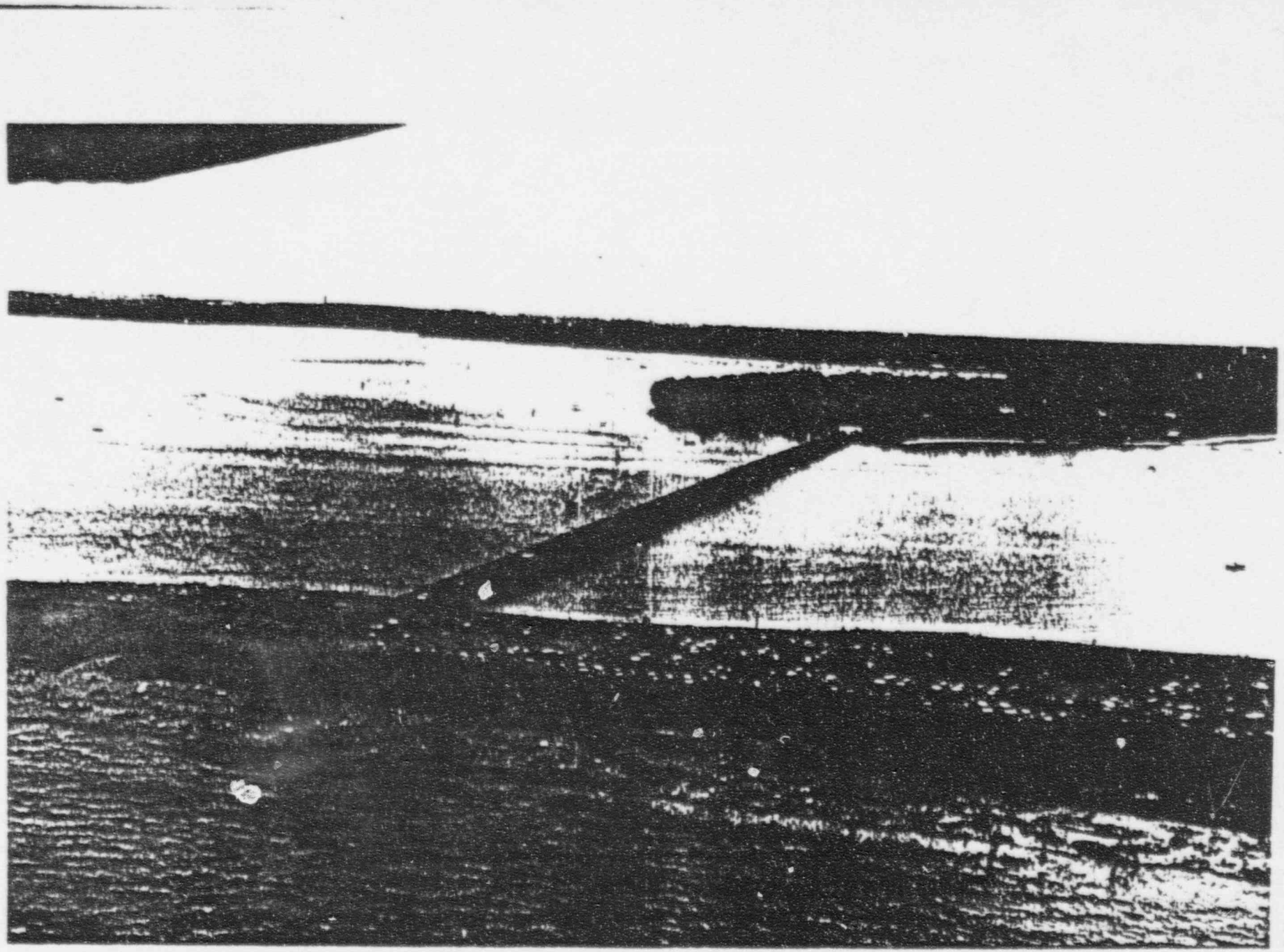


DUXBURY BEACH #3

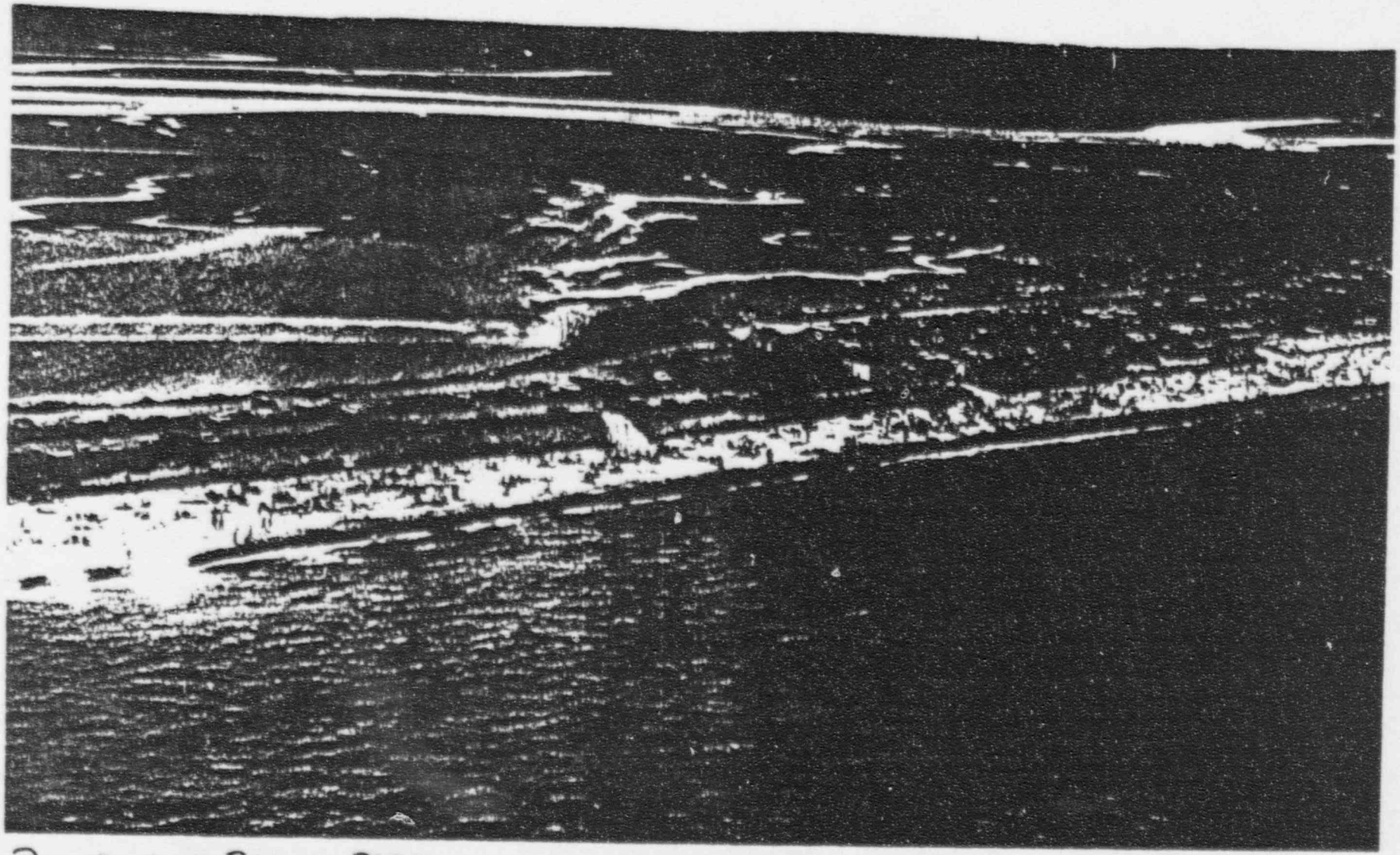


DUXBURY BEACH

#4

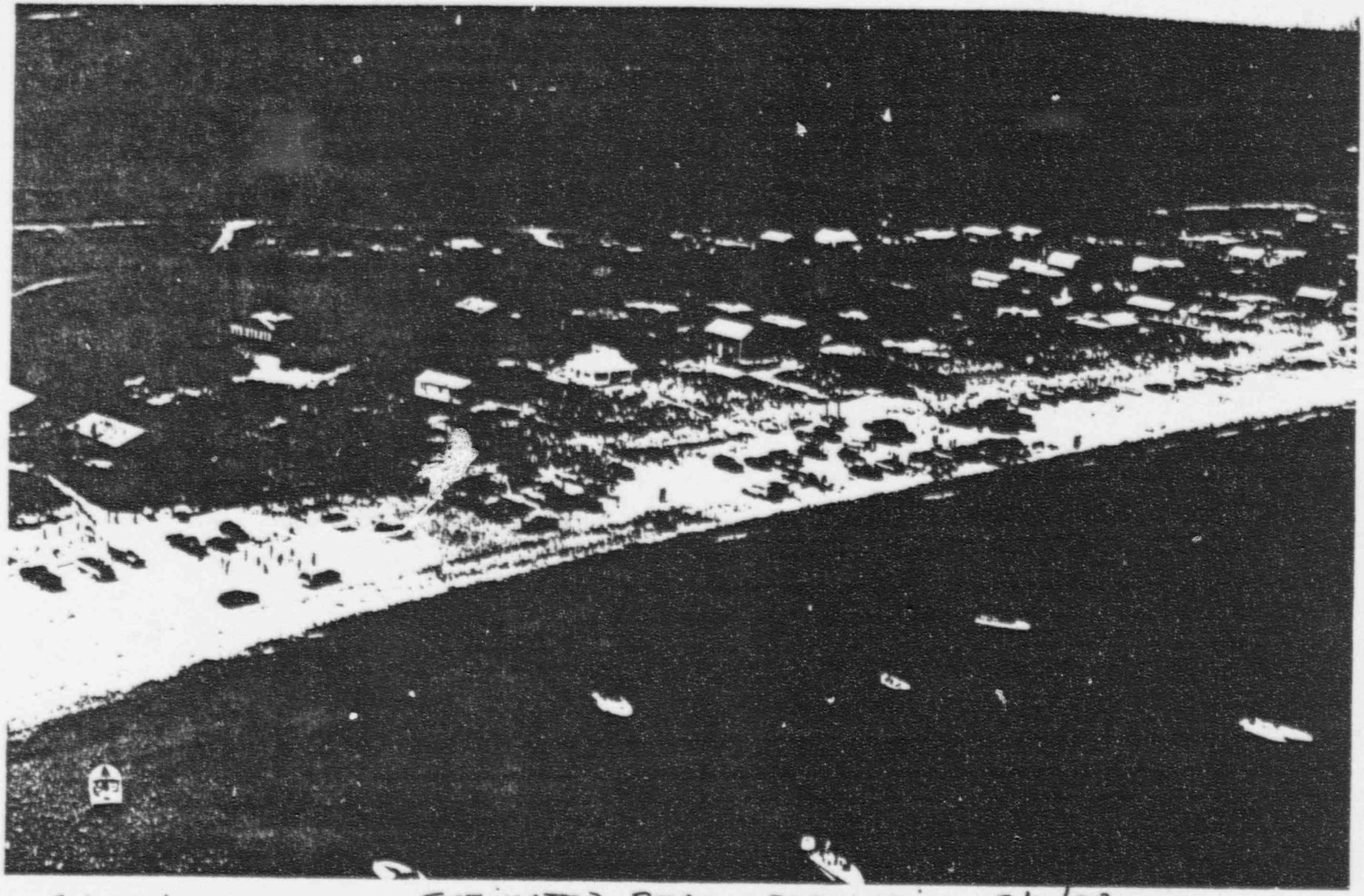


DUXBURY TOWN BEACH AND PARKING AREA #5

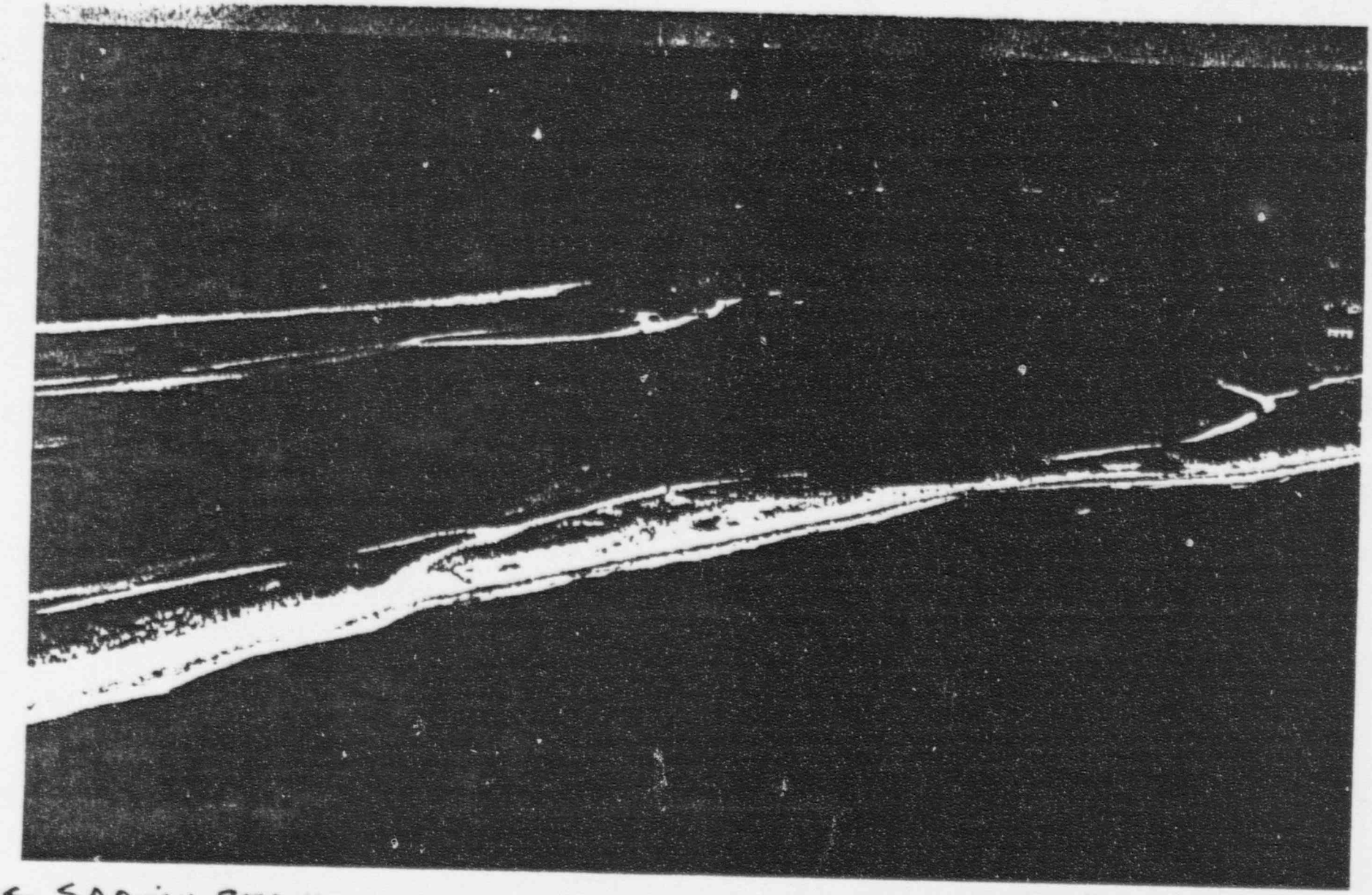


DUXBURY BEACH PARK

#6



SAQUISH BEACH ESTIMATED BEACH POPULATION 7/3/88
3500 PERSONS AND 400 to 500 4-WHEEL
DRIVE VEHICLES. #7



← SAQUISH BEACH

GURNET POINT → #8

ENCLOSURE 2

PILGRIM NUCLEAR POWER STATION MEETINGS REGARDING EMERGENCY PREPAREDNESS

A listing of those meetings considered is noted below:

1.	October 10, 1988	Transportation Provider Training
2.	October 9, 1988	Transportation Provider Training
3.	October 8, 1988	Transportation Provider Training
4.	October 6, 1988	Duxbury and CURE, Duxbury, MA.
5.	October 5, 1988	NRC Meeting with BECo and the Commonwealth of MA., Rockville, MD.
6.	October 4, 1988	Plymouth Board of Selectmen, Plymouth, MA.
7.	September 29, 1988	Public Meeting, Plymouth, MA.
8.	September 24, 1988	Transportation Provider Training
9.	September 8, 1988	ACRS Full Committee Meeting, Bethesda, MD.
10.	August 26, 1988	ACRS Subcommittee Meeting, Plymouth, MA.
11.	August 25, 1988	SALP Management Meeting, Plymouth, MA.
12.	August 24, 1988	Transportation Provider Training
13.	August 23, 1988	Transportation Provider Training
14.	*August 22, 1988	Commonwealth of Massachusetts, Framingham, MA.
15.	August 22, 1988	Commonwealth of Massachusetts, Framingham, MA.
16.	August 15, 1988	Plymouth Board of Selectmen, Plymouth, MA.
17.	May 11, 1988	Public Meeting, Plymouth, MA.
18.	March 23, 1988	Commonwealth of Massachusetts, Framingham, MA.
19.	March 10, 1988	Private Resident Meeting, Duxbury, MA.
20.	February 18, 1988	Public Meeting, Plymouth, MA.
21.	February 9, 1988	Commonwealth of MA. Meeting, Boston, MA.
22.	January 7, 1988	Senator Kennedy Field Hearing, Plymouth, MA.
23.	December 29, 1987	Senator Kennedy Staff Meeting, Washington, D.C.
24.	December 9, 1987	Pilgrim Exercise, Plymouth, MA.
25.	October 29, 1987	Public Meeting, Duxbury, MA.
26.	October 8, 1987	Commonwealth of MA. Meeting, Region I
27.	*August 14, 1987	FEMA Region I, Boston, MA.
28.	August 14, 1987	FEMA Region I, Boston, MA.
29.	July 17, 1987	Commonwealth of Massachusetts, Framingham, MA.
30.	May 27, 1987	Plymouth Board of Selectmen, Plymouth, MA.
31.	February 17, 1987	Commonwealth of Massachusetts

Those meetings noted by an asterisk provide additional information for meetings already covered.

ATTACHMENT 1

Meeting Title: Transportation Provider Training
Location: Rogers Bus Company
Date: October 10, 1988

Attendees	Position/Title
C. Conklin	NRC Region I

Summary of Meeting

Rogers Bus Company. There were 8 attendees. Some attendees were from Ingle Bus Company. All attendees were bus drivers. Training consisted of a combination of classroom lecture and actual performance of tasks. The lessons covered were: Introduction to Radiation; Introduction to Emergency Response; Dosimetry; and Implementing Procedures. Risk and consent, for both the drivers and company, were adequately covered. Hands on training included use of dosimetry and appropriate forms and actual running of routes. The routes were run on a sunny, warm holiday Monday late morning to early afternoon. Maps and instructions were provided and a bus was run from Rogers Bus Company in Hanover to the Martinson Junior High School staging area in Marshfield (12 minutes) and to Bus route M-4 and return to the staging area (50 minutes). Bus route M-4 included Marshfield and Duxbury beaches. This provider will normally have one driver in each bus. The maps and instruction provided were accurate and no problems were encountered running the entire route.

ATTACHMENT 2

Meeting Title: Transportation Provider Training
Location: Stavis Ambulance Service
Date: October 9, 1988

Attendees	Position/Title
C. Conklin	NRC Region I

Summary of Meeting

Stavis Ambulance Service. There were 5 attendees. All attendees were EMT's. Training consisted of a combination of classroom lecture and actual performance of tasks. The lessons covered were: Introduction to Radiation; Introduction to Emergency Response; Dosimetry; and Implementing Procedures. Risk and consent, for both the drivers and company, were adequately covered. Hands on training included use of dosimetry and appropriate forms and actual running of routes. The routes were run on a sunny, cool Sunday late morning to early afternoon. Maps and instructions were provided and a bus was run from Stavis Ambulance in Brookline to Silver Lake HS staging area in Kingston (65 minutes), to the Sister Divine Providence Nursing Home in Kingston, to the Cardinal Cushing Hospital in Brockton (57 minutes). This provider will normally have two EMT's in each ambulance. The maps and instruction provided were accurate and no problems were encountered running the entire route.

ATTACHMENT 3

Meeting Title: Transportation Provider Training
Location: Swansea Ambulance
Date: October 8, 1988

Attendees	Position/Title
C. Conklin	NRC Region I

Summary of Meeting

Swansea Ambulance. There were 13 attendees. All attendees were EMT's. Training consisted of a combination of classroom lecture and actual performance of tasks. The lessons covered were: Introduction to Radiation; Introduction to Emergency Response; Dosimetry; and Implementing Procedures. Risk and consent, for both the drivers and company, were adequately covered. Hands on training included use of dosimetry and appropriate forms. Actual routes were not run, however routes were analyzed and map reading techniques employed. This provider will normally have two EMT's in each ambulance.

ATTACHMENT 4

Meeting Title: Duxbury and CURE Meeting
Location: Duxbury, Massachusetts
Date: October 6, 1988

Attendees	Position/Title
R. Bellamy	Chief, FRSSB, NRC Region I
C. O'Neill	Duxbury Civil Defense Director
M. Dinan	Resident
K. O'Brian	Resident

Summary of Meeting

A comment was made at the 9/29/88 public meeting that the Duxbury EOC would not be habitable in the event of a radiological emergency at Pilgrim. In response to that comment, R. Bellamy, NRC, met with C. O'Neill, Duxbury Civil Defense Director and Fire Chief, and CURE representatives M. Dinan and K. O'Brian at the Duxbury EOC. The Duxbury EOC is a frame, two story structure connected to the Duxbury fire Station, about eight miles from Pilgrim Station. Mr. Bellamy and Mr. O'Neill discussed EOC habitability and Mr. O'Neill stated that the Plan and Implementing Procedures address EOC habitability, an Alternate EOC and relocation of staff to that Alternate EOC.

ATTACHMENT 5

Meeting Title: NRC Meeting with BECo and the Commonwealth of Massachusetts
Location: Rockville, Maryland
Date: October 5, 1988

Speaker	Position/Title	EP Issue/Reference
Peter W. Agnes, Jr.	Assistant Secretary of Public Safety Co monwealth of Massachusetts	NRC more interested in views of licensee on technical issues NRC lets licensee make presentation first in public meetings NRC never went to Massachusetts to invite State and locals to discuss EP Expect to deliver results of 10/6 public meeting in Plymouth NRC emphasizes and spends more time on technical and not EP issues No FEMA involvement since Fall 1987 Concerned about FEMA efforts and self-initiated review (SIR) Does not understand "objective measures" as applied to EP No plan in existence to provide reasonable assurance of public health and safety Comments and concerns on six FEMA identified issues of SIR: a. Evacuation plans for schools and day care centers not adequately addressed in an exercise b. More people, automobiles; changes in response personnel

Speaker	Position/Title	EP Issue/Reference
Peter W. Agnes (Continued)		NRC/FEMA say 2 reception centers adequate; Massachusetts needs 3, plus improvements on 2 existing ones
		NRC aware of Saquish Gurnett area; locals think evacuation can't be carried out
		Agnes question of how bus drivers understand where they have to go
		No letters of agreement with bus companies
		Bus driver training incomplete to W. Russell
		BEACONS system not completed
		All equipment requests not addressed to all EPZ towns
		New evacuation time estimates and traffic management study incomplete
		NRC did not afford Massachusetts proper adjudicatory process
Summary of Issues:		Procedures incomplete, shelter utilization plans, local plan training needs to be finished, then conduct exercise

ATTACHMENT 6

Meeting Title: Plymouth Board of Selectmen Meeting
Location: Plymouth, Massachusetts
Date: October 4, 1988

Speaker	Position/Title	EP Issue/Reference
Alba Thompson	Chairman, Plymouth Board of Selectmen	NRC should not be asking BECo about EP at 10/5 meeting.
		Lack of FEMA involvement
		Lack of direct NRC interface with Plymouth on EP matters
		Only drafts of basic plans
		Selectmen have not yet approved the drafts of: schools, police and fire department procedures
		NRC is responsible if anything goes wrong
David Malaguti	Selectmen	Plans are only conceptual until proven in exercise
		Could NRC allow plant restart without fully approved plans?
George Cameron	Selectmen	All issues should be adjudicated
Ann Waitkus-Arnold	We The People	NRC does not care about special needs -- Connecticut plans, we approved, are unsatisfactory with respect to special needs population
Diane Buckbee	Citizen	Unfair to meet in Rockville instead of local area

REFERENCE: R. Blough's notes -- Selectmen meetings are transcribed, but we don't get copies.

NOTE: R. Blough appeared before Selectmen to provide an overview of staff review and recommendations on meeting and technical issues, as followup to 9/29/88 pubic meeting, since 9/29 was inconvenient for most selectmen. About 2/3 of comments were on EP; however, R. Blough provided only brief comments and clarifications (i.e., not complete answers or explanations) on EP issues.

ATTACHMENT 7

Meeting Title: Public Meeting
Location: Plymouth, Massachusetts
Date: September 29, 1988

Speaker	Position/Title	EP Issue/Reference
Peter W. Agnes, Jr.	Assistant Secretary of Public Safety Commonwealth of MA	Emergency planning not complete. Specifically, training, letters of agreement, and reception centers. Evacuation of Saquish area
Kathi Anderson	Representing Senator Kennedy	Premature to be evaluating restart without approved exercise offsite emergency preparedness plan
Monica Conyngham	Representing Senator Kerry	Issue of a workable evacuation plan for the area has not been resolved
Mary Lou Butler	Representing Congressman Studds	Don't allow restart until tested evacuation plan has been completed
Lawrence Alexander	State Representative	Adequate and capable response plans are required prior to restarting
Edward Kirby	State Senator	Quoted Mr. Russell as saying "these improvements must address plans to evacuate school children and handicapped and other so called special needs people and should be completed before the end of the year." Fault for plans not being ready is with the State. Want emergency response planning completed prior to restart. Talked of the "90%" possibility of breaching containment or meltdown
Peter Forman	State Representative	Questioned authorizing restart without emergency plans in effect. Will the staff recommend startup without an approved emergency plan in place

Speaker	Position/Title	EP Issue/Reference
Senator Golden	State Senator	2.206 Petition and why wasn't an emergency preparedness plan a restart item
Pat Dowd	Chairman, Duxbury Board of Selectmen	Finding several errors in draft plans as they are reviewed
George Cameron	Plymouth Board of Selectmen	No one from NRC or FEMA has visited
J. Douglas Hadfield	Plymouth Civil Defense Director	Discussed status of plans and problems with training, especially school committee
Ann Waitkus-Arnold	We The People	Spoke on special needs, people evacuation
Neal Johnson	Chairman, Duxbury Nuclear Matters Committee	Duxbury EOC dose reduction factors
David Quaid	Citizen	Talked on difficulty of evacuating beaches and lack of available protective clothing
Shawn Dunsell	Citizen	Designed plan requires 80% of committee to participation by public employees. 30% design evacuation of these employee's have refused to plan for Plymouth participation
Mary Lambert	Citizen	General comments on EP
Rita Donahoe	President, Kingston Education Association (Mailed 9/23/88)	Comments regarding evacuation of school children in Kingston
James & Lynn Abbott	Citizens (Mailed 9/23/88)	Comments on EP covering the Cape Cod area (outside EPZ)

ATTACHMENT 8

Meeting Title: Transportation Provider Training
Location: Cresent Ambulance Company
Date: September 24, 1988

Attendees	Position/Title
C. Conklin	NRC Region I

Summary of Meeting

Cresent Ambulance (Trans Network). There were 13 attendees. All attendees were EMT's. Training consisted of a combination of classroom lecture and actual performance of tasks. The lessons covered were: Introduction to Radiation; Introduction to Emergency Response; Dosimetry; and Implementing Procedures. Risk and consent, for both the drivers and company, were adequately covered. Hands on training included use of dosimetry and appropriate forms and actual running of routes. The routes were run on a sunny, warm Saturday late morning to early afternoon. Maps and instructions were provided and a bus was run from Cresent Ambulance in Brockton to the Martinson Junior High School Staging area in Marshfield (37 minutes), to the Baypath Nursing Home in Duxbury (22 minutes), to the Cardinal Cushing Hospital in Brockton (46 minutes). This provider will normally have two EMT's in each ambulance. The maps and instruction provided were accurate and no problems were encountered running the entire route.

ATTACHMENT 9

Meeting Title: ACRS Full Committee Meeting
Location: Bethesda, Maryland
Date: September 8, 1988

Speaker	Position/Title	EP Issue/Reference
Dr. Kerr	ACRS Chairman, NRC:HQ	Unapproved emergency plan concerns of Dr. Murley and public
		Lack of emergency plan as it relates to restart
Samuel J. Collins	Deputy Director Division of Reactor Projects, NRC:RI	EP deficiencies
		Outstanding EP issues
		EOP Rev. 4, containment vent hardwire installations
		Responds to Mr. Carroll's questions on emergency exercise exemption
		Discussion on FEMA withdrawal of approval of emergency plan and FEMA deficiencies
Mr. Carroll	ACRS Committee, NRC:HQ	Emergency exercise exemption
Ralph Bird	Senior Vice President-Nuclear, BECo	Implementation of new EOPs
Roy Anderson	Plant Manager, BECo	Use of simulator for EP drills and EOP training
Mr. Ward	ACRS Committee, NRC:HQ	Discussion on restart without approved emergency plan
Ror Varley	EP Manager, BECo	Clarification on FEMA deficiencies

ATTACHMENT 10

Meeting Title: ACRS Subcommittee Meeting
Location: Plymouth, Massachusetts
Date: August 26, 1988

Speaker	Position/Title	EP Issue/Reference
Ron Varley	BECo, Manager of EP	Discussed BECo's involvement with the emergency preparedness plan and the current status of the plan
Samuel J. Collins	Deputy Director Division of Reactor Projects, NRC:RI	Discussed FEMA and state cooperation and outstanding issues
J. Douglas Hadfield	Plymouth Civil Defense Director	Angry that team did not look at emergency preparedness or talk to him
Alba Thompson	Chairman, Plymouth Board of Selectmen	Don't allow restart without adequate emergency preparedness
Peter W. Agnes, Jr.	Assistant Secretary of Public Safety Commonwealth of Massachusetts	3 years since an exercise. We do not have a revised emergency plan, but a totally new plan
Lawrence Alexander	Chairman, Massachusetts Joint House Committee on Energy	Approved and tested emergency procedures prior to startup
Ann Waitkus-Arnold	Handicapped Affairs	Emergency planning is inadequate concerning handicapped people
Robert Read	Town Administrator Kingston Board of Selectmen	Opposes restart until approved and tested emergency preparedness plan is in effect
Diane Buckbee	Citizens Urging Responsible Energy (CURE)	Massachusetts has left her children defenseless because of a lack of an evacuation plan
Joe Kreisburg	Research Director Massachusetts Citizens for Safe Energy	Emergency evacuation plans are unworkable. NRC violation its own resolutions or spirit of resolutions

ATTACHMENT 11

Meeting Title: SALP Management Meeting
Location: Plymouth, Massachusetts
Date: August 25, 1988

Speaker	Position/Title	EP Issue/Reference
Peter W. Agnes, Jr.	Assistant Secretary of Public Safety Commonwealth of Massachusetts	Major deficiencies exist in EP, not complete, not an adequate plan Full scale exercise needed Reference to SALP statement re: exemption for exercise on Page 37

ATTACHMENT 12

Meeting Title: Transportation Provider Training
Location: Warrenton Bus Company
Date: August 24, 1988

Attendees	Position/Title
W. Lazarus	Chief, EPS, NRC Region I
C. Conklin	NRC Region I
R. Hogan	NRR

Summary of Meeting

The training was conducted by BECo consultants. The training program and lesson plans had been approved by the Commonwealth. The training is quite detailed, and in fact included the actual running of bus routes by various drivers. Formal classroom training is followed by hands on training including dosimetry and appropriate forms. Risk and consent, for both the drivers and company, were adequately covered.

ATTACHMENT 13

Meeting Title: Transportation Provider Training
Location: Ingle Bus Company
Date: August 23, 1988

Attendees	Position/Title
W. Lazarus	Chief, EPS, NRC Region I
C. Conklin	NRC Region I
R. Hogan	NRR

Summary of Meeting

The training was conducted by BECo consultants. The training program and lesson plans had been approved by the Commonwealth. The training is quite detailed, and in fact included the actual running of bus routes by various drivers. Formal classroom training is followed by hands on training including dosimetry and appropriate forms. Risk and consent, for both the drivers and company, were adequately covered.

ATTACHMENT 14

Meeting Title: Commonwealth of Massachusetts Meeting
Location: MCDA Offices, Framingham, Massachusetts
Date: August 22, 1988

Attendees	Position/Title
W. Lazarus	Chief, EPS, NRC Region I
C. Conklin	NRC Region I
P. Agnes	Assistant Secretary of Public Safety, Commonwealth of Massachusetts
T. Matthews	Massachusetts Department of Public Health
R. Boulay	MCDA
B. Hausner	MCDA
E. Fratte	MCDA
A. Slaney	MCDA

Summary of Meeting

P. Agnes summarized the Commonwealth and Local progress on both Self-Initiated Review and other identified issues. Additionally, he summarized the Commonwealth position on restart and emergency preparedness, as well as outstanding problem areas/issues. After the meeting, Mr. Lazarus and Mr. Conklin reviewed several documents that had been forwarded to MCDA, but not yet to FEMA, including the complete emergency plan and implementing procedures for Marshfield and Taunton, the shelter implementation program for Marshfield and the Area II plan.

ATTACHMENT 15

Meeting Title: Commonwealth of Massachusetts Meeting
Location: Framingham, Massachusetts
Date: August 22, 1988

Speaker	Position/Title	EP Issue/Reference
P. Agnes, Jr.	Assistant Secretary of Public Safety Commonwealth of Massachusetts	Need to rewrite plans and planning process following the "Barry Report", FEMA sheltering policy, third reception center, beach sheltering
		Public Information brochures
		Approval of RERP Plans
J. Hausner	Massachusetts Civil Defense Agency	Draft implementing procedures for towns reviewed/approved
		Agreement between BECo and private providers for EP resources
		Communications/notifications
		Expansion of the EPZ
E. Fratto	Citizen	Training of people within the EPZ
		Reception center improvements
		Traffic management plan
T. Mathews	Department of Public Health	Public health procedures

ATTACHMENT 16

Meeting Title: Plymouth Board of Selectmen
Location: Plymouth, Massachusetts
Date: August 15, 1988

Speaker	Position/Title	EP Issue/Reference
Samuel J. Collins	Deputy Director Division of Reactor Projects, NRC:RI	Meeting was conducted to brief the Board of Selectmen on the Integrated Assessment Team Inspection process and subsequent meeting schedule
Alba Thompson	Chairman, Plymouth Board of Selectmen	Expressed general EP concerns on behalf of town

ATTACHMENT 17

Meeting Title: Public Meeting
Location: Plymouth, Massachusetts
Date: May 11, 1988

Speaker	Position/Title	EP Issue/Reference
Peter Forman	State Representative	NRC appears comfortable in not going along with a state or local determination on the adequacy of the emergency plan
Alba Thompson	Chairman, Plymouth Board of Selectmen	FEMA technical review is of drafts, not approved at state or local levels. Plymouth only has 2 of 80 implementing procedures
Senator Kirby	State Senator	Prior to restart, there should be full emergency response plans in place
David Quaid	Citizen	Discusses FEMA report and RAI Re: beach evacuation
James Petros	Citizen	Evacuation of people with special needs Training of emergency personnel
Ron Bellamy	Chief, Facilities Radiological Safety and Safeguards Branch, NRC:RI	Committed to assuring some demonstration that the mobility impaired and special needs population could be adequately protected prior to restart
Ann Waitkus-Arnold	Chairperson, Disabled Persons Advisory Board for Nuclear Evacuation for State Office on Handicapped Affairs	Any plans for special needs around the Rowe area are a joke Responsibility of EP re FEMA and who makes final decision on adequacy Do any plants have EP plans with final approval? (Answer Connecticut)

Speaker	Position/Title	EP Issue/Reference
Steve Comley	President, We the People	Appropriateness of sheltering and administration of potassium iodine
David Vogler	Selectmen, Town of Duxbury	Duxbury has not approved any draft emergency response plan Two of five communities did not submit any plans for review Exchange followed with Dr. Bellamy on who submitted plans, what's draft "approved" etc.
Gerald Hayes	Carver EP Coordinator	Discussion on EP plan development and review - BECo intimidation and control of process - Selectmen never approved any plans for submittal to FEMA
Mary Ott Dr. Muirhead	Chairpersons, CURE	No evacuation plans 1. Ability to evacuate based on plume speed 2. Status of shelters

ATTACHMENT 18

Meeting Title: Commonwealth of Massachusetts Meeting
Location: MCDA Offices, Framingham, Massachusetts
Date: March 23, 1988

Attendees	Position/Title
R. Bellamy	Chief, FRSSB, NRC Region I
B. Hausner	MCDA
E. Fratto	MCDA

Summary of Meeting

Purpose of the meeting was to discuss the status of plans and implementing procedures for the risk and host communities affected by Pilgrim Station.

ATTACHMENT 19

Meeting Title: Private Resident Meeting
Location: Duxbury/Saquish, Massachusetts
Date: March 10, 1988

Attendees	Position/Title
R. Bellamy	Chief, FRSSB, NRC Region I
D. Quaid	Resident

Summary of Meeting

Mr. Quaid made a request at the 2/18/88 public meeting to have NRC officials tour the Duxbury/Saquish Beach area to gain first hand knowledge of the emergency planning concerns for this area. R. Bellamy toured this area with D. Quaid. The Saquish area is accessible by four-wheel drive vehicles only (permit required). During very high tides, approximately two days a month for two hours a day, the Point can be isolated. The only road from the Point is narrow and floods. There are no motels, restaurants or concession stands on this beach. Overnighters are limited to residents. The Duxbury beach is a public beach with a paved parking lot, approximately eight miles from Pilgrim. There is a paved road running from the Duxbury beach due north. Both beaches would be closed at the Alert stage in the event of an accident at Pilgrim.

ATTACHMENT 20

Meeting Title: Public Meeting
Location: Plymouth, Massachusetts
Date: February 18, 1988

Speaker	Position/Title	EP Issue/Reference
Ms. Houghton	Citizen	Wants to see evacuation tested prior to restart
Ms. Petrocelli	Citizen	Evacuation plans should be tested prior to restart
Alba Thompson	Chairman, Plymouth Board of Selectmen	No effective emergency plan; draft plan under review, implementing procedures nowhere near draft form
		Evacuation routes are often overloaded under normal conditions
		Shelters for transient population not identified.
Senator Kirby	State Senator	Restart should not be allowed until adequate emergency response plans are in place
Ms. Treenkle	Citizen	A workable approved evacuation plan must be completed prior to restart
Kathy Anderson	Aide to Senator Kennedy	Wants FEMA approved evacuation plan prior to restart
Mr. Quaid	Citizen	Insufficient sheltering for beach population
		High tide makes evacuation of Duxbury beach impossible
		Roads are inadequate for evacuation of area

Speaker	Position/Title	EP Issue/Reference
Mr. Sangster/ Dr. Muirhead	Citizen Co-Chairperson, CURE	Will NRC allow restart without being satisfied that evacuation facilities are adequate for any accident? Does the emergency planning spectrum of accidents include a breach of containment?
Ms. Fehlow	Citizen	Emergency plan needs to be revised and tested prior to restart
Mr. McClusky	Citizen	Evacuation of any kind would not be effectively handled due to human element
Mr. Peter Forman	State Representative	Presented for the record, a copy of the State Legislature's Report by the Special Committee on Pilgrim Recommendation VI deals with EP (copy provided)
Mr. Veracca	Citizen	Sirens and speakers are unintelligible during tests
Ms. Cook	Citizen	Evacuation plan is terrible Roads are inadequate Hospitals not capable of treating radiation victims
Mr. Jerry Hayes	Carver Civil Defense Agency OPS Officer and Chief Planner	Emergency planning is inadequate for restart; in particular, evacuation time estimates and shelter surveys are in error

Speaker	Position/Title	EP Issue/Reference
John Barrows	Citizen (Written 2/18/88)	People on Cape Cod should be given respirators to give them to evacuate to safe location
John MacMahon	Selectmen, Town of Marshfield (Written 12/18/87)	Opposed to restart until all local emergency preparedness measures are in place, fully tested and ready for implementation
Kathy McKenna	Citizen (Written 10/28/87)	Opposed to restart without a workable evacuation plan
Susan Littlefield	Citizen (Written 2/12/88)	Opposed to restart for: 1. Lack of evacuation plan 2. Lack of shelters 3. Inadequate roads to evacuate Cape Cod and Duxbury Beach
Donald Leach	Citizen (Mailed 2/18/88)	Inadequate road system for evacuation
Francis J. Kane	Selectmen, Town of Carver (Written 2/17/88)	Cities improvements; however, feels much still to be done in areas of evacuation and training of local civil defense personnel
Deanna Gregory	Citizen (Mailed)	Sirens and speakers unintelligible during tests
Genevieve Osborn	Citizen (Mailed 3/4/88)	There can be no safe evacuation plan because of gridlock on roads

In addition to the comment/questions noted above on EP, there were 11 other individuals who specifically included resolution of EP issues in their request for an adjudicatory hearing.

ATTACHMENT 21

Meeting Title: Commonwealth of Massachusetts Meeting
Location: Boston, Massachusetts
Date: February 9, 1988

Speaker	Position/Title	EP Issue/Reference
Samuel J. Collins	Deputy Director Division of Reactor Projects, RI	Meeting was conducted at the request of the Commonwealth to explain the NRC process being conducted for the February 18, 1988 Public Meeting to obtain comments on the Pilgrim Nuclear Power Station Restart Plan
Commonwealth of Massachusetts was represented by Local Officials/Elected Officials and staff/CURE/MCDA and the Office of Public Safety		Although the meeting was not to discuss EP, many individuals expressed concerns and raised EP issues. Commitments were made to provide EP 10 CFR references and to conduct a EP process conference call with Mr. Agnes

ATTACHMENT 22

Meeting Title: Senator Kennedy Field Hearing
Location: Plymouth, Massachusetts
Date: January 7, 1988

Speaker	Position/Title	EP Issue/Reference
Senator Kennedy	U.S. Senator	NRC considering restart despite FEMA and Massachusetts provides that EP is not adequate Concerned Re: _ 10 miles (Cape Code, etc.)
William Abbott	President, Plymouth Co. Nuclear Committee	Offsite radiation monitoring is unsatisfactory
Ann Waitkus-Arnold	Chairperson, Disabled Persons Advisory Poard or Nuclear Evacuation for State Office on Handicapped Affairs	Has seen little real efforts by responsible agencies to ensure health and safety of special needs population Inadequate special needs survey by BECo
Dr. Grace Healy	Chairperson, Plymouth Nuclear Matters Committee	Committee Report in 3/87 finds offsite EP unsatisfactory and makes specific recommendation including revised plan and full exercise before restart Offsite monitoring unsatisfactory
David Malaguti	Chairmen, Plymouth Board of Selectmen	Plant should not restart until revised town response plan in place Evacuation difficult
Rachel Shimshak	MASSPIRG	Citizens not informed on emergency response procedures No plans for private schools Delay restart for workable plans and implementation

Speaker	Position/Title	EP Issue/Reference
Senator Golden	State Senator	EP for Pilgrim extremely difficult
Lt. Governor Murphy	Acting Governor Commonwealth of Massachusetts	Absurd that NRC can over-rule FEMA
William Shannon	Attorney General Commonwealth of Massachusetts	State is supposed to be heavily involved in decision of EP adequacy
Peter W. Agnes, Jr.	Assistant Secretary of Public Safety Commonwealth of Massachusetts	Existing plans not adequate NRC unclear on EP restart criteria Some EP progress Long way to go - lots of inadequacies Don't know if adequate EP is possible
Dr. Prothrow-Stith	Secretary of Public Health, Commonwealth of Massachusetts	Massachusetts would like to establish better off-site radiation (real-time) monitoring
Richard Krimm	Assistant Director, FEMA	Made statements and answered a variety of EP questions for Senator Kennedy with respect to FEMA's role
Dr. Thomas Murley William Russell	NRC:NRR Director NRC:RI Regional Administrator	Made statements and answered various questions from Senator Kennedy

NOTE: The following NRC representatives spoke and answered questions

Dr. Thomas Murley
William Russell

NOTE: The following individuals spoke at the Kennedy hearing but did not directly raise EP issues:

Neil Johnson, Chairman, Duxbury Committee on Nuclear Matters
Mary Ott, Co-Chairperson, Citizens Urging Responsible Energy (CURE)
Peter Forman, State Representative
Lawrence Alexander, State Representative, House Chairman of Joint Legislature Committee on Energy
Sharon Pollard, Secretary of Energy, Commonwealth of Massachusetts

ATTACHMENT 23

Meeting Title: Senator Kennedy Staff Meeting
Location: Washington, D. C.
Date: December 29, 1987

Attendees	Position/Title
S. Collins	Deputy Director, DRP, NRC Region I
R. Bellamy	Chief, FRSSB, NRC Region I
B. Boger	Assistant Director, NRR
R. Wessman	Project Manager, NRR
F. Combs	Office of Congressional Affairs
M. Callahan	Office of Congressional Affairs
B. Olmstead	Office of General Council

Summary of Meeting

Region I and NRR staff met with Senator Kennedy's staff in Washington, D.C. to prepare for the 1/7/88 committee meeting. Topic included: technical issues; restart process; legal issues; safety guidelines; status of emergency preparedness; FEMA's role; and progress to date.

ATTACHMENT 24

Meeting Title: Pilgrim Exercise
Location: Plymouth, Massachusetts
Date: December 9, 1987

Attendees	Position/Title
R. Bellamy	Chief, FRSSB, NRC Region I
W. Lazarus	Chief, EPS, NRC Region I
C. Conklin	NRC Region I
Various	NRC Incident Response Team
T. Matthews	Massachusetts Department of Public Health
D. Yaffe	Massachusetts Department of Public Health
Various	BECo Emergency Response Organization

Summary of Meeting

Scheduled partial participation exercise at the Pilgrim Station. Massachusetts Department of Public Health (MDPH), T. Matthews and D. Yaffe, participated for training and interface purposes. NRC Region I Incident Response Team participated with the licensee and Commonwealth personnel. No observable problems with the licensee/MDPH/NRC interface.

ATTACHMENT 25

Meeting Title: Public Meeting
Location: Duxbury, Massachusetts
Date: October 29, 1987

Attendees	Position/Title
W. Kane	Director, DRP, NRC Region I
J. Wiggins	Chief, DRP, NRC Region I
R. Bellamy	Chief, FRSSB, NRC Region I
B. Boger	Assistant Director, NRC, NRR
P. Agnes	Assistant Secretary of Public Safety, Commonwealth of Massachusetts
D. Volger	Duxbury, Board of Selectmen Chairman

Summary of Meeting

Purpose was to discuss NRC activities. Other attendees included: BECo; Duxbury Emergency Response Committee; and the Nuclear Matters Committee. The NRC, Commonwealth and BECo responded to comment on hardware, management and emergency preparedness issues.

ATTACHMENT 26

Meeting Title: Commonwealth of Massachusetts Meeting
Location: Region I
Date: October 8, 1987

Speaker	Position/Title	EP Issue/Reference
John Judge	Governor's Office	Request hearing on EP*
Lawrence Alexander	State House Representative	EP should be approved by Governor and local Selectmen
Peter W. Agnes, Jr.	Assistant Secretary of Public Safety	Working in good faith to gather information with BECo. Don't know yet if adequate plans are possible
William Russell	Regional Administrator	FEMA EP deficiencies would be addressed prior to restart

* Meeting Summary dated December 4, 1987

ATTACHMENT 27

Meeting Title: Commonwealth of Massachusetts Meeting
Location: FEMA Region I, Boston, Massachusetts
Date: August 14, 1987

Attendees	Position/Title
H. Vickers	FEMA Region I Regional Director
E. Thomas	FEMA Region I RAC Chairman
J. Dolan	FEMA Region I
J. Quinlan	FEMA Region I
W. Lazarus	Chief, EPS, NRC Region I
P. Agnes	Assistant Secretary of Public Health, Commonwealth of Massachusetts
J. Lovering	MCDA
B. Hausner	MCDA

Summary of Meeting

Primary purpose of meeting was to discuss judgements made in the FEMA Self-Initiated Report and to correct certain facts. Mr. Agnes stated that he had been instructed by the Governor to develop the best possible plans without delay. Mr. Agnes discussed a schedule that would complete all activities by 12/31/87. Discussions were also held on an exercise and EPZ expansion.

*Identified in 10/19/88 memorandum W. T. Russell to J. M. Taylor.

ATTACHMENT 28

Meeting Title: FEMA Self-Initiated Review Discussion
Location: FEMA Region 1, Boston, Massachusetts
Date: August 14, 1987

Speaker	Position/Title	EP Issue/Reference
Peter W. Agnes, Jr.	Assistant Secretary of Public Safety, Commonwealth of Massachusetts	Facts/judgements in FEMA Report Review process, 44 CFR 350 Ability of Commonwealth to respond to questions on the issues Commonwealth planned response to issues Need for an exercise Expanding the Pilgrim EPZ

ATTACHMENT 29

Meeting Title: Commonwealth of Massachusetts Meeting
Location: MCDA Offices, Framingham, Ma.
Date: July 17, 1987

Attendees	Position/Title
P. Agnes	Assistant Secretary of Public Health, Commonwealth of Massachusetts
R. Boulay	MCDA
J. Lovering	MCDA
B. Hausner	MCDA
T. Rodgers	MCDA
A. Slaney	MCDA
W. Lazarus	Chief, EPS, NRC Region 1
R. Varley	BECo
C. Fuller	BECo
R. Lewis	BECo

Summary of Meeting

Primary purpose of the meeting was to discuss the EPZ and potential expansion. FEMA was invited, but declined to attend due to conflicts, but suggested alternative dates at FEMA to discuss the issue.

ATTACHMENT 30

Meeting Title: Plymouth Board of Selectmen Meeting
Location: Plymouth, Ma.
Date: May 27, 1987

Attendees	Position/Title
D. Malaguti	Plymouth Board of Selectmen
A. Thompson	Plymouth Board of Selectmen
R. Bellamy	Chief, FRSSB, NRC Region I
W. Kane	Director, DRP, NRC Region i
M. McBride	Senior Resident Inspector Pilgrim, NRC Region i

Summary of Meeting

Primary purpose of the meeting was to discuss hardware issues. Selectmen Malaguti and Thompson expressed their opinion that the status of emergency preparedness was not adequate to support restart.

ATTACHMENT 31

Meeting Title: Commonwealth of Massachusetts Meeting
Location:
Date: February 17, 1987

Attendees	Position/Title
Peter W. Agnes	Assistant Secretary of Public Safety, Commonwealth of Massachusetts
R. Boulay	Massachusetts Civil Defense Agency (MCDA)
J. Lovering	MCDA
G. Parker	MCDA
B. Hausner	MCDA
E. Fratto	MCDA
J. Dolan	FEMA Region I
R. Bellamy	NRC Region I
BECo Representatives	

Summary of Meeting:

The purpose of the meeting was to discuss outstanding emergency preparedness issues at Pilgrim. Mr. Agnes stated we must all work together, and no plans will go to FEMA until MCDA approval is given. Mr. Agnes also indicated he wanted to arrange and attend all meetings with local officials. Mr. Agnes stated he "supports development of offsite plans", and insisted an exercise is required prior to restart. He would not commit to a schedule. EPZ expansion was also discussed.

ENCLOSURE 3

Summary

Subsequent to the Commission Meeting on October 14, 1988, some local officials requested meetings with the NRC staff to review information regarding emergency plans, implementing procedures, facilities and resources. In response to these requests, the staff offered to meet and subsequently met with all seven Civil Defense Directors between October 25 and November 2, 1988. Discussions were held in the offices of the Civil Defense Directors and included tours of the EOCs for the five towns within the 10 mile EPZ and the two reception communities. In two cases, selectmen were involved in the discussions (A. Thompson of Plymouth, and F. Mazzilli of Carver), and a representative of Massachusetts Civil Defense Agency was present for the majority of the meetings. In addition, the staff toured the Duxbury, Gurnet and Saquish Beaches with Mr. Brad Martin, head of the Duxbury Department of Lands and Natural Resources. Eight meeting summaries have been prepared and are enclosed as Attachments 1-8. The local officials present have verified the accuracy of the factual information as represented during the discussions. Attachment No. 9 is an October 25, 1988, summary of the Regional Administrator's telephone conversation with the MCDA Director regarding these meetings and his offer to hold a technical meeting with the Commonwealth.

All of the local officials appeared to be pleased that the NRC staff was meeting with them, and all discussions were forthright and cordial.

All Civil Defense Directors (CDDs) have a complete set of the plans and implementing procedures, and they were available in the EOC, but indicated that they were in varying stages of approval. Bridgewater, Kingston, Carver, Taunton and Marshfield plans and procedures have been completed and transmitted to FEMA for technical review. All CDDs expressed the opinion that the state of emergency preparedness is much improved over the 1982-1985 time frame. When questioned if they could carry out the plans, two CDDs stated the documents were adequate and could be implemented, three CDDs said they would try to implement the Plans but would prefer more training, and two CDDs said they couldn't answer due to the incomplete state of development and training. All CDDs or their assistants had reviewed the third report from Secretary Barry and believed it to be complete with some minor inaccuracies. When questioned about the October 14, 1988 Commission meeting and whether they were fairly represented by the Lieutenant Governor and Congressional Representatives, five CDDs had not seen the comments made, and two CDDs (Plymouth and Duxbury) stated their views were fairly represented.

Each CDD was asked whether there were any new items to present to the NRC. Mr. Hadfield of Plymouth stated that the Jordan Hospital procedure is not complete for evacuation of patients, and for treatment of injured/contaminated workers if the hospital were to be evacuated. The NRC was aware this procedure was not approved at the Department Head level. Mr. Hadfield considered this to be the biggest obstacle to completion of the procedures, yet believes review and approval of all Plymouth procedures can be completed in 10-12 weeks.

In addition, four of the CDDs clarified the status of their EOCs. In order to obtain first hand knowledge of that status the staff toured all of the EOCs. The EOCs for Plymouth, Carver, and Taunton are operational. The EOC for Kingston is nearly operational with telephone call routing problems noted and being corrected; this EOC could most likely be used in an emergency with minimal difficulty. The EOC for Duxbury is far enough along that it would also likely be used now rather than attempting to use the old EOC which is still available. In Bridgewater the renovation to the space is nearly complete and communications equipment is being installed. The previous EOC was another room in the same building which could be used, if necessary, by installing some telephones. At this point the new EOC is better equipped than the old one and most likely could be used successfully. In Marshfield, the old EOC is still functional and could be used, but construction on the new EOC is considerably behind the other towns. It should be noted that the condition of the old EOC's was not identified by FEMA as being a concern, and the new EOC's appear to be state-of-the-art.

Significant improvements have been made in the ability of Boston Edison to notify the local towns of an event. The previous system relied on notification from Boston Edison to the state police dispatcher in Middleboro, MA. The state was then responsible for relaying information to the towns. In order to improve the timeliness of notification a new Digital Notification Network (DNN) has been installed and is operational. This system automatically rings down to the local 24 hour warning points - the 7 town police departments, the EOCs, as well as the State police and Massachusetts Civil Defense Agency when the phone is picked up in the control room.

Other concerns raised by the CDDs included the status of plans and procedures, and availabilities of personnel. With respect to the status of plans and procedures, draft plans for all seven committees have been forwarded to the Commonwealth and subsequently to FEMA for technical review. Draft procedures have been developed for all areas. Many of the procedures have been forwarded to FEMA for technical review, but in some cases this was done with questions still unresolved. The philosophy on how and when school children would be evacuated is a concern in most of the towns. Some school administrations would like to see the children sent home at the ALERT rather than take the responsibility for evacuation. This is in conflict with the Commonwealth and CDDs position as well as the police desire to prevent traffic from re-entering the towns once an evacuation is ordered (parents would not be able to get home to pick up the children). The Emergency Plans for the five risk towns within the 10 mile EPZ, state that transportation is staged at the ALERT, and evacuation occurs at the SITE AREA EMERGENCY.

With respect to personnel, most CDDs indicated they would have the majority of people necessary to implement the plans, but several of the towns are short of volunteers to complete their staffing plans primarily in second shift and non-technical resources. In particular Bridgewater, a reception center community, indicates that they have recruited 50 out of about 300. Training is also a significant concern in most of the towns. Most indicated that it was just getting started.

The status of on-site and off-site emergency preparedness as stated by the staff at the October 14, 1988 Commission Meeting is that significant improvements have been made since the FEMA self-initiated-review, including improvements in areas which were not identified as being deficient. It is clear that the towns and the Commonwealth have several procedural questions to resolve, however, the present version of the plans and implementing procedures (with the exception of 5 implementing procedures) have been reviewed by knowledgeable officials responsible for implementing the plans (e.g., Civil Defense Directors and department heads). In fact, some of the changes being considered such as early dismissal of school children may be less desirable than the evacuation from the schools at SITE AREA EMERGENCY. All the town officials would be more comfortable with every procedure approved and tested. Based on projected schedules from civil defense personnel in the five EPZ towns the remaining incomplete areas can be complete in two or three months. The staff's conclusion, as stated at the October 14, 1988 Commission Meeting, that the existing facilities and equipment could be used to adequately protect the health and safety of the public during the controlled and phased startup period, is unchanged.

Attachments

No. 1	Meeting Summary with Bridgewater
No. 2	Meeting Summary with Carver
No. 3	Meeting Summary with Duxbury
No. 4	Meeting Summary with Kingston
No. 5	Meeting Summary with Marshfield
No. 6	Meeting Summary with Plymouth
No. 7	Meeting Summary with Taunton
No. 8	Meeting Summary of four of Duxbury, Gurnet and Saquish Beaches
No. 9	Summary of October 25, 1988 Telephone Call with MCDA

Enclosure 3
Attachment 1

November 4, 1988

MEMORANDUM FOR: William Russell, Regional Administrator

THRU: R. Bellamy, Chief, Facilities Radiation Safety and Safeguards Branch, DRSS

FROM: W. Lazarus, Chief, Emergency Preparedness Section, FRS&SB
S. Peleschak, Emergency Preparedness Specialist

SUBJECT: MEETING WITH CIVIL DEFENSE OFFICIALS IN THE TOWN OF BRIDGEWATER TO DISCUSS THE STATUS OF EMERGENCY PREPAREDNESS ON NOVEMBER 2, 1988

BACKGROUND

A meeting was held at the Bridgewater Town Hall on November 2, 1988. The purpose of this meeting was to obtain the latest factual information regarding the status of emergency plans, implementing procedures, and facilities directly from the Emergency Management Officer for the Town of Bridgewater. The Emergency Management Officer was also provided an opportunity to bring any previously unidentified concerns regarding the status of emergency preparedness to the attention of the NRC. Following the discussion the new EOC spaces were toured.

ATTENDEES

Frank Maher, Emergency Management Officer, Bridgewater
Roderick Walsh, Fire Chief, Bridgewater
Alfred Slaney, Planner, Massachusetts Civil Defense Agency (MCDA)
William Lazarus, Chief, Emergency Preparedness Section, NRC Region I
Susan Peleschak, Emergency Preparedness Specialist, NRC Region I

DISCUSSION

During the meeting on November 2, 1988, Mr. Maher presented the following status summaries and concerns regarding the state of emergency preparedness in the Town of Bridgewater, which is a host community for the Pilgrim EPZ.

Implementing Procedures (IPs)

The town Plan and IPs, as well as the state college procedure were forwarded to MCDA (and subsequently to FEMA Region I) for informal technical review. The procedures received only a cursory review before forwarding because it was felt important to get the feedback from the technical experts. The state college does not come under the authority of the town, but is a separate entity directly under the authority of the state, therfore the town is not directly involved in the review of the college procedure.

There are some concerns that the evacuation traffic into town on Route 104 may be a bigger problem than is reflected in the planning process. Traffic within town is still a concern.

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Availability of Documents

Copies of the Plan, IPs, and Evacuation Time Estimate are available.

Facilities and Equipment

The EOC is located in the basement of an old school building owned by the town and near the Town Hall. The renovation of the space is nearly complete, however the equipment is not yet installed. Telephones are almost complete and a few of the radios have been installed. The space still has not been turned over to the town from Boston Edison. Approximately 30 to 50% of the equipment necessary to implement the plan has been received. It is estimated that all of the equipment should be received by mid-January to early February, 1989.

Some work is necessary at the state college which will require state approval before Boston Edison can start the work.

Personnel Resources/Training

The town is still trying to locate volunteers to accept positions to implement the plan. So far only 50 out of 300 have been identified. Training is just getting started. The quality of training being received is excellent. Most groups have only received one or two of the modules. The fire department has received 8 modules.

Barry Report

The Barry report contained some inaccuracies and inconsistencies. The location of the Bridgewater EOC was not correct and the demographic figures cited were wrong.

Commission Briefing

Mr. Maher had not read the transcript of the remarks presented by Senator Kennedy, Representative Studds, or Lt Governor Murphy at the October 14, 1988 Commission briefing and could not comment on whether they represented the views of the town of Bridgewater.

SUMMARY

Mr. Maher did not believe that the Bridgewater plan and procedures could be implemented at this time because of the lack of a sufficient number of trained people to fill the positions needed. The town would, of course, respond to an emergency and do the best they could. The town has had an excellent relationship with Boston Edison, however, at the present pace of activity by Boston Edison, the town wont be ready for a full scale exercise until next June or July. Mr. Maher indicated that he believed the plant should be allowed to restart when all the safeguards are in place. Mr. Maher was not directly involved with emergency preparedness during the 1982-1985 time frame, but based on his discussions with those who were he believes that significant progress has been made.

Enclosure 3
Attachment 1

Mr. Maher was provided a draft copy of this memorandum, and his comments have been incorporated into this final copy. He indicated that it accurately reflects the information provided by him.

/S/

William J. Lazarus,
EP Section Chief, Region I

/S/

Susan Peleschak,
EP Specialist, Region I

cc: J. Dolan, FEMA Region I

Enclosure 3
Attachment 2

November 1, 1988

MEMORANDUM FOR: William Russell, Regional Administrator

THRU: R. Bellamy, Chief, Facilities Radiation Safety and Safeguards Branch, DRSS

FROM: W. Lazarus, Emergency Preparedness Section Chief, FRS&SB
R. Hogan, Emergency Preparedness Specialist, NRR

SUBJECT: MEETING WITH CIVIL DEFENSE OFFICIALS IN THE TOWN OF CARVER TO DISCUSS THE STATUS OF EMERGENCY PREPAREDNESS ON OCTOBER 27, 1988

BACKGROUND

A meeting was conducted in the Carver Town Hall on October 27, 1988. The purpose of this meeting was to obtain the latest factual information regarding the status of emergency plans, implementing procedures, and facilities, directly from the Director of Civil Defense for the Town of Carver. In Carver, Mr. Frank Mazzilli is the Chairman of the Board of Selectmen in addition to Director of Civil Defense. During this meeting he was also provided an opportunity to bring any previously unidentified concerns regarding the status of emergency preparedness to attention of the NRC. The meeting was followed by a tour of the EOC.

ATTENDEES

Frank Mazzilli, Chairman, Board of Selectmen, and Civil Defense Director
Helen Copello, Assistant Civil Defense Director
Alfred Slaney, Planner, Massachusetts Civil Defense Agency (MCDA)
William J. Lazarus, Emergency Preparedness Section Chief, NRC Region I
Rosemary T. Hogan, Emergency Preparedness Specialist, Office of NRR

DISCUSSION

Mr. Mazzilli and Ms. Copello presented the following status summaries and concerns regarding the state of emergency preparedness in the Town of Carver.

Implementing Procedures (IP)

The town plan and all IPs (32) have been through the local review process and have been forwarded through MCDA to FEMA for technical review (forwarded to FEMA on 10/24/88). Copies of the Plan ,IPs Shelter Implementation Plan, and Evacuation Time Estimate are available in the EOC.

Schools: The procedural concern which remains to be resolved is one involving the Carver Regional High School. A joint committee is attempting to resolve differences between Carver and Plymouth in this procedure.

8811210031 NA 3pp.

Police: The police have a concern regarding the ETE/Traffic Management Plan allowing people to re-enter the town while an evacuation is in progress. They believe that traffic flow should only be permitted out of town.

Equipment and Facilities

Mr. Mazzilli indicated that they have pretty much everything they need. Some things are still on order, but everything is falling into place.

Decontamination Facility: The biggest problem is the lack of a decontamination facility for emergency workers.

EOC: The EOC is complete, although radios are still being hooked up. Everything should be complete in about 2 weeks.

Personnel Resources

The lack of personnel to carry out the decontamination procedure is the biggest problem. There may be other departmental weaknesses of which they are not aware.

Special Needs Population

The town has a list with about 105 names. All the persons on this list were recently resurveyed to update the list. There may be others who have not been identified, but they feel pretty satisfied with the list.

Schedule

The procedures, facilities, and training should be far enough along for a test about the first of the year. The schedule for completion of the decontamination facility is the biggest unknown.

Barry Report

The third Barry Report contained a reasonable presentation of the status for the town of Carver, however it was lacking in some specifics regarding equipment.

Commission Briefing

Neither Mr. Mazzilli or Ms. Copello had reviewed the transcript of the October 14, 1988 Commission briefing and could not comment on the statements made by Senator Kennedy, Representative Studds, or Lt. Governor Murphy.

Implementation

In response to a question of whether they thought they could implement

the plan and procedures, they indicated that they would try to implement it but would not be comfortable because it had not been tested.

SUMMARY

Things are going along smoothly. They still need to get the decontamination facility completed, complete the training, and test the plans and procedures. They have come a long way in the last two to three years. The citizens of the town now know what to expect. Relations with both MCDA Area II and Boston Edison are very good.

Mr. Mazzilli and Ms. Copello reviewed this memorandum and indicated that they were satisfied that it accurately reflected the status provided during our discussions.

/S/

William J. Lazarus,
EP Section Chief, Region I

/S/

Rosemary T. Hogan,
EP Specialist, NRR

cc:
J. Dolan, FEMA Region I

Enclosure 3
Attachment 3

November 1, 1988

MEMORANDUM FOR: William Russell, Regional Administrator

THRU: R. Bellamy, Chief, Facilities Radiation Safety and Safeguards Branch, DRSS

FROM: W. Lazarus, Chief, Emergency Preparedness Section, FRSSB
R. Hogan, Emergency Preparedness Specialist, NRR

SUBJECT: MEETING WITH CIVIL DEFENSE OFFICIALS IN THE TOWN OF DUXBURY TO DISCUSS THE STATUS OF EMERGENCY PREPAREDNESS ON OCTOBER 26, 1988

BACKGROUND

A meeting was held in the Duxbury Fire Station on October 26, 1988. The purpose of this meeting was to obtain the latest factual information regarding the status of emergency plans, implementing procedures, and facilities, directly from the Director of Civil Defense for the town of Duxbury. The Director of Civil Defense was also provided an opportunity to bring any previously unidentified concerns regarding the status of emergency preparedness to the attention of the NRC.

ATTENDEES

Carl O'Neill, Duxbury Civil Defense Director and Fire Chief
Alfred Slaney, Planner, Massachusetts Civil Defense Agency (MCDA)
William J. Lazarus, Chief, Emergency Preparedness Section, NRC Region I
Rosemary T. Hogan, Emergency Preparedness Specialist, Office of NRR

DISCUSSION

Mr. O'Neill presented the following status summaries and concerns regarding the state of emergency preparedness in the Town of Duxbury.

Implementing Procedures

There are approximately 38 implementing procedures (IPs), none of which have been sent to FEMA for review. All of the IPs, except three, have been reviewed by cognizant Department Heads. The three IPs which are still under development are: Selectmen; Town Manager; and Public Information Officer. The RERP has reviewed the Fire and Civil Defense IPs and are reviewing the School IP. All IPs will be sent in segments to the Board of Selectmen for their review. Copies of the Plan, IPs, Shelter Implementation Plan and Evacuation Time Estimate are available in the EOC.

The following are specific concerns which remain to be resolved.

Schools: The school committee does not agree with the school

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procedure as drafted, but is considering early dismissal of school children at the ALERT, rather than have the buses in standby and evacuate the children at a SITE AREA EMERGENCY. There is no sound technical basis for the position and in some cases would require three round trips of the school buses. This is contrary to the recommendation of the Civil Defense Director and MCDA who would like to see the procedure remain as it is. There are a few other minor concerns involving role conflict of teachers and the guarantee of sufficient buses which remain to be resolved.

Personnel Resources

There are a few personnel shortages which need to be filled. The EOC staff does not have a complete second shift complement and the police department needs two additional staff for Gurnet-Saquish route alerting if necessary. All other departments appear to have sufficient staff.

Evacuation Time Estimate

The new ETE has been received, but it has not been thoroughly reviewed.

Equipment and Facilities

The EOC is nearing completion. The facility is expected to be complete in four weeks when the communication equipment is installed. Some portable radios, a repeater and a LORAN navigation radio should be delivered within a few weeks.

The Board of Selectmen has not approved a reception center community. Although the current plan provides for evacuation to Bridgewater or Wellesley, the Selectmen are opposed to Wellesley. There are reservations on the use of Bridgewater, as well, because the evacuation routes to that community would be blocked delaying evacuation.

The police need a 4 wheel drive vehicle to be used for route alerting of the Gurnet-Saquish Beach area.

Training

Training has just begun, but is progressing very smoothly.

Barry Report

Mr. O'Neill thought the Barry report accurately reflected the concerns and the status of emergency preparedness in Duxbury.

Commission Briefing

Mr. O'Neill indicated that the statements made by Senator Kennedy, Representative Studds, and Lt. Governor Murphy reflected the status of

emergency preparedness for the town of Duxbury.

Ability to Implement

The Civil Defense Director does not believe the plan could be implemented at this time because so little training has been completed. No portions of the plan have been tested. The Civil Defense Director has notified the Selectmen that he believes that training, equipment installation, plan and IP development, mini-drills and a town drill could be complete by the middle of February, 1989.

Special Needs Population

Identification of the special needs population is slow due to the reluctance of that population to highlight their handicaps. Repeated advertisements in the local papers requesting self-identification is continuing. TDDs are available to be delivered to deaf people who request them. Special needs population evacuation was not identified as a major concern provided resources arranged by the state are actually available.

Beaches

The Gurnet-Saquish procedure is still under review by the Gurnet-Saquish Association. Concerns are that siren coverage may be inadequate. There is no feedback method to determine if the sirens have actuated and Duxbury police do not have sufficient resources to run route alerting as a back-up for siren failure. Route alerting would take at least 45 minutes to complete. Chief O'Neill indicated that some of the estimates regarding the Gurnet-Saquish beach area he has seen have been inflated. He estimated the number for the Saquish Beach at about 4,000 maximum (2,000 typical) on peak days. The road to this beach is under water from high tides for a part of 2 days per month (2 to 3 hours). The water may be waist high in that section.

There are 4,000 to 5,000 people on the Duxbury Beach during the peak part of the season. The Powder Point Bridge has been re-opened and provides a second evacuation route for those evacuating the Duxbury-Gurnet-Saquish beach area. This greatly improves the situation. People are requested to evacuate at the ALERT and the beach is closed.

SUMMARY

The major concerns are getting equipment in place and working, completing the training and drills, and resolving the school evacuation issue, and final approval of procedures and plans.

Mr. O'Neill was provided an opportunity to review this memorandum and his comments for clarification have been incorporated.

Enclosure 3
Attachment 3

/S/

William J. Lazarus,
EP Section Chief, Region I

/S/

Rosemary T. Hogan,
EP Specialist, NRP

cc: J. Dolan, FEMA Region I

Enclosure 3
Attachment 4

November 1, 1988

MEMORANDUM FOR: William Russell, Regional Administrator

THRU: R. Bellamy, Chief, Facilities Radiation Safety and Safeguards Branch, DRSS

FROM: W. Lazarus, Emergency Preparedness Section Chief, FRS&SB
R. Hogan, Emergency Preparedness Specialist, NRR

SUBJECT: MEETING WITH CIVIL DEFENSE OFFICIALS IN THE TOWN OF KINGSTON TO DISCUSS THE STATUS OF EMERGENCY PREPAREDNESS ON OCTOBER 26, 1988

BACKGROUND

A meeting was conducted in the Kingston EOC on October 26, 1988. The purpose of this meeting was to obtain the latest factual information regarding the status of emergency plans, implementing procedures, and facilities, directly from the Director of Civil Defense for the Town of Kingston. The Director of Civil Defense also provided an opportunity to bring any previously unidentified concerns regarding the status of emergency preparedness to attention of the NRC.

ATTENDEES

Dennis Tavares, Civil Defense Director
Fred Woodworth, Assistant Civil Defense Director
Alfred Slaney, Planner, Massachusetts Civil Defense Agency (MCDA)
William J. Lazarus, Emergency Preparedness Section Chief, NRC Region I
Rosemary T. Hogan, Emergency Preparedness Specialist, Office of NRR

DISCUSSION

Mssrs. Tavares and Woodworth presented the following status summaries and concerns regarding the state of emergency preparedness in the Town of Kingston.

Implementing Procedures (IP)

The town plan and all IPs have been through the local review process and have been forwarded through MCDA to FEMA for technical review. This does not mean that all local concerns regarding the procedures have been resolved. Copies of the Plan ,IPs, Shelter Implementation Plan, and Evacuation Time Estimate are available in the EOC.

The following are specific concerns which remain to be resolved.

Schools: The school committee wants to change the school procedure (for the elementary school) to have an early release of the school children at the ALERT declaration, rather than having the buses brought in at the ALERT and then evacuating them at SITE

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AREA EMERGENCY. No technical justification has been presented for this position, which is opposed by both the CD Director and the state. The procedure for Silver Lake Regional High School is still under review by the school committee. The school committee for the high school includes representatives from three non-EPZ towns as well as Kingston.

Police: The police chief wants to change the traffic management procedure to prevent anyone from entering the town after an evacuation is ordered. The present ETE reflects the fact that parents are permitted to re-enter to get children at home.

Personnel Resources

The town is presently short six people to staff the positions in the EOC for 24 hour coverage. The police have indicated that they can't cover all traffic management and access control points without outside assistance. They will have to coordinate with the Plymouth County Sheriff's Department.

Evacuation Time Estimate (ETE)

The new ETE has been received but it has not been thoroughly reviewed. There is a concern regarding changes to the bus routes for transportation dependent personnel.

Equipment and Facilities

The EOC was recently completed, however the telephone system is not yet fully operable (calls can't be transferred or routed properly). All the radios are installed and operating. The police department has received half of the portable radios they would need. There is a reliability problem with the police radio repeater shared by Kingston, Duxbury, and Plympton, which Boston Edison has agreed to correct.

There are no problems with equipment or facilities in other departments that have been brought to the attention of the Civil Defense Director.

There presently is no reliable system (pager) to notify the Civil Defense Director of an emergency.

Training

Little training has been done yet. Training of the EOC staff is just starting; The highway, police, and fire departments have had one module of the training. The teachers at the elementary school have had one module but there was very light turnout. Reports from people who have received the training are very positive. There is no estimate when the training will be complete; the schedule is still under development.

Enclosure 3
Attachment 4

Barry Report

Mr. Tavares thought that the Barry Report reasonably presented the status for the town of Kingston; there were only minor discrepancies.

Commission Briefing

Mr. Tavares had not reviewed the transcript of the October 14, 1988 Commission briefing and was not able to comment on the presentations made by Senator Kennedy, Representative Studds, or Lt. Governor Murphy.

Ability to Implement

Mr. Tavares indicated that he was skeptical of the ability to implement the Plan and procedures. He believes that the plans are good, and a lot of improvements have been made, but training is still needed. He would attempt to follow the procedures rather than rely on guess-work.

Special Needs Population

Approximately 120 people have been placed on the special needs list for the town. They are still working to get people identified.

SUMMARY

The major concerns are getting equipment in place and working, completing the training, and resolving the issue of how the school children will be protected.

Mr. Tavares and Mr. Woodworth were provided with a draft copy of this document and indicated that it accurately reflects our discussions.

/S/

William J. Lazarus,
EP Section Chief, Region I

/S/

Rosemary T. Hogan,
EP Specialist, NRR

cc: J. Dolan, FEMA Region I

Enclosure 3
Attachment 5

November 4, 1988

MEMORANDUM FOR: William Russell, Regional Administrator

THRU: R. Bellamy, Chief, Facilities Radiation Safety and Safeguards Branch, DRSS

FROM: W. Lazarus, Chief, Emergency Preparedness Section, FRSSB
R. Hogan, Emergency Preparedness Specialist, NRR

SUBJECT: MEETING WITH CIVIL DEFENSE OFFICIALS IN THE TOWN OF MARSHFIELD TO DISCUSS THE STATUS OF EMERGENCY PREPAREDNESS ON OCTOBER 25, 1988

BACKGROUND

A meeting was held at the Marshfield Police Station on October 25, 1988. The purpose of this meeting was to obtain the latest factual information regarding the status of emergency plans, implementing procedures, and facilities directly from the Director of Civil Defense for the Town of Marshfield. The Civil Defense Director was also provided an opportunity to bring any previously unidentified concerns regarding the status of emergency preparedness to the attention of the NRC.

ATTENDEES

Daniel McGonagle, Director, Office of Civil Defense, Marshfield
William Lazarus, Chief, Emergency Preparedness Section, NRC Region I
Posemary Hogan, Emergency Preparedness Specialist, Office of NRR

DISCUSSION

During the meeting on October 25, 1988 and in a subsequent telephone conversation on October 31, 1988 which was used to clarify some of the information, Mr. McGonagle presented the following status summaries and concerns regarding the state of emergency preparedness in the Town of Marshfield.

Implementing Procedures (IPs)

The Plan and all procedures have been submitted to MCDA (and subsequently forwarded to FEMA for technical review). The only specific concern identified related to the status of the school procedure. Until last week, the school superintendent was not involved in any emergency plan development. All plan and IP development had been delegated to the assistant superintendent. He is opposed to a plan that he has not approved and that has not been discussed with the teachers and school staff who would implement it. He has received a copy of the plan to review, but has not received a school procedure. Mr. McGonagle thinks the late involvement of the school superintendent may delay emergency preparedness development. At this point the

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superintendent is not saying that the procedure wont work, but he has some concerns.

Personnel Resources

Mr. McGonagle is concerned with the ability of the Harbormaster to accomplish his duties with the limited staff available to him. The Harbormaster is tasked with notification of the beach, notification of the coastal waters out to a quarter of a mile and management of Green Harbor. He has only one boat, four assistants and lifeguards during the summer season. The details of harbor evacuation have not been developed.

Evacuation Time Estimate (ETE)

Mr. McGonagle's major concern involves the credibility of the ETE study. From his observations of traffic during the summer season, he does not believe the evacuation times in the study. He is not sure that the ETE considers that the EPZ population of 2500 doubles in the summer, that there are only two major routes out of the town proper, and that they feed into only two evacuation routes heading north (routes 3 and 3A) which will already be full with evacuation traffic. His doubts are based on a preliminary review of the 10/11/88 revision of the ETE. He plans to complete a more detailed review and has provided copies to the Board of Selectmen for their review as well. He has concerns that the population evacuating from the Saquish area and passing through Marshfield have not been considered in determining the ETEs. He has some minor concerns regarding appropriate traffic routes.

Reception Center

The plan currently designates Bridgewater as the reception center community for Marshfield. The Board of Selectmen and Mr. McGonagle adamantly oppose the proposed change to Wellesley. Bridgewater is satisfactory. Marshfield has proposed other locations to the Commonwealth for a northern reception center. Wellesley is considered to be too far away and there are no hospitals nearby.

Barry Report

Mr. McGonagle stated that the Barry Report accurately presented the status for the town of Marshfield.

Commission Briefing

Mr. McGonagle had not read the transcript of the October 14, 1988 Commission briefing, and was not able to comment on the representation provided by Lt Governor Murphy, Senator Kennedy, or Representative Studds.

Ability to Implement

Mr. McGonagle believes that there has been a marked improvement in emergency preparedness in the past fifteen months. There have been no tests of any portion of the revised plan. He plans to conduct a series of tests before he can determine if the plan and IPs can be implemented. Both the police and fire departments have stated that they would be comfortable in implementing the plan. Except for resolution of the concerns with the school procedure, he feels that the IPs will be completed and the EOC operational by late December 1988.

EPZ

Mr. McGonagle does not believe that the effect of emergency response activity in the part of Marshfield within the EPZ on the areas adjacent, but outside of the EPZ, have been satisfactorily addressed. He believes actions taken by some of the population outside of the EPZ may disrupt evacuation within the EPZ. There are about 28,000 year round residents in Marshfield and 70,000 to 75,000 during the summer (2500 residents in the part of the town within the EPZ). He perceives an administration problem with emergency response personnel functioning in only one part of the town. He is concerned that Marshfield resources for responding to an emergency, such as the fire department, are not located within the EPZ, but rather much farther away in another part of town.

Facilities and Equipment

The EOC, which is being erected as an addition onto the police department building, is incomplete at this writing, but is progressing. Installation of communications and other equipment will occur when the EOC is completed.

Mr. McGonagle was provided with a copy of this memorandum and indicated that it accurately reflected the information he provided during our discussions. He also indicated that he was preparing some additional comments that he would provide by November 8, 1988.

/S/

William J. Lazarus,
EP Section Chief, Region I

/S/

Rosemary T. Hogan,
EP Specialist, NRR

cc: J. Dolan, FEMA Region I

Enclosure 3
Attachment 6

November 1, 1988

MEMORANDUM FOR: William Russell, Regional Administrator

THRU: R. Bellamy, Chief, Facilities Radiation Safety and Safeguards Branch, DRSS

FROM: W. Lazarus, Emergency Preparedness Section Chief, FRS&SB
R. Hogan, Emergency Preparedness Specialist, NRR

SUBJECT: MEETING WITH CIVIL DEFENSE OFFICIALS IN THE TOWN OF PLYMOUTH TO DISCUSS THE STATUS OF EMERGENCY PREPAREDNESS ON OCTOBER 25, 1988

BACKGROUND

This meeting was conducted in the Plymouth EOC on October 25, 1988. The purpose of the meeting was to obtain the latest factual information regarding the status of emergency plans, implementing procedures, and facilities, directly from the Director of Emergency Preparedness for the Town of Plymouth. The Emergency Preparedness Director was also provided an opportunity to bring any previously unidentified concerns regarding the status of emergency preparedness to the attention of the NRC.

ATTENDEES

J. Douglas Hadfield, Director, Office of Emergency Preparedness
Alba C. Thompson, Chairman, Board of Selectmen
William J. Lazarus, Emergency Preparedness Section Chief, NRC Region I
Rosemary T. Hogan, Emergency Preparedness Specialist. Office of NRR

DISCUSSION

Mr. Hadfield, and Ms. Thompson presented the following status summaries and concerns regarding the state of emergency preparedness in the Town of Plymouth.

Implementing Procedures (IPs)

This status is based on Mr. Hadfield's comments, review of the IP status list that was provided at the meeting (attached), and a telephone conversation with Mr. Hadfield to clarify discrepancies on October 28, 1988.

Of the 57 IPs identified on the attached list, all exist at least in draft form. The review process involves a review by the cognizant department head, then review by the RERP Committee, and finally review and approval "in concept" by the Board of Selectmen. As of the date of this meeting, 34 IPs have been "approved in concept". Of the remaining procedures, 17 have been through the RERP Committee and are awaiting review by the Board of Selectmen. That leaves 4 procedures which have not been reviewed by the RERP Committee. One of the 4 (Special Needs

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Officer) has been approved at the department head level and is awaiting review by the RERP Committee. In addition to the IPs on the attached list, there are 34 shelter procedures. The model for these 34 procedures (Shelter Manager Procedure) has been "approved in concept" by the Board of Selectmen. Review and approval of all of the IPs at the local level is expected to be complete in 10 to 12 weeks. The IPs which have not yet been approved at the department head level include Saquish, Monitoring and Decontamination, and Jordan Hospital.

The following items were identified as specific concerns which remain to be resolved before some of these IPs can be approved:

Police: Division of responsibilities between the Plymouth Police and state police needs to be determined, as the procedures identify 40 access points and 40 traffic control points and there are only 78 police officers available from Plymouth. The need for protective clothing for police manning positions in the EPZ during radiological emergencies has not yet been determined.

Schools: The Joint School Committee met on October 24, 1988 to review the school procedures. There are 8 elementary, 1 intermediate, and 2 high schools involved. The outcome of that review was not known at the time of this meeting. In a telephone conversation on 10/28/88, Mr. Hadfield related that the committee did not approve the school procedure, but that they had authorized training for the elementary school teachers. Concerns have been raised regarding the appropriate way to notify parents of evacuation of the children; legal questions regarding transportation of school children out of the town; and the question of whether teachers would participate in the evacuation of the school children. Still being considered is a change to the school procedures which would have children sent home at the ALERT level rather than holding them at the school and then evacuating them at the SITE AREA EMERGENCY as the state would like. This is apparently being considered because children would be moved before the parents knew there was a problem, since there is no EBS broadcast at the ALERT level. A joint committee is attempting to resolve differences between Carver and Plymouth in the procedure for the Carver (Regional) High School (which is shared by Plymouth and Carver).

Hospital: Jordan Hospital has serious problems with their implementing procedure as it deals with the evacuation of patients. Details of the concern were not known at this time. A second concern raised by Mr. Hadfield was that the Jordan Hospital is also the hospital which would be used for treatment of any injured/contaminated workers from the site in case of an accident, and he wasn't clear on how they would be handled if the hospital was evacuated. The Jordan Hospital procedure was considered by

Mr. Hadfield to be the biggest obstacle to the completion of the IPs.

Mr. Hadfield acknowledged that he had copies of the latest drafts of all implementing procedures in the EOC. They were presently contained in 7 2 1/2 inch binders whereas the total previous town plan was a little more than an inch thick.

Personnel Resources

Police need to work out division of responsibilities with the state police because there are too few Plymouth police to handle all the access control and traffic control points.

Special Needs Population

The town is still working to get people with special needs to "self-identify". An advertisement is being placed in the local newspaper once per month for the next six months requesting that people with special needs contact the Emergency Preparedness Office to have their names placed on a confidential list which could be used to assist them in the event of an accident. This process is hoped to update completely the list maintained by the town.

Barry Report

Mr. Hadfield indicated that although he had a problem with the state speaking generically for the towns, the third Barry Report was generally complete regarding the status and problems faced by Plymouth. He was not sure if the concerns with the Jordan Hospital procedure were reflected in that report.

Representation at the Commission Briefing on October 14, 1988

Mr. Hadfield and Mrs. Thompson both indicated that the Lt. Governor, Senator Kennedy, and Congressman Studds had fairly represented their concerns at the Commission briefing, although their comments lacked the specifics which they were bringing out in our meeting.

Saquish - Gurnet Point Area

At the present time there is not an adequate procedure for the protection of the 200 - 400 summer residents plus another 200 - 300 campers who would be in the Saquish - Gurnet Point area. The homeowners are working on development of a plan. The concern is that part of the only road off the Saquish Beach area is under water for some period of time during the full moon each month, and that a boat is the only way out during that time.

Implementation of the Plan

When asked whether he thought he could implement the plan and procedures, Mr. Hadfield indicated that he honestly couldn't answer the question due to the incomplete state of development, review, and training. Individual department heads would be in a better position to make such an assessment. Ms. Thompson indicated that restart should not be permitted until effective plans are in place, but that she was not saying that a full-scale exercise was necessarily required to make that determination. Mr. Hadfield did indicate that there was no question that they were ahead of where they were in the planning process a few years ago, and that they had made great improvements.

Mr. Hadfield was provided a copy of this memo and indicated that it accurately reflected the status he presented during our discussions.

/S/

William J. Lazarus,
EP Section Chief, Region I

/S/

Rosemary T. Hogan,
EP Specialist, NRR

cc: J. Dolan, FEMA Region I

Enclosure 3
Attachment 7

November 1, 1988

MEMORANDUM FOR: William Russell, Regional Administrator

THRU: R. Bellamy, Chief, Facilities Radiation Safety and Safeguards Branch, DRSS

FROM: W. Lazarus, Emergency Preparedness Section Chief, FRS&SB
R. Hogan, Emergency Preparedness Specialist, NRR

SUBJECT: MEETING WITH CIVIL DEFENSE OFFICIALS IN THE TOWN OF TAUNTON TO DISCUSS THE STATUS OF EMERGENCY PREPAREDNESS ON OCTOBER 26, 1988

BACKGROUND

A meeting was conducted in the Taunton EOC on October 26, 1988. The purpose of this meeting was to obtain the latest factual information regarding the status of emergency plans, implementing procedures, and facilities, directly from the Director of Civil Defense for the Town of Taunton. The Civil Defense Director was also provided an opportunity to bring any previously unidentified concerns regarding the status of emergency preparedness to attention of the NRC.

ATTENDEES

Robert Spearin, Director, Office of Civil Defense, Taunton
Albert Slaney, Planner, Massachusetts Civil Defense Agency (MCDA)
William J. Lazarus, Emergency Preparedness Section Chief, NRC Region I
Rosemary T. Hogan, Emergency Preparedness Specialist, Office of NRR

DISCUSSION

Mr. Spearin presented the following status summaries and concerns regarding the state of emergency preparedness in the Town of Taunton.

Implementing Procedures (IPs)

There are 25 IPs required for the plan. The Plan and all 25 procedures have been reviewed on the local level and have been forwarded to FEMA through MCDA. There are no sticking points or concerns regarding the IPs. They are waiting to get back the comments from FEMA's technical review so that any necessary changes can be incorporated into the procedures. The Plan and a set of procedures, as well as the Evacuation Time Estimate are in the EOC. In addition each department head has a copy.

Facilities and Equipment

EOC: The EOC is essentially complete; only a few minor items are needed - some status boards, maps, and other small miscellaneous items.

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Reception Center: The renovation of the reception center (to be located in an unused building at the state hospital - Cain Hall) has not been started. As this is a state facility State approval must be given in order for outside funds to be expended on it. Mr. Slaney indicated that the plans still need to be approved by the state agency responsible for granting approval before Boston Edison can begin the work. (This facility will be used for the survey and decontamination of evacuees, and reuniting of families. Congregate care is handled by other facilities.) Examples of repairs noted by Mr. Spearin and Mr. Slaney are painting, repair of gutters and downspouts, handicap access, and reconnection of heat and water. Survey equipment and decon facilities will also need to be installed.

Traffic Control Equipment: The town still hasn't received traffic control equipment needed. They have been told that it will be provided in two to three weeks.

Communications Equipment: All needed communications equipment has been installed, tested, and is functional.

Training

Training is progressing well.

Fire Department should be done November 4, 1988.
Police Department is about 50 % complete.
Health Department is complete.
DPW is complete.
Emergency Medical (EMS) is not started.
Schools (congregate care) is not started.
Civil Defense is about 50 % complete.
EOC has not started.

All training should be complete in about six months.

Personnel Resources

The town is short about a dozen people, mainly for working at the reception center, but also for working at transportation and staging areas. The town is still looking for volunteer workers.

Barry Report

Mr. Spearin thought that the third Barry Report contained a fair representation of the situation for Taunton.

Commission Briefing

He had not read the transcript of the Commission briefing so could not comment on the presentations made by the Lt. Governor, Senator Kennedy, or Representative Studds.

SUMMARY

Mr. Spearin's biggest concerns were the lack of readiness of the reception facility and the fact that training was not complete. He indicated that there was no comparison to where the town was in the 1982-1985 time frame. They previously had only a set of plans and now had detailed implementing procedures. Cooperation from Boston Edison has greatly improved. With the reservations noted about the status of the reception center, he thought that the procedures were adequate and could be used.

Mr. Spearin was provided a copy of this memorandum and indicated that it accurately reflected the status provided during our discussions.

/S/

William J. Lazarus,
EP Section Chief, Region I

/S/

Rosemary T. Hogan,
EP Specialist, NRR

cc: J. Dolan, FEMA Region I

Enclosure 3
Attachment 8

November 4, 1988

MEMORANDUM FOR: William Russell, Regional Administrator

THRU: R. Bellamy, Chief, Facilities Radiation Safety and Safeguards Branch, DRSS

FROM: W. Lazarus, Chief, Emergency Preparedness Section, FRS&SB
R. Hogan, Emergency Preparedness Specialist, NRR

SUBJECT: TOUR OF THE DUXBURY, GURNET, AND SAQUISH BEACHES

BACKGROUND

Following the meeting with Mr. Carl O'Neill to discuss the status of emergency preparedness in the town of Duxbury, Mr. O'Neill arranged for us to visit the Duxbury, Gurnet, and Saquish beach areas which have been frequently identified as a major evacuation concern. Mr. Brad Martin, the head of the Duxbury Department of Lands and Natural Resources, agreed to drive us out to Saquish. Responsibilities of Mr. Martin's department include controlling access and patrolling the Duxbury beach to assure that people do not enter the restricted areas such as bird nesting locations. As a result of his duties he is quite familiar with the area and its problems. Mr. Martin provided the following observations during the trip.

The total number of four wheel drive vehicles allowed access to the Duxbury beach is limited to 500 (by permit). These vehicles have been seen to evacuate the beach in about a half-hour due to a thunderstorm.

Based on the numbers of 4 wheel drive vehicles allowed (500) plus parking capacity for about 400 cars at the entrance to Duxbury Beach, the typical number of persons at the beach would number about 3,000.

In addition to the check for a beach permit at the Duxbury beach, persons who wish to enter the Gurnet-Saquish area (during summer months) must also pass through a security point, further limiting access to that area.

The area of the road between Gurnet and Saquish which has been identified as impassable due to periodic high tides is under water for perhaps two hours during consecutive high tides for two days each month (during the full moon). During these high tides the road floods to a depth of 1 to ? feet and covers about 100 yards of the road. In Mr. Martin's opinion, this should not present a serious impediment to most four wheel drive vehicles. In any event it would be passable on foot and people could be picked up by vehicles on the Gurnet Point side.

There are about 250 cottages beyond the section of the road that is subject to periodic flooding. The area is only open to property owners and their guests, limiting the number of people who could be in that area to 400 to 500. The Gurnet-Saquish area is very lightly inhabited in the off-season months.

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Enclosure 3
Attachment 8

The contents of this memorandum were discussed with Mr. Martin by telephone on November 4, 1988, and Mr. Martin indicated that it accurately reflected the information he provided.

/S/

William J. Lazarus,
EP Section Chief, Region I

/S/

Rosemary T. Hogan,
EP Specialist, NRR

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406

ENCLOSURE 3
Attachment 9

October 25, 1988

MEMORANDUM FOR: File

FROM: William T. Russell, Regional Administrator, RI

SUBJECT: TELEPHONE CONVERSATION WITH ROBERT BOULAY, DIRECTOR OF MASSACHUSETTS CIVIL DEFENSE AGENCY

I returned a telephone call to Mr. Robert Boulay, Director of Massachusetts Civil Defense Agency regarding NRC staff meetings with local Civil Defense Directors in the vicinity of the Pilgrim Nuclear Power Plant.

He had been advised by some local Civil Defense Directors that such meetings were taking place. I explained that the meetings were initiated at the request of Mr. Hadfield, Civil Defense Director for Plymouth and Alba Thompson, Plymouth Board of Selectmen. Based upon those requests, on Friday and Monday, contacts were made with local officials to meet to hear their concerns one-to-one. I indicated that the staff would be pleased to meet with the Commonwealth to discuss technical issues of concern regarding emergency preparedness. The staff will not participate in public meetings at this time. The Commission is currently considering Peter Agnes' request for a public meeting in the Pilgrim area. Mr. Boulay indicated that some Civil Defense Directors had requested technical staff from the Commonwealth participate in the meetings with NRC this week. I advised Mr. Boulay that the staff had no objection to their participation in such technical meetings and reconfirmed that the staff would be willing to meet with the Commonwealth if so requested.

A copy of this Memorandum For File is being provided to Mr. Boulay.

W T Russell

William T. Russell
Regional Administrator

cc: V. Stello, EDO
S. Collins, RI
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R. Boulay, Mass. Civil Defense Agency

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