UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Title: DISCUSSION/POSSIBLE VOTE ON PILGRIM RESTART

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1 UNITED STATES OF AMERICA

2 NUCLEAR REGULATORY COMMISSION

3 ***

4 DISCUSSION/POSSIBLE VOTE ON PILGRIM RESTART

5 ***

6 PUBLIC MEETING

7 ***

8 Nuclear Regulatory Commission

9 Room 1130

10 1717 H Street, N.W.

11 Washington, D.C.

12 Friday, October 14, 1988

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14 The Commission met in open session, pursuant to

15 notice, at 2:00 p.m., the Honorable LANDO W. ZECH, Chairman of

16 the Commission, presiding.

17 COMMISSIONERS PRESENT:

18 LANDO W. ZECH, Chairman of the Commission

19 THOMAS M. ROBERTS, Member of the Commission

20 KENNETH CARR, Member of the Commission

21 KENNETH ROGERS, Member of the Commission

22

23

24

25

1 STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

2 S. CHILK

3 W. PARLER

4 E. KENNEDY

5 E. MURPHY

6 G. STUDDS

7 S. SWEENEY

8 R. BIRD

9 V. STELLO

10 T. MURLEY

11 W. RUSSELL

12 R. BELLAMY

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1 P R O C E E D I N G S

2 [2:00 p.m.]

3 CHAIRMAN ZECH: Good afternoon, ladies and gentlemen.

4 The Pilgrim Nuclear Power Station at Plymouth,

5 Massachusetts was shut down by the Boston Edison Company on

6 April 12, 1986 due to a series of equipment problems. The

7 Nuclear Regulatory Commission, NRC, Region I Office,

8 subsequently issued a confirmatory action letter confirming

9 Boston Edison Company's intent to keep the plant shut down

10 until certain technical and managerial problems had been

11 corrected to NRC's satisfaction.

12 Since that time, other issues have been raised in the

13 course of NRC and the Federal Emergency Management Agency's,

14 FEMA's regulatory reviews, including emergency planning. The

15 NRC staff and the Boston Edison Company will be addressing

16 these issues this afternoon.

17 Numerous actions have taken place by the Boston

18 Edison Company to address the issues raised prior to and during

19 the shutdown. Boston Edison Company and the staff have briefed

20 the Commission previously on progress related to correction of

21 the identified deficiencies. Today we will hear from Boston

22 Edison Company and the NRC staff concerning the corrective

23 actions taken and the readiness of the facility to return to

24 normal operations.

25 During the course of the shutdown, a majority of the

1 Commission has visited the Pilgrim facility in order to gain
2 personal knowledge concerning the condition of the facility,
3 the performance of its management, and the status of corrective
4 actions being taken.
5 In addition, since the April 12, 1986 shutdown, the
6 NRC staff has held or participated in 13 public meetings in the
7 Pilgrim area which provided for extensive input by local
8 officials and citizens into the staff's considerations of the
9 adequacy of Boston Edison Company's corrective actions.
10 Further, the NRC has received numerous written comments and
11 reports from citizens and elected officials from all levels of
12 government concerning the progress at Pilgrim and potential
13 restart of that facility.
14 In addition to the specific issues I have already
15 addressed, the Commission has previously asked the staff to be
16 prepared to address the licensee's implementation of its
17 maintenance work control program during today's meeting.
18 However, before we proceed with the Boston Edison Company the
19 NRC staff presentations, we have several additional speakers.
20 The Commission has received requests from members of
21 Congress and the Governor's Office of Massachusetts for
22 permission to address the Commission at today's meeting. The
23 Commission has agreed to hear from several members of the
24 congressional delegation from the Commonwealth of Massachusetts
25 and the Lieutenant Governor of Massachusetts.

1 We regret the need to limit presentation by members
2 of the public to the Governor's Office and members of Congress.
3 However, this limitation was necessary at today's meeting in
4 order to enable the Commission to conclude our business within
5 a reasonable allocation of time. I would note again that the
6 Commission has provided substantial opportunity for public
7 participation in the vicinity of the plant so that we would
8 have the benefit of the views of local government officials and
9 interested parties.
10 The question before the Commission is clear. Pilgrim
11 will not be allowed to restart unless the Commission is
12 confident that the health and safety of the public can be
13 adequately protected during operations.
14 Copies of the slides used during the meeting today
15 should be available as you enter the meeting room.
16 Do any of my fellow commissioners have any opening
17 comments before we begin?
18 [No response.]
19 If not, our first speaker is Senator Edward M.
20 Kennedy of Massachusetts. Senator, you may proceed. Welcome.
21 SENATOR KENNEDY: Thank you very much, Mr. Chairman
22 and members of the Commission.
23 I at the outset want to extend the regrets of my
24 colleague, Senator Kerry, who wanted to be here today and is
25 necessarily absent. He has an amendment on the Floor of the

1 United States Senate where we are continuing to debate the
2 Omnibus Drug Bill, but he has a statement and I would like to
3 have the opportunity to include that as a part of the record.
4 CHAIRMAN ZECH: Certainly. We will be pleased to
5 receive that, Senator.
6 SENATOR KENNEDY: I welcome the opportunity to appear
7 today before the Regulatory Commission on the proposal to
8 restart the Pilgrim Nuclear Power Plant at Plymouth,
9 Massachusetts. Although I am pleased that the Commission has
10 provided an opportunity for the state and federal legislators
11 to speak on the question, I am dismayed by the Commission's
12 refusal to hear other witnesses on this issue.
13 People who live and work near the Pilgrim Reactor
14 have the most at stake in the event of an accident, but those
15 same people have been repeatedly denied the opportunity for
16 genuine participation in the decision. I am here today to
17 speak for them, but they should be here and be able to speak
18 for themselves. One of the fundamental principles of American
19 justice and American democracy is to hear the other side. That
20 principle should apply to the Nuclear Regulatory Commission and
21 every other government agency, and I regret in this case it has
22 not.
23 The problems with the Pilgrim plant are well
24 documented. The NRC itself rated the plant as one of the worst
25 in the country. In 1982 the plant received one of the largest

1 fines ever levied by the NRC for providing false information
2 and for improperly operating the plant. The plant has been
3 cited in recent years for literally dozens of violations
4 related to substandard operating procedures, lapses in
5 security, fire protection and radiological controls.
6 Now, in the face of this less than reassuring past
7 record, the Commission is proceeding on a course to restart the
8 plant in a decision process that effectively relies on private
9 inspections and the word of the utility to verify that
10 improvements have, in fact, been made.
11 This plant has one of the worst safety records in the
12 history of nuclear power. The utility claims that significant
13 imrpovements have been made since the shutdown in April of
14 1986, and this may be so; but the burden of proof should be on
15 Boston Edison to demonstrate in an open and adjudicatory
16 process that the defects have been remedied.
17 A decision as important as this one, with the
18 potential to affect so many lives in Massachusetts, should not
19 and must not be made in an ivory tower on a paper record in
20 Rockville, Maryland. The people here today have made the
21 effort to come all the way from Massachusetts to tell you about
22 the Pilgrim Plant. They are not high paid lobbyists from
23 downtown Washington. They are parents, teachers, concerned
24 residents from Plymouth, Duxbury, Kingston and other
25 communities near Pilgrim in Massachusetts who honestly believe

1 that this plant should not be restarted again. They have come
2 here to let the Commission know that they fear for their
3 safety, for their children if the NRC is wrong and Pilgrim
4 becomes another Chernobyl.
5 They are here not to talk about Boston Edison profit-
6 to-loss ratios but because they want to know how the Nuclear
7 Regulatory Commission intends to protect their children in the
8 event of an accident at Pilgrim. They are here because they
9 are appalled that the NRC is even considering a decision to
10 restart the plant at a time when there is no emergency
11 evacuation plan in place.
12 They are here to speak for thousands of their friends
13 and neighbors who are not able to come all the way to
14 Rockville, and they should have had the opportunity to talk
15 with you commissioners face to face in Plymouth. They sit here
16 silently because the Commission has told them they have no
17 right to speak and they are not part of the decisionmaking
18 process, that their opinions are not worth hearing. Well, I
19 believe that they do have a right to be heard and that this
20 Commission has an obligation to hear from them.
21 I want to say, Mr. Chairman, I appreciate the fact in
22 your opening statement you mentioned that a majority of the
23 members of the Commission had an opportunity to visit that
24 plant. A visit in the plant is one thing, but having the
25 opportunity to listen to those whose lives are most directly

1 affected is another. I think that is the principal concern.
2 We appreciate the fact that you have been willing to
3 have members of the NRC staff come to public hearings. They
4 came to public hearings that we had that I chaired. As the
5 Chairman of the Health Committee of the United States Senate,
6 we have had health hearings on the implications of Three Mile
7 Island, the adverse health implications of that failure. We
8 have had health hearings on the health implications in the
9 Soviet Union of the meltdown in Chernobyl. We had academician
10 Belikov who testified and he continues to work with our Health
11 Committee on those particular measures.
12 I must say that the kind of testimony that I heard in
13 Plymouth from the health specialists and the researchers, those
14 that have spent the time, was equal in terms of professionalism
15 and in terms of competency to anything I have heard from any of
16 those who have represented many of the agencies of the
17 government during those two very important hearings.
18 This past January I chaired a field hearing in
19 Plymouth for the Senate Labor and Human Resource Committee.
20 During that hearing I made a commitment to the people of
21 Massachusetts. After hearing compelling testimony from those
22 who believe that the plant should not be permitted to start
23 again, I urged the NRC to provide these witnesses with an
24 opportunity to speak directly to the Commissioners.
25 Such an opportunity was not provided. I said that I

1 would personally convey to the Commissioners some of the major
2 concerns that were raised during the hearing, and here I am.
3 Members of the Nuclear Regulatory Commission have
4 been entrusted with the responsibility of protecting the lives
5 and safety of Americans who live near nuclear power facilities.
6 It is time the NRC lived up to that sacred trust by putting
7 aside its own personal views on nuclear power and by looking at
8 the facts. The credibility of the Nuclear Regulatory
9 Commission is at one of the lowest points in its history. This
10 has come about not by ideology but because of fairness.
11 The Commission has allowed the interests of the
12 nuclear power industry to run roughshod on the interests of the
13 public safety. The time has come for the NRC to try to salvage
14 its credibility by living up to its responsibilities under the
15 Atomic Energy Act, by not allowing any nuclear plant to be
16 operated in a way that it could endanger the public. If the
17 NRC were, in fact, putting public safety first, then these
18 discussions in Plymouth would not be taking place today, for it
19 is clear that the public cannot be adequately protected in the
20 event of an accident at Pilgrim.
21 The Federal Emergency Management Agency is entrusted
22 by the NRC with the duty to evaluate the adequacy of emergency
23 preparedness plans for nuclear power plants. On August 6,
24 1987, FEMA withdrew its finding that there was reasonable
25 assurance that the public could be protected after an accident

1 at Pilgrim.

2 FEMA based its findings on several critical areas of
3 deficiency in emergency planning: first, the lack of a
4 reception center for people being evacuated to the north; the
5 lack of evacuation plans for public and private schools and day
6 care centers; the lack of identifiable public shelters for the
7 beach population; inadequate planning for the evacuation of the
8 special needs population; inadequate planning for the
9 evacuation of the transport-dependent population; overall lack
10 of progress in planning; and apparent cutbacks in emergency
11 preparedness.

12 Over a year has passed since FEMA withdrew its
13 approval for the Pilgrim off-site emergency preparedness plan.
14 Since that time, to their credit, the Commonwealth of
15 Massachusetts and the surrounding communities near Pilgrim have
16 worked diligently to try and remedy the deficiencies identified
17 by FEMA. There is no question that progress has been made, but
18 we are far from finished. To date, not a single community
19 within a ten-mile radius of the plant has submitted a final
20 emergency preparedness plan to Massachusetts for review.

21 Not a single issue identified in the FEMA self-
22 initiated review of August 1987 has been fully resolved. There
23 is still no assurance that school children will be safely and
24 quickly evaluated from the area in the event of emergency.
25 Questions still remain about the adequacy of the proposed

1 evacuation center in Wellesley.

2 The special needs population and the transportation-
3 dependent population still have no assurance of protection in
4 an emergency. Sufficient shelters for the beach population
5 still have not been identified.

6 They say that a picture is worth a thousand words,
7 and it is certainly true in this case. Let me just take a
8 moment to show the members of the Commission this aerial
9 photography of the Duxbury Beach. I could put it on the easel,
10 but it is a small blowup and I think it is perhaps better if I
11 just hold it.

12 This is the Saquish Beach area four miles here from
13 Pilgrim. On the average summer day, you get from four to five
14 thousand people that come along this beach here. Some 250
15 homes are in this area. This is Duxbury Beach. During the
16 course of the summer there are several thousands, in excess of
17 ten thousand. This is the only area, this small bridge here,
18 with two lanes on it. This is the only way to be able to
19 evacuate this. It gives you some idea in one area here. I
20 won't bother talking about Plymouth Beach where there are
21 several thousand similar problems, where there is no shelter.
22 This is just one area during the period of the summertime.

23 This picture here just shows the number of cars along
24 the Duxbury Beach, where you just see them virtually parked.
25 It is almost gridlocked. It's almost as bad as the Callahan

1 Tunnel in Boston, but it is really a packed and crowded area.
2 This, Mr. Chairman, is a picture of the road at
3 Saquish when the water is at high tide. This is the road here.
4 It is virtually closed off. The people come down there.
5 Obviously, the tide is every six hours. Usually at one time or
6 the other during the course of the day there are several
7 thousand people there that make their own plans of when they
8 are going to leave there, but their leaving there is dependent
9 on what the tide would be. That is virtually impassable at the
10 seasons, high tides.
11 I make those available for the file.
12 As you can see, as I mentioned, there are 250 homes
13 at Saquish Beach, another 35 homes at Gernet Point, the
14 residents of this area about three miles from Pilgrim. The
15 only access is by four-wheel drive vehicle traveling about five
16 miles on sand, and if any of you commissioners have driven a
17 four-wheel on a barrier beach, you know it's slow going.
18 There is also the problem of the crowds of summer
19 beachgoers. As the other photograph reveals, they park their
20 vehicles on the beach, and I ask you how are these people going
21 to be protected if there is an accident.
22 It is not clear to me how the Nuclear Regulatory
23 Commission can contemplate restarting Pilgrim at any power
24 level till these issues are resolved. At this time no one is
25 certain that the problems with emergency preparedness can ever

1 be satisfactorily addressed. Certainly FEMA has not determined
2 that these deficiencies are remedied.
3 The NRC repeatedly states that it looks to FEMA for
4 advice on matters relating to emergency preparedness. Well,
5 FEMA has given you its advice and you have chosen to ignore it.
6 You have ignored FEMA, you have ignored the Governor of
7 Massachusetts and our experts on public safety, ignored the
8 pleas of disabled residents, of parents, of beachgoers, and you
9 are ignoring the Massachusetts Congressional Delegation as
10 well. Yet in spite of this, you expect that the people of
11 Massachusetts are going to believe when you reassure us that
12 all is well at Pilgrim, that the NRC is watching out for their
13 safety and their welfare.
14 One of the witnesses at our Senate hearing last
15 January was Dr. Thomas Murley, the Director of the NRC's Office
16 of Nuclear Regulatory Regulation. In his testimony he said,
17 "The NRC will not permit the facility to resume operation until
18 corrective actions satisfactory to the NRC have been taken to
19 address the emergency planning deficiencies identified by FEMA.
20 We will give special attention to the improved evacuation plans
21 for schools, day care centers, as well as the improved
22 evacuation plans for special needs and transportation-dependent
23 population in the ten-mile emergency planning zone.
24 "We will require some demonstration of the critical
25 aspects of these evacuation plans before we can decide that

1 Pilgrim is ready to resume operation."

2 It is puzzling to me how the Commission could
3 possibly feel that corrective action satisfactory to the NRC
4 had been taken when the emergency preparedness plans are still
5 in draft form. Even more puzzling is the fact that Dr. Murley
6 also stated that the NRC will require some demonstration of the
7 critical aspects of the plants before the restart decision is
8 made.

9 In fact, there have been no exercises to test these
10 plans. There have been no off-site exercises of emergency
11 plans for Pilgrim over three years because the NRC has granted
12 Boston Edison two exemptions from Federal requirements to
13 perform emergency exercise.

14 If the NRC now chooses to rush ahead with an ill-
15 advised and potentially dangerous decision, the Pilgrim plant
16 will have the dubious distinction of being the only operating
17 nuclear power plant in the country for which FEMA has withdrawn
18 its approval of emergency preparedness.

19 Finally, I want to mention two additional important
20 matters. The first concerns the Mark-I boiling water reactor,
21 the type used at the Pilgrim facility, which Brookhaven
22 National Laboratory identified as having an 80 to 90 percent
23 chance of melt-through during certain accidents. The
24 Brookhaven report was issued nine months ago. The NRC has
25 still made no decision on whether to require Boston Edison to

1 make safety improvements such as the installation of a direct
2 torus vent.
3 It is premature to consider restarting Pilgrim at
4 this time if the safety modifications are needed to ensure that
5 the containment vessel is structurally sound. In fact, doubts
6 remain as to whether any improvements can be made to
7 substantially reduce the probability of containment failure in
8 this type of nuclear reactor.
9 The last issue relates to the uncertainties of the
10 potential effects of nuclear power facilities on public health.
11 Last January I asked the National Institutes of Health to
12 undertake a study to determine whether populations near nuclear
13 power plants are at higher risk for certain types of disease.
14 I requested this study because of my concern over information
15 released by the Massachusetts Department of Public Health
16 indicating an increased incidence of leukemia in the coastal
17 communities near the Pilgrim reactor.
18 While no conclusions can yet be drawn concerning the
19 causal relationship between the Pilgrim reactor and the higher
20 leukemia rate, more analysis is needed to determine whether the
21 plant has had an impact on public health. That study is an
22 extensive study. We have been able to get really some of the
23 best people in our country as part of the Department of HHS,
24 National Institutes to do that study.
25 They expect it will take in excess of a year to get

1 their final conclusions, but we have been continuing to monitor
2 that study. They have taken that work seriously. We have had
3 important indications of increases of cancer in these coastal
4 areas, and it seems to me that by and far that issue ought to
5 be resolved before any consideration of other factors.
6 I suggest that a restart decision should be postponed
7 until the National Institutes of Health have completed the
8 study. In the absence of meaningful health data, area
9 residents continue to be duly concerned over the role of
10 Pilgrim in these leukemia cases.
11 In the years since Three Mile Island and Chernobyl,
12 we have come to learn more about the awesome power of nuclear
13 energy. We know that accidents happen, and when they do,
14 consequences can bring enormous tragedy. The most important
15 lesson we have learned from these disasters is that we must
16 exercise the greatest caution and care in regulating our
17 nuclear power plants.
18 Only by applying the strictest safety standards can
19 we reduce the likelihood that the history of TMI, let alone
20 Chernobyl, will repeat itself. These strict standards have not
21 been applied at Pilgrim, but it is not too late for the
22 Commission to change course.
23 I urge you to defer action on the decision to restart
24 until all the emergency preparedness issues have been resolved,
25 until there is real assurance of safety for the Mark-I reactor,

1 and until all questions relating to public health are answered,
2 and I thank you for the opportunity to be able to make this
3 appearance.
4 CHAIRMAN ZECH: Thank you, Senator.
5 Let me just say we appreciate very much your taking
6 the time to appear before us today. I do not want to take the
7 time now to discuss a number of the details that you brought up
8 but only to say that we do not ignore our safety
9 responsibilities. We have a lot of hard-working professionals
10 in this organization. We have people committed to the safety
11 of their fellow citizens. We have more than 3000 people, many
12 of them in Washington and many throughout the country, that are
13 dedicating their lives to the safety of their fellow citizens.
14 So I must at least say that much. I do not agree
15 with some of your insinuations. We care a lot about our
16 responsibilities, and I must say that to you, sir, while you
17 are here.
18 SENATOR KENNEDY: I appreciate that, and I appreciate
19 the restraints on time to be able to respond more completely to
20 the points that I have made; but let me just say, Mr.
21 Commissioner, I know I speak for those in the community of
22 Pilgrim and also at Seabrook who would not accept that
23 explanation. They would say that you basically have run
24 roughshod over the recommendations of the organization that has
25 been selected by the NRC to make proposals with regards to

1 safety. This is the FEMA.

2 I take direct issue with the suggestion that you have
3 followed both the procedures and past practices. We may differ
4 with that and I'm sure we do, but I know I represent myself, my
5 own view in following this issue closely over a period of years
6 that I have not seen any agency of government, any agency of
7 government that has been willing to run roughshod and take the
8 risks on the issues of health and safety. I say that as one
9 who has had the oversight responsibility on OSHA and MSHA to
10 ensure the safety of mine workers in the deepest mines, of
11 occupational health and safety, to ensure that workers in this
12 country are going to have safe workplaces and be concerned
13 about the dangers of chemicals.

14 I take a step back to no one in the Senate or at any
15 agency on the issues of safety. Mr. Commissioner, this agency,
16 I think quite frankly, has treated that issue, by the way that
17 you have reacted to those regulations that have been put in
18 place and have been respected by this Commission over a period
19 of years, cavalierly. We have a difference on it and this is
20 not the place to debate it, but I have --

21 CHAIRMAN ZECH: Can I take issue with what you have
22 said, sir? You may have your view. I have mine. This is a
23 dedicated agency to safety. You may not think so, but I do.
24 We do have an issue, and so be it.

25 SENATOR KENNEDY: The last 30 seconds. I don't

1 question the dedication of the professionals in this agency.
2 No question at all. No question at all. What I do question is
3 the policy decision that starts right here. That is an
4 important distinction. That is an important distinction. I
5 have seen that in agency after agency. I have seen it in the
6 FDA where we have dedicated people and policy decisions made to
7 overrule their decisions. I have seen it in agency after
8 agency, Mr. Commissioner. The policy decision is set right
9 here, and the policy --
10 CHAIRMAN ZECH: That's right. We set the --
11 SENATOR KENNEDY: But I don't question the dedication
12 of the people in this agency to safety. I question the policy
13 decisions that basically handicap those individuals to do the
14 kind of job that we expect them to do in the Congress of the
15 United States.
16 CHAIRMAN ZECH: And those policy decisions, in my
17 view, Mr. Senator, are sound and solid and committed to public
18 health and safety, and that is what we make to the best of our
19 ability.
20 SENATOR KENNEDY: You are good to let us come by, and
21 I appreciate it very much.
22 CHAIRMAN ZECH: Thank you very much.
23 Senator Kerry, did you have a statement?
24 SENATOR KENNEDY: I will include it as part of the
25 submission.

1 CHAIRMAN ZECH: All right, sir. Thank you very much.
2 Thank you, Senator, for coming.
3 We will now hear from Lieutenant Governor Evelyn
4 Murphy, please. Welcome very much. It is nice to have you
5 with us this afternoon.
6 LIEUTENANT GOVERNOR MURPHY: Thank you very much. I
7 appreciate the opportunity to be here.
8 Mr. Chairman and members of the Commission, for your
9 information and my introduction, I am Evelyn Murphy, the
10 Lieutenant Governor of Massachusetts.
11 Before I begin my remarks, let me express my deep
12 disappointment in the NRC's unwillingness to provide an
13 opportunity for local elected officials and for local public
14 safety officials to appear before you today. These public
15 officials throughout the Plymouth area of Massachusetts have
16 spent two years and thousands of hours in an attempt to protect
17 public health and safety. The very least the Commission could
18 do and could have done would be to allow them to respond today
19 and to hear their legitimate concerns.
20 You are here today to consider the restart. I am
21 here today to oppose the restart of Pilgrim at this time. Let
22 me go right to the point.
23 Emergency planning is the responsibility of the
24 Commonwealth of Massachusetts, not Boston Edison's, not the
25 NRC's. We take this responsibility very seriously. In

1 carrying out this responsibility, the Commonwealth concludes
2 that no emergency response plans exist at this time, and
3 consequently, no reasonable assurance can be given that
4 people's health and safety can be protected. Therefore,
5 Massachusetts' strongly held position is that the Pilgrim
6 Nuclear Reactor should not be permitted to restart without an
7 approved emergency response plan that has withstood the rigors
8 of a full-scale graded exercise.
9 You will undoubtedly hear today different versions of
10 the status of the emergency preparedness. Boston Edison and
11 your own NRC staff will report great progress has been made to
12 improve emergency response plans. They will report that
13 cooperative efforts are going well. They will report that
14 agreements are in place with service providers and that
15 training is well under way. They will report that implementing
16 procedures and draft plans are available for all the emergency
17 planning zone communities, and they will report that Boston
18 Edison has delivered on its commitments.
19 Progress has been made. Cooperation has improved.
20 But progress and cooperation do not save families. A family's
21 chance for a safe evacuation will not come until emergency
22 response plans are complete, tested and approved, and until
23 equipment and personnel are fully in place.
24 The fact is no emergency response plans exist for
25 Pilgrim. Previous emergency plans from 1981 and later years no

1 longer are operative. Following the Commonwealth's 1986 report
2 and FEMA's 1987 self-initiated review, state and local
3 officials and Boston Edison went back to the planning -- the
4 drawing board to develop a totally new emergency response
5 organization. That process is still under way.
6 Let me list some of the specific problems that have
7 yet to be resolved. First, no local community has yet to
8 approve a plan or a set of implementing procedures. At best,
9 we are evaluating draft material. Second, training for more
10 than 6000 emergency workers is less than one-third complete.
11 Third, letters of agreement with transportation providers, the
12 persons who would assist with the evacuation of school children
13 and persons with special needs, have not been completed.
14 Fourth, the system for notifying local communities
15 and emergency workers during an emergency is not complete.
16 Procedures for using equipment have not been approved. Some
17 communications equipment has yet to be delivered, and there is
18 yet to be a test. Fifth, procedures for the evacuation of
19 school children and persons with special needs have been
20 drafted but not approved by school superintendents or by school
21 committees. In some cases, parents and school officials have
22 not even discussed when and how children would be released at
23 the alert stage of an accident.
24 Sixth, there exists no workable procedure for the
25 evacuation or sheltering of the up to 16,000 seasonal residents

1 of Saquish and the Gernet, as Senator Kennedy was just pointing
2 out, and the roads, as he pointed out, in this area are
3 primitive and sometimes under water from high tides.
4 Seventh, traffic management within and outside the
5 EPZ remains unresolved. Adequate numbers of personnel and the
6 procedures for traffic control at the reception centers are
7 still under study by the licensee. Eighth, there is no
8 northern reception center. A final designation is still six
9 months away. Millions of dollars in capital improvements must
10 be made in reception facilities before they can function as
11 intended.
12 These are not trivial issues; they are serious
13 deficiencies. That is why every local elected official and
14 public safety official in the emergency planning zones believe
15 that in no event should the Pilgrim Plant be permitted to
16 restart without a full-scale graded exercise.
17 I am deeply disturbed by the NRC's total lack of
18 public documentation on emergency planning. In contrast, our
19 position on this issue is clear and well-documented in a
20 comprehensive 200-page report submitted to you this week. Our
21 report is backed by testimony from local public safety
22 professionals and from local civil defense directors. Their
23 testimony supports each of these deficiencies and was made
24 available to the Commission as an attachment to our status
25 report filed with you this week.

1 Over the past two years the NRC has made it quite
2 clear to the licensee that regardless of how long it takes to
3 respond to all the management and reactor safety concerns
4 raised by the NRC, the plant will remain closed until the
5 commissioners are satisfied. By the NRC's own account,
6 thousands of hours of inspections and progress reports have
7 been maintained to ensure that Boston Edison is performing to
8 the total satisfaction of the NRC.
9 According to the NRC, this scrutiny has been
10 unprecedented, so I would ask you: Why hasn't the NRC applied
11 the same level of scrutiny to the issue of emergency
12 preparedness? Why hasn't the NRC published written findings on
13 emergency preparedness for public view and comment? Why hasn't
14 the NRC ever prepared a detailed response to any of the three
15 comprehensive reports submitted by Governor Dukakis and by
16 Public Safety Secretary Charles Barry?
17 Why, at the only NRC hearing where the status of
18 emergency preparedness was an official agenda item, did the NRC
19 fail to recognize local civil defense directors who had
20 travelled to Rockville to testify? And finally, why won't you
21 wait for completion and testing of emergency response plans as
22 has been requested by our two U.S. Senators, our Congressman,
23 our Governor, our Attorney General, all the local Boards of
24 Selectmen, all local Civil Defense Directors, all local School
25 Superintendents, all local Police and Fire Chiefs, and from

1 concerned citizens throughout the region?

2 These questions trouble us. Without some direct,
3 forthright answers, we can only conclude that the emergency
4 preparedness has been treated more like a box that needs to be
5 checked off than like the legitimate and critical public safety
6 issue that it is. For the record, let me cite some examples of
7 the lack of public process by both FEMA and the NRC to address
8 these serious plan deficiencies.

9 The NRC has failed to respond in any way to the
10 detailed reports prepared by the Commonwealth in 1986, 1987 and
11 1988 on the inadequacy of the emergency preparedness. FEMA has
12 never actively participated with the State and localities in
13 the development of new draft plans despite the fact that the
14 Agency took the extraordinary action of stripping the plan of
15 its interim approvals.

16 Neither FEMA nor the NRC has ever held a public
17 meeting to receive input from State and local public safety
18 officials on the status of emergency preparedness. Neither
19 FEMA nor the NRC accepted the Commonwealth's invitation to
20 attend the State's public meeting held in Duxbury on October 6,
21 1988 to discuss this issue.

22 As you are aware, in October of 1987 Governor Dukakis
23 and Attorney General Shannon filed a show cause petition with
24 this Commission for a full adjudicatory hearing on the issues
25 related to management deficiencies, reactor safety questions,

1 and the status of emergency preparedness planning. To date the
2 Commission has denied the Commonwealth's request for an
3 adjudicatory hearing on management and reactor safety issues
4 and has postponed judgment on the issue of emergency
5 preparedness.
6 Since no final action has been taken on this item, I
7 request on behalf of the Commonwealth and the residents of
8 Plymouth that the Commission withhold any restart decision
9 until a full adjudicatory hearing has been held on the issues
10 associated with emergency preparedness.
11 Finally, the lack of emergency response plans for the
12 Pilgrim EPZ is appalling. I doubt there is another licensed
13 operating nuclear reactor in this country where FEMA has
14 officially withdrawn all interim approvals and where the host
15 state and the emergency planning zone communities have done the
16 same. I doubt there is another plant with such an
17 extraordinary history of safety violations where the NRC would
18 consider a restart without emergency plans.
19 Since the NRC is unable to provide assurance that an
20 accident at the Plymouth Reactor will not occur, the Commission
21 could and should assure the citizens of the Commonwealth that
22 an approved and tested emergency response plan is in place. To
23 do less is unconscionable.
24 In closing, on behalf of Governor Dukakis and the
25 citizens of the Commonwealth of Massachusetts, I call on the

1 Nuclear Regulatory Commission to deny Boston Edison's request
2 to restart Pilgrim Reactor unless and until new emergency
3 response plans are completed, tested and approved.
4 Thank you very much.
5 CHAIRMAN ZECH: Thank you very much. We appreciate
6 you being with us today.
7 LIEUTENANT GOVERNOR MURPHY: I appreciate the
8 opportunity. Thank you.
9 CHAIRMAN ZECH: I believe that Congressman Studds is
10 here also. Welcome, Mr. Congressman.
11 CONGRESSMAN STUDDS: Thank you, sir. I'm given to
12 understand that it is somewhere between unusual and
13 unprecedented for you to subject yourselves to members of
14 Congress in this setting.
15 Perhaps that's a reflection on the extreme of the
16 circumstances, but you are very kind to do that.
17 CHAIRMAN ZECH: We've done it before and you're
18 welcome to appear this afternoon.
19 CONGRESSMAN STUDDS: I should tell you that obviously
20 the themes of what I have to say have been spoken by the
21 preceding speakers. I'm going to pick one subject in
22 particular that I'm concerned about. You've heard about it
23 before but perhaps I can ask you to focus on it a little more
24 carefully and that is emergency planning.
25 I'm here to speak for a lot of people who are not

1 here, basically my own constituents. The town of Plymouth lies
2 as far as there is a middle in the middle of my coastal
3 district and I'm here to speak for constituents.
4 I should warn you that one of them is Senator Kennedy
5 as you get the drift of what it is that I may have to say. I'm
6 representing them as you have heard others say before me
7 because they have asked me to do so. You have not afforded
8 them the opportunity to speak to you themselves either today or
9 as I must say sadly, on any other occasion.
10 Some of you have visited the plant, perhaps most of
11 you no doubt have spoken to Boston Edison officials. Those
12 same officials are here again today to make their case to you.
13 Your staff has presided over public meetings in Plymouth but
14 not once have any of you met either formally or informally with
15 the people whose health and safety lie in your hands.
16 Your staff convened several public meetings in the
17 public area but not one was for the sole purpose of discussing
18 the critical issue of emergency planning. When this
19 opportunity was recently provided by the governor, scores of
20 citizens spoke their piece until the late hours of the night
21 but there was no one there from the NRC to hear them.
22 Your staff recently held a meeting on emergency
23 planning issues here in Rockville. They allowed Boston Edison
24 which does not have primary responsibility for carrying out the
25 off-site emergency plan to make a presentation. But would they

1 also listen to the Civil Defense Officials from towns in the
2 emergency planning zone report on their state of readiness?
3 They would not.
4 With this history, it is no wonder that my
5 constituents and those of the Senator, Lieutenant Governor,
6 feel that their views are of minimal interest to the NRC. In
7 yesterday's New York Times, a front page article described how
8 five planned nuclear power plants in the Soviet Union have been
9 cancelled because of the opposition of local officials and
10 residents.
11 It is a sad commentary that Soviet officials appear
12 to pay more attention to the concerns of the local citizenry
13 than their American counterparts. If you had spent more time
14 speaking with the residents of the area, you would have learned
15 several things about them. I must tell you that you would
16 discover that they're not left-wing radicals.
17 In fact, the majority of them have twice voted for
18 President Reagan. They are not by and large anti-nuclear,
19 believe it or not, but virtually all of them, even those who
20 are strong supporters of the nuclear power industry, believe
21 that Pilgrim should not be allowed to reopen at this time.
22 What unites them in this belief is their deep concern
23 which I share that the existing state of emergency planning
24 will not protect their health and safety in the event of a
25 radiological accident.

1 My most recent letter to you and we've become
2 correspondents over some time as you know, discussed this issue
3 in considerable detail. Although I don't want to spend a great
4 deal of time today discussing technical legal matters, there is
5 one point that I would very much like to make.
6 In my letter, I argue that certain provisions in
7 federal law and your regulations prohibit you from issuing an
8 operating license without an adequate emergency plan and an
9 exercise of the plan. Your staff asserts that these rules do
10 not apply because Pilgrim is already licensed. They maintain
11 that another regulation dealing with licensed facilities is
12 operable in this case.
13 That regulation gives a utility a four-month grace
14 period to correct deficiencies in emergency plans. Statements
15 by your staff have given the impression that you would probably
16 invoke this rule if you decide to allow Pilgrim to restart at
17 this time.
18 I want to point out that under this regulation, the
19 four-month grace period is supposed to begin when it is
20 determined that existing emergency plans are inadequate. I
21 want to remind you that FEMA made this finding in August of
22 1987. According to my humble calculations, the four-month
23 grace period expired last December.
24 The utility is not entitled to another one. This
25 being the case, the rules require Boston Edison officials to

1 demonstrate now, not four months from now, why the deficiencies
2 in the plant are not significant. Since an emergency
3 preparedness plan does not even exist in usable form, they
4 would have in my view an impossible task.
5 Members of your staff have painted a very rosy
6 picture of the status of emergency planning, grossly
7 exaggerating the amount of progress that has been made. There
8 are many who fear, I think you may know this, I hope you do,
9 that with this conclusion in hand, you will cite a conveniently
10 vague provision of the law and regulations and send Boston
11 Edison on its way to restart.
12 I suggest that instead of hiding behind the letter of
13 the law, you pay a little more attention to the intent of the
14 law, which is purely and simply to protect the people in the
15 event of a nuclear accident and I would further suggest that
16 what this entire discussion needs is a big healthy dose of
17 common sense even though we're dangerously close to Washington
18 and what common sense compels us to do is to look for the
19 answers to some very practical questions.
20 Just yesterday, my staff spoke with the Civil Defense
21 Directors in several of the towns within the emergency
22 preparedness zone. They provided responses to some of these
23 common sense questions that are far more useful than any
24 regulations could ever be in determining whether or not the
25 people living in the Plymouth area or on Cape Code down wind

1 from Pilgrim, are protected.

2 If you bear with me, I'd like to go over them with

3 you. If Pilgrim resumes operation and if there is an accident

4 within the next few months, have the local police and fire

5 departments received the training they need to carry out an

6 evacuation? The answer is no.

7 Has a plan been developed to evacuate the special

8 needs population and have those people been identified? The

9 answer to both questions is no. Have the towns of Carter and

10 Kingston and Duxbury and others received the radios and

11 generators and traffic management equipment they need? The

12 answer is no.

13 Are the teachers in the many schools throughout the

14 area trained and prepared to see the thousands of

15 schoolchildren to safety in the event of an emergency? The

16 answer is no. Is the absolutely essential communications

17 system that will link the operating centers in place? The

18 answer is no.

19 Has there been a full-scale exercise to test the

20 adequacy of plans within the last three years? The answer is

21 no. Most importantly, do the selectmen, the Civil Defense

22 officials, the police chiefs, the fire chiefs, the school

23 superintendents and others who have to carry out an emergency

24 plan, feel that they are even close to being ready? The answer

25 is a unanimous, resounding, no.

1 If your staff and Boston Edison officials argue that
2 the answers to these questions are yes, then they are directly
3 contradicting the statements of local emergency planning
4 officials. If the responses to these and myriad other critical
5 questions are indeed no, then common sense tells us that
6 existing plans which exist in draft form only, are clearly not
7 adequate in the event of an accident at Pilgrim.
8 State and local officials have said time and again
9 that they are not yet ready to carry out any type of emergency
10 plan, especially one that requires evacuation. They are not
11 saying that they will never be ready. They are simply saying
12 that they are not ready now.
13 The governor has attempted to provide his Civil
14 Defense staff with the resources that they need to perform the
15 laborious and time-consuming task of coordinating the planning
16 effort. He's also to be commended for insisting that local
17 residents play a significant role in this process but more work
18 needs to be done.
19 A few more months to wait is inconsequential in the
20 light of two and a half years of shutdown and if it provides
21 the measure of safety that is necessary and the assurance
22 residents need to sleep more easily, then it is certainly worth
23 it.
24 I join with those who preceded me in urging you in
25 the strongest possible terms to delay restart of the Pilgrim

1 plant until final emergency plans have been approved by
2 federal, state and local officials and that exercises are
3 performed to test their adequacy.
4 It could be a very tragic mistake to do otherwise.
5 Let me just close by reminding you that again, I think it's
6 common sense and that is that if there is an emergency and if
7 there are emergency plans to be carried out, they will not be
8 carried out by the members of this Commission, they will not be
9 carried out by the members of Congress. They're going to be
10 carried out by the very local officials who tell us that they
11 are not ready.
12 I would hope that would be as sobering to you as it
13 is to those of us are here to speak for them and I thank you
14 for your time.
15 CHAIRMAN ZECH: Thank you very much, Mr. Studds. I
16 appreciate your being with us this afternoon. Thank you, sir.
17 CHAIRMAN ZECH: We will now call on the Boston Edison
18 Company to come to the table, please. Mr. Sweeney, welcome.
19 You may proceed.
20 MR. SWEENEY: Good afternoon, Mr. Chairman. I'm
21 Steven Sweeney, Chairman of the Board and Chief Executive of
22 Boston Edison Company.
23 Ralph Bird, the Senior Vice President for Nuclear,
24 will speak for the company this afternoon but before he begins,
25 I want to confirm on behalf of the entire board of directors of

1 Boston Edison Company and our senior management of our
2 commitment to retaining the top people, to developing our
3 people to be among the best in the industry and to rising
4 standards of excellence in the operation of Pilgrim Nuclear
5 Power Station.
6 We have institutionalized that commitment in our
7 corporate goals and long-term plans. Both capital and expense
8 budgets allocate the necessary resources. The Board of
9 Directors has overseen changes we've made in nuclear
10 organization and has been involved in the process of decision-
11 making that we've gone through.
12 Besides being briefed by Ralph Bird at every Board
13 meeting, the Board has visited the site on a number of
14 occasions and conducted a final review and inspection on
15 September 21, 1988. On September 22, 1988, the Board
16 authorized us unanimously to seek our agreement for restart of
17 Pilgrim. Now, I'll ask Mr. Ralph Bird to continue on behalf of
18 the company.
19 CHAIRMAN ZECH: Thank you very much. You may
20 proceed.
21 MR. BIRD: Good afternoon. We're here today to tell
22 you why we believe we are ready to restart the Pilgrim Nuclear
23 Power Station and to seek your agreement. Our management team
24 is in place and I believe that in terms of structure,
25 experience and overall ability, it compares favorably with that

1 at other utilities.

2 The competence and effectiveness of our team has been
3 recognized by the integrated assessment team inspection report
4 and of the Advisory Committee on Reactor Safeguard's letter to
5 you. All of the key employees, section head and above, are
6 Boston Edison employees.

7 The NRC's Integrated Assessment Team inspection
8 confirmed the conclusion of our self-assessment that with the
9 completion of specified items, the Pilgrim plant is physically
10 ready for safe and reliable restart and for continued
11 operation.

12 Two restart items in the restart plan are open. Two
13 of the items determined to be necessary for restart by our
14 Management Oversight and Assessment Team in our Restart
15 Readiness Self-Assessment Report remain open. These items
16 involve updating a few drawings, some procedure validations,
17 system preoperability tests and a final certification of the
18 responsible managers to me that restart prerequisites are all
19 closed.

20 We expect to close these items by October 19th. The
21 NRC items required for restart are closed and the restart
22 commitments that we made as a result of the integrated
23 assessment team inspection are also closed.

24 Virtually all accessible areas, 90 percent of the
25 process buildings, are radiologically clean and we intend to

1 keep them that way. I have an additional slide which is not in
2 your hand-out to show where we stand as of today in our
3 prerequisite and startup procedure.
4 Surveillances and checks now in progress would lead
5 to shifting the mode switch to startup and to reactor
6 criticality on the 20th of October if you agree that we're
7 ready to restart Pilgrim.
8 We've expended considerable resources to improve the
9 material condition of the plant and we intend to keep it in
10 good shape. Since the completion of the last SALP period and
11 the NRC maintenance inspection No. 88-17, we have made a number
12 of maintenance improvements that have proven to be effective.
13 We implemented a revised work process which includes
14 planning checklists and we trained 545 people including the
15 managers on its use. We issued a greatly improved maintenance
16 manual. We implemented detailed travellers for our work
17 packages which improved work performance and made the audits of
18 the work easier.
19 We proceduralized, supervised reviews to ensure
20 thorough maintenance closeout and we assigned operations and
21 systems engineering to have the lead on prioritizing the work
22 to be done. We have added a Deputy Maintenance Section Manager
23 to the organization and we filled the position with an
24 individual who has 30 years of broad experience in this field.
25 We have expanded the maintenance organization by

1 transferring personnel from other areas and at the same time,
2 we have improved the supervisor to craft ratio. All
3 maintenance supervisory positions are now filled by Boston
4 Edison employees who have attended Supervisory Training before
5 assuming their responsibilities.
6 The duties that in the past prevented supervisors
7 from getting out in the field and supervising work have been
8 reassigned. We have improved the organization's ability to
9 integrate radiological and operational considerations by
10 assigning Health Physics and Senior Reactor Operator Qualified
11 People to assist in the maintenance planning.
12 Our recent assessments of the new work control
13 process have shown both the value of the process and its
14 acceptance by the work force. While we improved our
15 Maintenance Work Control Process recently, we also continued to
16 reduce the maintenance backlog. The number of open power block
17 maintenance requests has been reduced to 275 as of today which
18 is 125 less than our most recent goal of 400 and equates to a
19 3-week backlog of work.
20 By the way, our goal of 400 is more conservative than
21 the 500 that INPO recommends as an industry goal. New work is
22 reviewed and prioritized at the beginning of each workday by a
23 Committee chaired by the Chief Operating Engineer. The
24 Committee includes representatives of systems engineering,
25 maintenance, construction management, planning and outage

1 management and fire protection.

2 The work items are assigned to one of five priority
3 categories which range from priority one which is urgently
4 required work to correct an active limiting condition of
5 operation or some personnel safety hazard down to priority five
6 which is fill-in work.

7 In addition, emergency work items are processed
8 separately in accordance with the following restrictions.
9 Priority E may only be assigned by the nuclear watch engineer
10 who is the senior operator on shift or by the chief operating
11 engineer and can only be used when troubleshooting,
12 investigation, or repair must commence immediately and it can
13 only be used for work needed to directly or indirectly assure
14 public or employee health and safety and we use very, very few
15 of those categories of work requests.

16 We've also increased emphasis on radiological issues
17 throughout the organization and the expanded training and these
18 are showing clear and measurable benefits. Last spring we met
19 the goal to have 90 percent of the plant's process buildings
20 radiologically clean.

21 We've made the changes in attitudes, in training and
22 in work practices required to maintain that level of
23 cleanliness and it has become a source of pride for the
24 organization. The goal for total radiation exposure for our
25 people this year has been set at 390 man-rem which is 20

1 percent better than the industry boiling water reactor average
2 and it is less than the 1990 INPO industry goal.
3 We are pursuing that goal aggressively and we are on
4 track to meet it. There has been a sustained improvement in
5 the number of radiological currents reports issued despite
6 lowering the threshold for that report three times and we
7 continue to show progress in reducing the backlog of open RORs.
8 The operations, the radiological and the maintenance
9 sections, are communicating well in planning and in day to day
10 operations. There is health physics coverage on all of the
11 shifts and there is a representative from health physics at
12 each shift turnover in the control room.
13 People with backgrounds in operations and in health
14 physics have been assigned to the maintenance section also.
15 The plant manager, Roy Anderson, who has those groups with the
16 greatest range of activities in the process buildings reporting
17 to him now chairs the ALARA Committee which is responsible for
18 lowering the radiation exposure to as low as is reasonably
19 achievable.
20 We've also begun a long-term source reduction project
21 under Ed Wagner who has extensive experience in that area.
22 Substantial further reduction of radiological exposure will be
23 achieved through the use of a videodisc tour program which will
24 be completed in December of this year. This program will
25 consist of 65,000 photographs of plant spaces, systems and

1 equipment and be on a videodisc controlled by a personal
2 computer.
3 The program will be used primarily by radiological,
4 maintenance, planning and outage, training, engineering
5 systems, public information, operations and quality assurance.
6 To illustrate the benefits during the current outage, we spent
7 about 15 percent of our radiological exposure reviewing work
8 areas for interferences, locating inspection areas and in the
9 general familiarization with the work area.
10 Using this new program, we expect we can achieve
11 significant savings of man rem over the life of the plant
12 because these things can be done from outside of the plant by
13 reviewing the photographs.
14 Even though the last SALP rating for radiological
15 protection was a three, the improving trend was noted and many
16 accomplishments were cited. The company has a corporate
17 strategy to reduce exposure to radiation and we are allocating
18 the resources in our capital and expense budgets for
19 implementation as part of the long-term plan.
20 I also focus attention on radiological controls at
21 both large and small meetings of employees and I plan to
22 continue that. The IATI report and our restart assessment
23 readiness report have confirmed that we have built on our
24 progress.
25 The improvements have continued and our improvement

1 will be sustained over the long-term. The success of our
2 rigorous self-assessment was confirmed by the small number of
3 items found by INPO or by the IATI. We are absolutely
4 determined to avoid complacency or backsliding in any area.
5 We have made a commitment to extensive programs to
6 institutionalize continued progress towards rising standards of
7 excellence. Today I'll mention only a few of those which are
8 in areas that are keys to safe and reliable operation or which
9 have been a concern to Boston Edison or to the NRC in the past.
10 Our commitment to retain the best talent and to
11 develop our employees to be among the best in the industry will
12 continue. Because of the clearly demonstrated benefits, we
13 will maintain the program of self-assessment under the
14 Management Oversight Assessment Team which I chair. The
15 lessons learned from our self-assessments at various points
16 during the power ascension program will be incorporated into
17 our permanent programs.
18 The Radiological Action Plan and the Material
19 Condition Improvement Action Plan which we developed, are the
20 most comprehensive programs resulting from our self-assessments
21 and they have shown their importance to the organization.
22 However, we have covered these in past discussions, so today
23 I'd like to highlight a few of the many others which although
24 narrower in scope than the programs I just mentioned, combine
25 to be an important part of the basis for our continued

1 progress.

2 Engineering was strengthened by an original

3 assessment of the nuclear organization and engineering and

4 technical support has been given the highest possible SALP

5 rating ever since the NRC began evaluating this as a separate

6 category.

7 Within this area is a safety enhancement program

8 which is a Boston Edison initiative which emphasizes prevention

9 of core damage accidents. The program, which includes

10 equipment modifications and revised emergency operating

11 procedures, has placed Pilgrim at the forefront of the

12 technology.

13 Installation of all of the components in the safety

14 enhancement program has been completed including the Direct

15 Torus Vent. The vent will become operational during the power

16 ascension program.

17 All of the watch standers have been trained on the

18 new emergency operating procedures which have been revised

19 through revision four of the boiling water reactor owner's

20 group guidelines.

21 We have not finished reviewing the completed station

22 improvements against the newly-issued station blackout rule,

23 but we will of course meet the rule. Our preliminary

24 conclusion is that we have probably exceeded the general

25 requirements since we have extended DC battery capability and

1 we have installed a third backup diesel generator.

2 In the operations area, the past criticism of

3 operations was based on the fact that we had too few licensed

4 operators who worked too much overtime. The competence of the

5 operators was not in question. We have tripled the number of

6 licensed operators and we will be able to staff a 6-shift

7 rotation near the end of the power ascension and test program.

8 [Slide.]

9 MR. BIRD: To ensure that we continue to have plenty

10 of operators, classes leading to licenses for new reactor

11 operators and new senior reactor operators will begin in

12 January, 1989. The morale within the operations area is

13 improved. One senior reactor operator is leaving this year to

14 take an engineering job, and we intend to have enough operators

15 in the pipeline so that in the future, more operators can move

16 to other jobs without adversely affecting the operation.

17 [Slide.]

18 MR. BIRD: New and improved procedures to help

19 operators do their job include such things as formal

20 communications and uniforms which add to the professional

21 atmosphere. Our new state-of-the-art plant-specific simulator

22 has enhanced training. All watch standers have been trained on

23 the emergency operating procedures which, as I mentioned, have

24 been revised to the Revision 4, BWR Owner's Group Guidelines.

25 [Slide.]

1 MR. BIRD: The use of the simulator has also allowed
2 the operators to perform casualty drills that validate the
3 emergency operating procedures, as well as the drills that
4 validate other operating procedures for the plant. The
5 establishment of the Systems Engineering Division was a major
6 step toward improved plant reliability. Each major system now
7 has an owner assigned in the Systems Engineering Group.
8 Their programs include routine walk-downs of major
9 plant systems to identify and correct problems before failure
10 occurs, and routine trending of key system operating parameters
11 for early identification of any equipment degradations. The
12 system engineers provide in-depth root cause analysis of plant
13 events and equipment failures, and technical support of
14 maintenance activities to ensure that the repairs are effected.
15 It think that among the more important steps to
16 ensure future success are those that prepare people to move up
17 and to take on added responsibilities. This is a path that
18 starts with recruiting the best possible person for every job
19 and then providing training and opportunity. I feel a very
20 strong personal responsibility for recruiting, training, and
21 developing our people.
22 We have a first-rate group in Boston Edison's nuclear
23 organization and we will have the programs that they need to
24 succeed. We'll have a college degree program available to
25 operators and other personnel for enhancing professionalism,

1 for personal fulfillment and for future advancement. We are
2 developing expanded career development programs and planning
3 for key management and nuclear personnel rotations, backup and
4 so on.
5 We'll have more initial continuing development
6 training for managers. We have also implemented an improved
7 performance appraisal system which will improve our ability to
8 achieve accountability through all levels of the organization.
9 [Slide.]
10 MR. BIRD: On the subject of emergency preparedness,
11 in December, 1987, the NRC staff evaluated an exercise of the
12 on-site emergency plan and found it adequate to protect the
13 public health and safety. On October 1st of this year, we
14 implemented an enhanced on-site plan and emergency response
15 organization. I'd like to make it very clear here at the
16 outset that we believe that the off-site programs belong to the
17 Commonwealth and to the towns.
18 In my following remarks, I am not speaking for them.
19 Even though the off-site emergency preparedness is the
20 responsibility of the state and the local authorities, Boston
21 Edison has made a corporate committment to provide substantial
22 resources to assist those authorities in meeting federal
23 requirements.
24 To confirm that commitment, we have completed letters
25 of agreement with all of the communities involved for various

1 types of assistance. By the end of 1988, we will have
2 committed $15 million of support in off-site planning through
3 personnel, equipment and facilities. Our committment is
4 evident from our agreement to fund a civil defense staff
5 position in each town for the operating life of the plant.
6 [Slide.]
7 MR. BIRD: We believe that very substantial progress
8 has been made in upgrading the status of off-site emergency
9 preparedness around Pilgrim station. The progress to date has
10 been explicitly recognized by FEMA. The basic improvements
11 include renovated emergency response facilities, enhanced draft
12 emergency plans, new draft implementing procedures for those
13 plants, implementation of a new training program and a revised
14 and updated evacuation time estimate.
15 The current program addresses comprehensively and in
16 detail, the six areas of major concern identified by FEMA in
17 1987 as a result of their self-initiated review. The current
18 program is a substantial improvement, particularly since the
19 revised plans and procedures are being prepared by the same
20 people who will use them. We are firmly committed to
21 continuing to assist the Commonwealth and the towns in further
22 improving their off-site emergency preparedness program.
23 [Slide.]
24 MR. BIRD: Turning to the power ascension and test
25 program -- we have worked very hard to be ready to restart

1 Pilgrim. Restart is not the end of the process, but is the
2 beginning of our careful and deliberate power ascension and
3 test program which has been approved by the NRC staff. The
4 company has upgraded plant systems, expanded and improved its
5 nuclear organization and assisted the Commonwealth of
6 Massachusetts and the local towns to improve off-site emergency
7 plans.
8 We are taking the same careful, methodical approach
9 to powers ascension. There are five NRC approval points in the
10 power ascension program -- startup; 5 percent, 25; 50 and 75
11 percent power. At each level, operator training and related
12 assessments will be conducted. We will have an extra senior
13 reactor operator on each shift. He will be an assistant to the
14 watch engineer who is the senior person in charge of the shift.
15 His primary function will be out in the plant
16 overseeing and supervising the non-licensed operators. An
17 experienced senior management oversight team will provide
18 additional supervision at key points. Ascension from one power
19 level to the next, will require approval both by Boston Edison
20 management and by the NRC staff who will be on-site.
21 The power ascension program is based on a 4-shift
22 rotation. All of the operators and watch engineers assigned to
23 the shifts, will have had experience in running Pilgrim. They
24 are all seasoned operators. This period will be used to fully
25 qualify the new operators so that we will then be ready to move

1 into --

2 VOICE: Go out peacefully, or go out my way.

3 VOICE: I want that on the record. Could you give

4 this to the record, please. I'd like this on the record.

5 VOICE: You have to go, sir.

6 VOICE: Why?

7 VOICE: Come on, sir, let's go.

8 VOICE: I didn't say a word, for heaven's sakes.

9 CHAIRMAN ZECH: All right, let's proceed.

10 VOICE: Mr. Zech, I would like this on the record.

11 VOICE: You've got to go.

12 CHAIRMAN ZECH: Now, we can proceed.

13 MR. BIRD: To return to the power ascension program,

14 it's based on a 4-shift rotation. All the operators and watch

15 engineers assigned to the shifts have experience in running

16 Pilgrim. This period of power ascension will be used to fully

17 qualify the new operators so that those who are newly licensed

18 will then be ready to move into a 6-shift rotation for

19 continued operation. The program is scheduled to last about

20 four months, and it will confirm the readiness of the people

21 and the plant for continued safe and reliable operation.

22 To summarize, based on the results of our restart

23 plan and our restart readiness self-assessment, we conclude

24 that the necessary conditions for restart which were set forth

25 in Confirmatory Action Letter 8610, and the supplement to that

1 letter, have been satisfied, and that Pilgrim is ready to
2 proceed into the power ascension program.
3 Morale is high and it shows in many ways and has been
4 noted by all of our recent visitors. We are working to a
5 nuclear ethic that is common to the management team and that is
6 spreading through the organization. You can see it in the
7 professionalism of the operators and in the dedication of the
8 employees at every level. We are committed to making it easier
9 for people to do the right thing and they are responding very
10 well.
11 Therefore, on behalf of Boston Edison, I request an
12 affirmative vote on restart.
13 CHAIRMAN ZECH: Thank you very much. I appreciate
14 your presentation. Questions from my fellow Commissioners?
15 Commissioner Roberts?
16 COMMISSIONER ROBERTS: No.
17 CHAIRMAN ZECH: Commission Carr?
18 COMMISSIONER CARR: No.
19 CHAIRMAN ZECH: Mr. Rogers?
20 COMMISSIONER ROGERS: No, I don't think I have any.
21 CHAIRMAN ZECH: All right. Thank you very much.
22 We'll hear from the staff. Thank you very much.
23 CHAIRMAN ZECH: Mr. Stello, you may proceed.
24 MR. STELLO: Thank you, Mr. Chairman. As you are
25 aware, the Pilgrim Plant has been in extended shutdown since

1 April of 1986. The history of the poor performance at this
2 plant involving inadequacies in equipment and personnel
3 performance and inadequacies in management response to plant
4 problems had reached a point where we no longer had confidence
5 that the plant, as it was being operated at that time, could
6 continue to operate with an adequate assurance of safety.
7 At that time, the NRC launched a concerted effort to
8 assure that the Boston Edison Company fully addressed the
9 safety performance problems which had plagued it. In the
10 period of about 9 to 15 months after the plant was shut down
11 for safety reasons, a number of problems were identified
12 concerning emergency planning matters at the facility which led
13 to FEMA's August 1987 letter identifying six deficiencies in
14 emergency planning at Pilgrim and withdrawing the reasonable
15 assurance finding.
16 The staff has periodically briefed the Commission on
17 the status of plants for which agency-wide close monitoring has
18 been required. For some of these plants, the Commission has
19 indicated that it wishes to be kept informed of the results of
20 the staff review. For others like Pilgrim, the Commission has
21 stated it will make the decision regarding plant startup.
22 The staff is here ready to brief the Commission on
23 why it believes that the Pilgrim Plant is now ready to operate
24 safely. Over the two and a half year period since the plant
25 was shut down, the licensee has made various significant

1 improvements in plant systems, in operational capability, and
2 with the overall management organization and attention to
3 safety matters at the Pilgrim Plant.
4 Tom Murley, Director of NRR and previous Region I
5 Administrator, and Bill Russell, Region I Administrator today,
6 are here to discuss the steps taken to improve the operation
7 safety of the Pilgrim facility and the basis for our
8 conclusions that the plant is now ready to operate safely. In
9 short, the conditions which led to the plant shutdown have now
10 been rectified and the plant is ready for power ascension.
11 Bill will describe the power ascension program which
12 will be followed if restart is approved. This phased program
13 will require some four to six months to thoroughly evaluate
14 equipment and personnel performance. During this period, the
15 NRC will significantly increase its inspection activities,
16 including 24 hour coverage for selected evolutions. With
17 respect to emergency planning matters, there has also been
18 substantial progress in the improvement of emergency response
19 planning for this facility especially directed toward the
20 deficiencies identified by FEMA in its August 1987 letter.
21 I would note that the licensee and state and local
22 governments have been working cooperatively to resolve issues.
23 This will be discussed later by Tom and Ron Bellamy of Region
24 I. There clearly is more work to be done in connection with
25 emergency planning at Pilgrim. At this time, we do not have a

1 schedule for the resolution of all of these issues. The staff
2 believes that a carefully constructed power ascension program
3 can take place safely with emergency planning in its current
4 condition provided that there is continued progress toward
5 finalizing the resolution of outstanding emergency planning
6 matters.
7 The staff plans to come back to the Commission, if it
8 approves the power ascension phase, to brief the Commission on
9 operations during power ascension and to report to the
10 Commission on the progress being made on the emergency planning
11 during this period. Thank you, Mr. Chairman, and now I will
12 turn to Dr. Murley to begin his presentation.
13 CHAIRMAN ZECH: Thank you very much. You may
14 proceed.
15 MR. MURLEY: Thank you, Mr. Chairman. Boston Edison
16 has come a long way in the 30 months since the Pilgrim Plant
17 was shut down. It took them about a year and a half to fully
18 analyze their problems and get the management team in place
19 that could deal effectively with the problems. The past year
20 has seen a dramatic improvement in the condition of the plant
21 and the readiness of the plant staff to operate the plant
22 safely.
23 I inspected the plant myself several times in recent
24 months and the contrast is striking between its present
25 condition and the condition when I was a Regional Administrator

1 in Region I a few years ago. I believe, and Bill Russell and
2 the NRR and regional staffs join in this belief, that the
3 Pilgrim Plant is substantially safer now than it was at the
4 time of shutdown in April 1986.
5 There are several reasons for this view. They have
6 more licensed operators, they work less overtime, they are
7 better trained, and they have a new simulator to train on.
8 There is a greater depth of management experience from the
9 Executive Vice President down through the first level
10 supervisors. They have implemented improved emergency
11 operating procedures. They have improved safety attitudes
12 among the plant workers.
13 There is an improved material condition of the plant
14 equipment and they have implemented a safety enhancement
15 program that goes beyond current NRC requirements, particularly
16 for the Mark I containment. Boston Edison, on their own
17 initiative, has installed improvements that we are considering
18 as generic requirements for all BWR Mark I containments. In
19 some cases they have gone beyond even what we are considering
20 for generic improvements.
21 Now, Bill Russell will describe the comprehensive NRC
22 inspections and evaluations that were done in recent months and
23 I will return to a discussion of emergency preparedness issues
24 later.
25 MR. RUSSELL: Thank you, Mr. Murley, Mr. Chairman.

1 I'd like to cover the background a little bit in some detail to
2 set the stage, review again the restart criteria that we
3 discussed with you in June when we were here. I will describe
4 in-depth the staff assessment activities and the results of
5 those activities. I will cover the physical condition of plant
6 as it exists today and will discuss in-depth the power
7 ascension program and the plans for staff monitoring of that
8 program should you approve restart.
9 By way of background, the facility was shut down on
10 April 12, 1986 for technical reasons. The staff issued a
11 confirmatory action letter that as a result of continuing
12 hardware problems. We had had repetitive failures associated
13 with the RHR system, with inter-system leakage. This is
14 leakage from a high pressure reactor coolant system into the
15 lower pressure RHR system.
16 We had had spurious containment isolation and
17 failures of the outboard main steam isolation valve to open
18 when it should have. We required in this initial confirmation
19 of action letter that the licensee investigate these technical
20 problems, develop the root causes for them, and propose
21 corrective action satisfactory to the NRC staff prior to a
22 resumption of operation.
23 While that technical review was ongoing, the licensee
24 chose to enter into a refueling outage. Just prior to this, we
25 had been concerned about the management activities at the plant

1 and we documented in a SALP report some substantial management
2 concerns, particularly as they related to incomplete staffing,
3 the management view expressed to the staff on occasion that the
4 improvements to date were sufficient and further improvements
5 were not necessary, a reluctance to acknowledge problems at the
6 facility, and a dependence upon third parties to identify
7 problems to get them resolved.
8 Based upon these concerns, the staff supplemented the
9 confirmation of action letter to require the facility remain
10 shut down until these management issues had been adequately
11 addressed in addition to the technical issues. The supplement
12 required a formal assessment of the facility's readiness for
13 resumption of operations, a formal restart program with a
14 schedule for implementing that program including a power
15 ascension program, and it specifically included NRC review and
16 approval of those programs.
17 Approximately midway through the outage, at least
18 midway to where we are now, the staff issued a SALP report in
19 the period ended January of 1987. The report was issued
20 approximately in April. This report identified weak
21 performance in five areas. In the areas of radiological
22 controls, surveillance, fire protection, security, and most
23 importantly, assurance of quality.
24 This constituted the background of the performance at
25 the facility up until the time of early 1987. In August of

1 1987, we received the FEMA findings on emergency preparedness
2 which Dr. Murley has described. This was a self-initiated
3 review based upon planning deficiencies, not based upon an
4 exercise or identified exercise deficiencies.
5 Dr. Murley has described the safety enhancement
6 program which was initiated by the company in July of 1987 and
7 also during this period we have received formal petitions as
8 has been discussed by earlier presenters today regarding a
9 request for a formal hearing, issues associated with the Mark I
10 containment management issues, and emergency preparedness
11 issues.
12 I highlight these petitions principally because the
13 factual material on which the petitioners relied was
14 information that was coming from NRC inspection reports and
15 staff activities. These were matters which the staff was well
16 aware of and has been pursuing and in part are the principal
17 bases for the staff's conclusions which were documented in Dr.
18 Murley's response to those petitions. If I could have the next
19 slide, please.
20 [Slide.]
21 MR. RUSSELL: The restart criteria which we discussed
22 with you in June has been documented in several pieces of
23 correspondence, from you, Mr. Chairman, to members of the
24 Congress and others. The first criteria is a stable and
25 effective management and staff in place at the Pilgrim

1 facility. Secondly, the resolution of the technical issues
2 which I described which were the basis for the original
3 confirmation of action letter. Third, demonstrated improvement
4 in the SALP problem areas, and this is from the SALP period
5 that ended in January of 1987, regarding radiological controls,
6 fire protection, security, and assurance of quality.
7 We discussed in June the problems which were
8 identified in a maintenance team inspection and we will discuss
9 the status of that activity at this time and why the staff has
10 assurance, reasonable assurance that the maintenance programs
11 are well in hand and that the issues which we identified in May
12 have been resolved.
13 Finally, we have indicated that the staff must be
14 satisfied that certain emergency plan improvements have been
15 made. I'd like to turn now to describe how the staff has gone
16 about developing the necessary factual information to support
17 its conclusions in each of those areas.
18 [Slide.]
19 MR. RUSSELL: Our assessment activities have been
20 managed by a Pilgrim restart assessment panel which is made up
21 of senior SES managers from the Region and from the Office of
22 Nuclear Reactor Regulation. This panel has not only
23 coordinated all of the myriad of activities by the staff, the
24 licensing reviews, the inspection reviews, but they have also
25 played a very key role in reviewing and accepting documents and

1 proposals and plans from Boston Edison Company and most
2 importantly in a review and independent confirmation of the
3 adequacy of the information provided.
4 By way of example, I'd like to describe what the
5 inspection activity has been that we have augmented during the
6 period of time of this shutdown. In the year immediately
7 preceding the shutdown, the inspection activity was at a range
8 of approximately 3,500 direct inspection hours on-site per year
9 at the plant. In the early portion of the shutdown, that
10 increased to 5,400 hours per year.
11 During the period after January of 1987, the
12 resources that went into documenting the basis for the staff's
13 conclusion regarding the current SALP report involved
14 expenditure at the rate of about 7,800 per year. And in fact,
15 since the Integrated Assessment Team inspection and including
16 our estimates, what it would take for the power ascension
17 program should you approve it, we are looking at approximately
18 11,000 direct inspection hours per year.
19 This should be contrasted to a nominal rate of about
20 2,500 to 3,000 hours for a facility. The SALP report which we
21 have recently issued and reviewed with the company this summer
22 involved 9,600 hours of direct inspection activity. We
23 observed improvement in all areas with significant improvement
24 in four of the five areas that had previously been evaluated as
25 Category 3. One area remained Category 3, improving, but it is

1 significant in that we have high confidence in those findings
2 based upon the amount of inspection effort and evaluation
3 activity that went into the facility during that period.
4 Following the SALP report this summer and after
5 receiving the company's own self-assessment report and their
6 conclusions that the facility was ready, we conducted an
7 Integrated Assessment Team inspection. This involved 13
8 inspectors, approximately 1,100 hours of direct inspection
9 activity, and it was observed by two personnel for the
10 Commonwealth of Massachusetts.
11 In addition, we have held numerous meetings in the
12 vicinity and specifically meetings to solicit public and local
13 official input as it relates to the plans submitted by Boston
14 Edison Company, the staff review, the conduct of the
15 inspection, and identifying issues of concern to the local
16 people in the area.
17 MR. RUSSELL: Some specific examples of the kind of
18 issues that we followed up on based upon that public input or
19 associated with the questions regarding Capetown wire. The
20 management issues with respect to the span of control and the
21 effectiveness of the management team were raised in a public
22 meeting and questions regarding the lack of boiling water
23 reactor experience on the part of some of the new managers that
24 came into the company.
25 These issues have been followed up on and have been

1 addressed in our restart readiness assessment report.

2 In addition, we have had an advisory committee of

3 Reactor Safeguards Subcommittee meeting and full Committee

4 meeting and they have forwarded a letter to you, Mr. Chairman,

5 that indicates that the plant is ready for the resumption of

6 operation as it relates to management and technical issues and

7 recommends a plan as it relates to emergency preparedness

8 issues, that is, a staff plan.

9 I mentioned the Pilgrim restart assessment panel.

10 They had performed an independent review activity. They

11 completed their work and provided a report to me on the 26th of

12 September. Based upon the hearing that was conducted by

13 Senator Kennedy in the Plymouth area, I committed to make that

14 report public and to discuss with members of the public for the

15 reasons for the staff's conclusion. In addition, I have

16 physically inspected the plant. I have reviewed the status of

17 all the open items since that time and I have given serious

18 consideration to the comments that I received during that

19 meeting.

20 I have forwarded my recommendation to Dr. Murley and

21 I will review shortly with you the bases for that

22 recommendation.

23 I would like to shift now to Slide No. 5.

24 I am now going to cover the criteria which we have

25 articulated on several occasions as the basis for a restart

1 decision and give you the results of our inspection and
2 assessment activities to date.
3 In the first area of stable and effective management
4 being in place, the staff concludes that there is substantial
5 improvement in the depth of management experience within the
6 facility, from the Senior Vice President down to the first line
7 supervisors.
8 The organizational structure has been expanded and
9 significantly strengthened. There are extensive management
10 improvements and staff increases. Let me highlight some of
11 those management improvements.
12 The responsibilities and accountability of the
13 organization are now well defined and understood. Previously
14 there had been a series of various management directives,
15 documents issued. They had not been pulled together in one
16 place, and in the course of staff interviews and inspections we
17 found that these policies were not well understood at the first
18 line supervisor level. That has substantially been corrected.
19 They now have a mission, organization and policy manual which
20 has been promulgated, which in one place describes the policies
21 and the procedures and the expectations of the organization.
22 We have interviewed all levels of the organization
23 including first line supervisors and conclude that they
24 understand well what is expected.
25 The effectiveness of the management team has been

1 confirmed through the results of the integrated assessment team
2 inspection. The process was one of holding the company
3 accountable for taking the first "what is the condition of the
4 plant" and detailing in all aspects on the results of their own
5 review. We then went in and independently evaluated to see
6 what we found.
7 The results were very close in agreement. There were
8 a few areas where we had some differences in priority but these
9 were not substantial and we concluded that the management
10 organization policies and procedures were in place to support
11 safe operation of the facility.
12 In the second area, major technical issues which were
13 the cause of the original shutdown back in 1986. These matters
14 have been resolved to the extent that they can be with the
15 facility shut down. Clearly there needs to be retesting to
16 demonstrate that the corrective actions have been satisfactory
17 and these tests are planned during the early phases of the
18 power ascension program.
19 But more importantly, the modifications to the
20 facility, the upgrades, the safety enhancement program that Dr.
21 Murley described, the company has not stopped with the narrow
22 focus of the original technical matters which were addressed in
23 the shutdown but rather has broadly taken a look at what needs
24 to be done and I believe that the safety enhancement program
25 has gone well beyond, for example, just Mark-I issues and has

1 addressed a number of issues which have been of serious concern
2 to the staff and they are ahead of us in our generic programs
3 in many respects.
4 As it relates to improvement in the SALP problem
5 areas which were identified with the period that closed in
6 January of 1987, in the areas of fire protection, I would like
7 to by way of example identify what were the strengths and the
8 weaknesses that came out of the integrated assessment team
9 inspection such that you would be able to judge the bases for
10 the staff's conclusions.
11 In the area of fire protection, a notable strength is
12 the quality of the staff and the maintenance of the fire
13 protection equipment and the significant upgrades to fire
14 barriers in the maintenance program. We identified no
15 weaknesses in this area. In the area of security, the
16 contract guard force, there has been significant increases in
17 dedicated management activities to fire protection with
18 increased oversight of the guard force and the contractor.
19 This was identified as a significant strength. We did not
20 identify any weaknesses in that area.
21 As it relates to surveillance testing, we did
22 identify a question on the once per refueling outage
23 surveillances or this plant would have been shut down for 30
24 months and we felt it was appropriate to go back and re-look at
25 those surveillances to justify why some of those should not be

1 performed again. The licensee has agreed to do that and that
2 review is now completed by the licensee. It is the only NRC
3 item which is open from the Appendix M to the restart report on
4 which I updated for you last night, indicated there were three
5 items open at that time. We are now down to one, with all
6 licensee actions completed.
7 On that one item on the once per refueling outage
8 review is about 80 percent complete by the staff and we have
9 agreed with their findings thus far. We're just not complete
10 with our own review.
11 We did conclude that there was a significant
12 improvement in the area of planning for surveillance testing
13 and the coordination of surveillance testing. That was
14 identified as a significant strength.
15 In the area of assurance of quality, this is how well
16 does management manage the activities and oversee the
17 activities, we found a significant strength in the safety
18 review and audit committee, in the attitude throughout the
19 organization from the first-line supervisor right through to
20 the senior vice president and noteworthy communications
21 improvements between the quality assurance organization and the
22 operations organization.
23 We did identify some weaknesses associated with the
24 Operations Review Committee, the fact that they had multiple
25 action lists and they were not consolidated. It was not known

1 that everything was being covered and there were some questions
2 about tracking and follow-up on quality assurance reports.
3 Each of these items have been subsequently addressed to the
4 satisfaction of the staff.
5 The reason I highlight these is these are the results
6 of the inspection that also included direct observation by the
7 Commonwealth. It was an extensive inspection. Those observers
8 had access to all parts of inspection planning on the staff
9 caucuses, the results, and they participated in the exit
10 meeting with the company and had their opportunity to provide
11 additional comments on both the strengths and the weaknesses
12 and the findings of the inspection.
13 In one area that was rated as a SALP Category 3, that
14 is the area of radiological controls, we noted in the most
15 recent report that this was still a Category 3 but the 3 was
16 improving.
17 We looked into this area extensively during the
18 integrated assessment team inspection and concluded that it was
19 continuing to improve. What we were concerned about and why we
20 did not rate it as a Category 2 is we felt that the problems
21 that had existed in the past were so sufficient, so serious
22 that we wanted to see sustained improvement over a period of
23 time and we took the issue of looking at what types of
24 resources the staff would be applying because recall the
25 Category 3 rating relates to staff resources and how we budget

1 and plan for activities.

2 Subsequent even to the close of the integrated

3 assessment team inspection, we have had additional meetings

4 with the licensee on the area of radiological controls and I

5 think a recent example establishes a good benchmark for how far

6 they have come.

7 We had problems with a control rod drive mechanism

8 lower unit just over the past two or three weeks. This was an

9 activity which the company, planned, established a budget for

10 that was very ambitious and completed the work with a planned

11 budget of three man-rem for the total job with an actual

12 exposure of 2.8 man-rem. It was well planned and well managed,

13 so we are seeing that the recent work in the area of

14 radiological controls is being very well handled.

15 In the area of the maintenance program and the work-

16 back log, this was a significant concern that we had back in

17 June when we met with you. There have been significant

18 increases in organization and staffing. Those have been

19 described by Mr. Bird, the President of the company, and I

20 won't repeat those.

21 There are some areas I would like to highlight,

22 however. There are improved maintenance and post-work test

23 procedures. This was a concern that we had, that there was not

24 adequate tracking of the early maintenance work and the

25 necessary retest following that maintenance.

1 There is a much more thorough program, set of
2 procedures, on how work is managed both from the time you start
3 the work and you go out of service until the it is returned to
4 service and retested. This is the Traveler System as was
5 described by Mr. Bird.
6 Most importantly, though, the backlog of maintenance
7 actions has been reduced and they have prioritized all open
8 work. In one area, the area that is germane to the restart,
9 the total maintenance requests open for restart as of about
10 Noon today were 201 maintenance requests, 171 of those 201 are
11 complete and they are awaiting operation with the plant at
12 temperature and pressure such that the retest can be
13 accomplished, 27 are in the process of being closed out now
14 and there were three that were still working. This could be
15 completed later this afternoon or tomorrow, as it relates to
16 that work activity.
17 We have noted significantly improved communications
18 within the organization and exceptionally noteworthy control of
19 field activities. The supervisors are getting out in the
20 plants where the work is being accomplished.
21 In sum, the issues that were of concern to the staff
22 in June of 1988 and documented in the maintenance team
23 inspection report have been resolved and with respect to
24 hardware performance I believe that some of that is awaiting
25 testing during power ascension.

1 During the period of initial low power operation it
2 may be necessary to take a shutdown to correct leaks or resolve
3 retest items. Recall that we've had two and a half years of
4 maintenance activity and while we have high confidence in the
5 process and the programs in place now, we had concerns about
6 some of those activities in the past.
7 We have tested them and observed the testing to the
8 extent we can in a shutdown facility and in fact the licensee
9 has brought in a portable boiler -- I call it a shore boiler --
10 to test the reactor coolant injection system, HPCI and RCSI.
11 However, there is a limitation on how much you can test when
12 you are shut down and we are going to have to wait until the
13 plant is operational to complete some of that maintenance
14 retest.
15 I'd like to at this point discuss the program that we
16 have planned from the power ascension program. This is Slide
17 No. 7.
18 This program provides for a deliberate and controlled
19 return to power operation. It provides for special testing to
20 be accomplished, the testing that is necessary for the
21 maintenance items that I've just discussed.
22 In addition, we'll be conducting some unique tests.
23 We'll be performing a shutdown from outside the control room to
24 demonstrate conformance to the Appendix R requirements.
25 The program includes hold points as were described by

1 Mr. Bird, five -- initial criticality, 5 percent, 25 percent,
2 50, 75 and finally one at 100, which is the point at which the
3 staff will evaluate the total program and decide whether we can
4 release the company from the confirmation of action letter.
5 In this process are built in management assessment
6 points where there will be a senior management team that will
7 assess the quality of operations. After they have satisfied
8 themselves with the quality of operations at each plateau, that
9 special team will stand down and we will get an opportunity to
10 evaluate, then, operations by the normal control room
11 complement to determine ourselves that the facility is ready to
12 operate without increased or augmented coverage.
13 After observing both the results of the management
14 assessment activities by Boston Edison Company, our own
15 observations during the plateau, the steady state operation at
16 reduced power, the NRC staff through the restart assessment
17 panel process will make a recommendation to me regarding the
18 readiness of the plant to proceed to the next power level or
19 plateau.
20 This process will be followed for each of the hold
21 points. It is a very deliberative process and we will include
22 'round the clock coverage during the times of power changes
23 when significant testing and activity is ongoing.
24 As I indicated, we are expecting that this could
25 require as much as a thousand hours of direct inspection

1 activity per month for the next four to six months.

2 Let me describe what would be the situation for plant

3 status and the expected date that the plant would be ready for

4 criticality, should that decision be made by the Commission.

5 Presently we expect that most work items will be completed

6 either today or over the course of the weekend. Following

7 that, we anticipate that there are going to be approximately

8 four to five days of surveillance testing.

9 The critical testing is a loss-of-power test to

10 demonstrate the on-site AC power systems, and some load

11 shedding which are associated with modifications and once

12 priority surveillances that will be conducted. If that work

13 progresses well and the schedule has been going well, a day or

14 two later, we anticipate that the facility would have all

15 requirements complete and ready to proceed to criticality on

16 the 19th of October, such that criticality could occur as early

17 as the 20th, based upon plant, material, readiness and

18 documentation.

19 At this point, I'd like to turn the discussion back

20 to Dr. Murley who will provide some comments regarding the

21 status of emergency preparedness.

22 MR. MURLEY: I need to set the stage with some

23 background on emergency preparedness. The accident at Three

24 Mile Island II, taught us the importance of emergency

25 preparedness. It taught us that it's essential that decision-

1 makers have a range of options for protective actions, and that
2 they do not have to rely on an ad hoc response to an emergency
3 as was the case at Three Mile Island.
4 In the aftermath of TMI, the NRC added what is
5 essentially a fourth layer to our defense-in-depth safety
6 philosophy. To see where this fits into our regulatory fabric,
7 you recall the first level of our safety defense, is to require
8 high quality in the design and the construction and the
9 operation of the plant in the first place. The second level of
10 our safety defense is to assume that there may be failures of
11 equipment and to require that safety systems be installed to
12 shut down the plant and the chain reaction and keep the fuel
13 cooled.
14 Beyond that, we add yet a third level of safety
15 defense, and we postulate that, in spite of those safety
16 systems, that serious accidents can happen, and that we
17 nevertheless require a containment structure to prevent the
18 release of radioactivity. Now we have added yet a fourth level
19 to that safety defense. We postulate the possibility of an
20 off-site release in any event, and we provide that there be
21 emergency planning options for authorities to take to protect
22 the population in the vicinity of nuclear plants.
23 Thus we see that emergency planning is the last in a
24 series of barriers in the defense-in-depth safety philosophy to
25 protect the public. We have just described the actions taken

1 by Boston Edison over the past 30 months to strengthen their
2 operational staff, the safety equipment and their containment
3 structure to strengthen these first three lines of defense.
4 Now, I'll discuss what's been done to improve the fourth line
5 of defense which is emergency planning.
6 Our regulations do not require perfection in
7 emergency planning. In fact, it is not possible to guarantee
8 that emergency planning actions will protect all of the people
9 near a nuclear plant under all accident conditions and in all
10 weather conditions. Our regulations recognize this reality and
11 they only require a reasonable assurance finding that
12 protective actions can and will be taken in the event of an
13 emergency.
14 We recognize that emergency planning is a dynamic
15 process; that perfection is not attainable; that deficiencies
16 will occur from time to time, and that the deficiencies can be
17 corrected while the plant is operating. With this general
18 background on emergency planing, let me summarize the specific
19 case at Pilgrim. Our conclusions, I should add, at Pilgrim,
20 consider all of the information that's available to us today,
21 including the recent report from Secretary Barry.
22 The initial plans for Pilgrim were submitted to FEMA
23 by the Commonwealth of Massachusetts in June, 1981. There were
24 revisions required and they were resubmitted by the
25 Commonwealth in October of 1981. With those plans in place,

1 the first full scale exercise at Pilgrim was held in March,
2 1982. There were several deficiencies noted. They were
3 corrected and in September of 1982, FEMA issued an interim
4 finding that the state and the local plans were adequate.
5 In June of 1983, there was a second full-scale
6 exercise. I was the regional administrator at the time, and I
7 personally observed this exercise with the FEMA regional
8 director. I was in the control room. I was at the TSC. I was
9 at the emergency operations facility, and I saw the local
10 activities at the Plymouth Armory.
11 I watched the civil defense authorities, the police
12 authorities, the liaison with the Coast Guard -- all of the
13 normal emergency response facilities and activities that take
14 place. They had extensive communications equipment and one
15 could see the communications with the civil defense authorities
16 in Framingham.
17 There were several deficiencies noted at that
18 exercise. They were corrected and FEMA issued a finding of
19 adequacy at that time. In August of 1984, there was a drill or
20 a partial exercise. There was one deficiency found in that,
21 after which FEMA issued a finding of adequacy of state and
22 local plans. In 1985, a year later, FEMA wrote to
23 Massachusetts that nonetheless, there were several planning
24 problems that were unresolved and that the state did not seem
25 to making progress in corrective actions.

1 Later that year, in September of 1985, there was yet
2 another full-scale exercise in which four deficiencies were
3 noted. They had a remedial exercise a month later, October of
4 1985. The deficiencies were corrected and FEMA issued us a
5 finding of state and local response as adequate.
6 Six months after that then, in April of 1986, the
7 plant was shut down. In December of 1986, Secretary Barry from
8 the Commonwealth sent a report to NRC and FEMA describing
9 problems that Massachusetts saw with emergency plans near
10 Pilgrim. In August, 1987, FEMA sent to the NRC their report to
11 the NRC of their findings from a self-initiated review. These
12 have been discussed and will be discussed in more detail.
13 There were six major deficiencies that FEMA found.
14 They found that the off-site emergency preparedness
15 had deteriorated at the site and that they could no longer make
16 the finding that state and local plans were adequate. The
17 plant was shut down at the time, of course, and we concluded
18 that there was no need to take any enforcement action. Boston
19 Edison had been working with the state and local officials at
20 that time to improve the plans, and we could see that
21 improvements were already being made.
22 Now, the situation at Pilgrim is not unique. The NRC
23 oversees 108 operating plants at 72 different sites in the
24 country, in 33 different states. We have a great deal of
25 experience in working on emergency planning with FEMA and with

1 the 33 states with nuclear plants. Emergency planning is a
2 dynamic process. It's not uncommon for deficiencies to appear
3 in the plans or in the exercises.
4 For example, even today, at Duane Arnold site, FEMA
5 has notified the state of Iowa of deficiencies regarding
6 relocation centers, bus drivers and other matters. These
7 deficiencies are being corrected and there will be an exercise
8 later to verify those corrections. Our regulations provide us
9 with a range of enforcement options that we can take when
10 deficiencies are found.
11 In most cases, the deficiencies can readily be
12 corrected and observed in remedial exercises. In one case I
13 remind you that in 1982 and 1983 at the Indian Point site, one
14 of the counties in the emergency planning zone, refused to
15 participate altogether in emergency planning. FEMA could not
16 make an adequacy finding in that case. In that case, the state
17 of New York ultimately stepped in to compensate for the county.
18 The plants were permitted to operate while these
19 corrections were being made and while there was an exercise to
20 verify the compensatory action by the state. In the case of
21 Pilgrim, the staff judged the deficiencies identified by FEMA
22 were significant enough that we said that we would not permit
23 the plant to restart until improvements were made in the plans
24 and we observed some demonstration of those improvements.
25 In fact, there have been substantial improvements in

1 the off-site plans, and the NRC staff has observed the
2 demonstration of some key elements of the plans. We'll discuss
3 those details in a moment. Boston Edison, as you heard, has
4 spent $10 million already on improvements to the plans and
5 facilities in the local communities. They intend to spend
6 about $5 million more.
7 Nonetheless, we recognize that there is more work
8 that needs to be done before we can receive a FEMA finding of
9 adequacy. In some cases, Massachusetts wants to go beyond NRC
10 requirements. We don't object to that, of course, but it does
11 delay the state in finalizing the plans. The next steps are
12 that the state will have to submit final plans to FEMA. FEMA
13 must review them and approve them and schedule an exercise.
14 The state and the licensee and FEMA and the NRC then
15 must conduct the exercise. If there are any deficiencies, they
16 must be corrected. Finally, we would get a formal report from
17 FEMA to the NRC of the finding of adequacy. We estimate that it
18 would take about six months after Massachusetts submits the
19 final plans before we could receive such a formal FEMA finding.
20 In the meantime, the staff believes that we have
21 sufficient information to come to our own conclusions
22 concerning the significance of the outstanding issues, pending
23 completion of the formal FEMA process. The last full exercise,
24 as I mentioned, was in 1985. We have issued an exemption to
25 the regulation requiring a full participation exercise every

1 two years.

2 Of course, we cannot schedule an exercise until the

3 Commonwealth of Massachusetts submits revised plans to FEMA.

4 Ron Bellamy will now summarize the improvements that have been

5 made in the plans and the NRC observations of these

6 improvements.

7 CHAIRMAN ZECH: Thank you very much. You may

8 proceed.

9 MR. BELLAMY: Thank you, Mr. Chairman. I am the

10 regional branch chief with the responsibility for the review of

11 emergency preparedness issues. Next month will complete six

12 years that I have been charged with that responsibility. If

13 you'll turn to the next slide, the next slide will discuss the

14 status of emergency preparedness.

15 [Slide.]

16 MR. BELLAMY: Although emergency preparedness was not

17 an issue of the Pilgrim plant shutdown in April, 1986, the NRC

18 staff has continuously monitored the status of emergency

19 preparedness. The Federal Emergency Management Agency began

20 their self-initiated review in September of 1986, due to a lack

21 of progress toward resolution of document concerns. The FEMA

22 self-initiated review was issued in August 1987, and identified

23 six specific issues: the lack of evacuation plans for certain

24 public and private schools and daycare centers; the lack of a

25 reception center for people evacuating to the North; the lack

1 of identifiable shelters for the beach population; inadequate
2 planning for the evacuation of the special needs population;
3 inadequate planning for the evacuation of the transportation
4 dependent population and an overall lack of progress and
5 planning and apparent diminution in emergency preparedness.
6 This report was immediately transmitted to the Boston
7 Edison Company by the staff and a written plan for resolution
8 was received by the staff on September 17, 1987. Based on
9 these FEMA identified deficiencies, FEMA in its report,
10 withdrew its interim finding of adequacy for off-site emergency
11 preparedness and concluded that there was no longer adequate
12 assurance that public health and safety could be protected.
13 This previous finding of adequacy was based on plans and
14 procedures being in place, and demonstration of the
15 implementation during full-scale exercises.
16 In order to assess progress, the NRC staff has
17 reviewed local plans and procedures, discussed the issues with
18 FEMA Region I staff, Commonwealth officials, local town
19 emergency planning officials, local residents, and Boston
20 Edison representatives. We have attended numerous public
21 meetings in the area and have toured the area, with special
22 emphasis on the beaches and the local emergency operating
23 centers.
24 Considerable progress toward resolution of the issues
25 pertaining to the schools and daycare centers, the special

1 needs population and the transportation dependent population is
2 evidenced by the drafts of plans and implementing procedures
3 that have been prepared. Draft plans for all five communities
4 within the ten-mile emergency planning zone, as well as plans
5 for the two reception communities have been sent to the
6 Commonwealth and from the Commonwealth to FEMA for a technical
7 review.
8 Implementing procedures for three of the EPZ
9 communities and the two reception communities have also been
10 forwarded to the Commonwealth and of these, the procedures for
11 one of the EPZ communities and the two reception communities
12 have been forwarded to FEMA for a technical review. The
13 Massachusetts Civil Defense Agency Area II Plan, which covers
14 the area around Pilgrim, has been sent to FEMA for technical
15 review and work is progressing on the Commonwealth statewide
16 plans and procedures.
17 It is noted that the statewide plans and procedures
18 were demonstrated at full-scale exercise at Yankee Row in
19 April, 1988, and at Vermont Yankee in August, 1988. The
20 progress in generating revised plans and procedures is due to
21 the efforts of local officials, including Selectmen, town
22 managers, civil defense directors, police chiefs, fire chiefs,
23 department of government officials, school administrators,
24 nursing home administrators, hospital administrators, day care
25 center administrators, harbor masters, owners of private

1 buildings identified for use as shelters and members of the
2 general public working in concert with licensee employees.
3 As such, these individuals are thoroughly familiar
4 with the contents of these documents and could implement these
5 plans and procedures if necessary. There are five procedures
6 for two EPZ communities for Plymouth and Ducksberry that,
7 although prepared, have not yet been approved by the local
8 officials for forwarding to the Commonwealth for technical
9 review.
10 Although in draft, the revised plans and procedures
11 are in sufficiently final form that a training program,
12 approved by the Commonwealth, is being conducted. The NRC
13 staff has audited this training program, including the
14 individual lesson plans and staff from both Region I and NRR
15 have observed the training of bus and ambulance drivers from
16 companies providing transportation for school and daycare
17 centers, the special needs population, and the transportation-
18 dependent persons.
19 This training includes use of route maps and travel
20 on the actual routes to be used in an emergency. The staff has
21 audited six different training sessions and witnessed
22 implementation of the training for approximately 50
23 transportation providers, which is 25 percent of that training
24 that has already been conducted. These limited demonstrations
25 provide the staff with the basis to conclude that significant

1 progress has been made in improving the emergency plans and
2 procedures for schools and daycare centers and for the special
3 needs and transportation-dependent populations in the emergency
4 planning zone.
5 Regarding lack of a reception center for people
6 evacuating to the north, the Commonwealth has tentatively
7 designated a state-run facility in Wellsley as a northern
8 reception center and has conducted a feasibility study that
9 indicates the facility is feasible for use as a reception
10 center. Boston Edison has performed an analysis which
11 concludes that the two reception centers that are presently in
12 existence at Taunton and Bridgewater, with appropriate
13 renovations and additional equipment, have the capability to
14 support an evacuation from the emergency planning zone, yet
15 they are supporting the potential for a third center.
16 The Bridgewater State College facility is capable of
17 serving as a location for evacuees from the emergency planning
18 zone to assemble and lacks improvements and hardware for
19 monitoring of radioactive material to be able to monitor the 20
20 percent of those arriving at the reception center within 12
21 hours. These modifications could be completed in a short
22 timeframe, and by a short timeframe I mean approximately one
23 month after approval by the Commonwealth.
24 The reception center at the Taunton State Hospital is
25 an existing structure that needs modifications including

1 monitoring equipment that would take three to four months to
2 complete after approval by the Commonwealth. The Taunton Civil
3 Defense Director has documented his belief that he would use
4 portions of the facility in an emergency, even if the
5 renovations were not complete and he also stated that there are
6 no outstanding program issues that would interfere with
7 implementation of workable plans and procedures.
8 Regarding a lack of identifiable beach shelters for
9 the beach population, Boston Edison completed a shelter survey
10 and developed a shelter implementation program, including
11 shelter identification, letters of agreement with the providers
12 and shelter procedures. FEMA's position, which the NRC staff
13 supports, is that a range of protective actions are required
14 and that sheltering is only one protective action to be
15 considered and is not, in and of itself, a requirement.
16 Therefore, FEMA has removed this issue as a concern.
17 Nonetheless, a shelter program for the beach population is
18 continuing. The deficiency regarding an overall lack of
19 progress and support in emergency preparedness is being
20 resolved by the progress being made in correcting the other
21 specific FEMA-identified issues, including the development of
22 revised state plans.
23 I'd like to quickly summarize the information already
24 provided for the FEMA self-initiated deficiencies and the sub-
25 issues. The next slide.

1 [Slide.]

2 MR. BELLAMY: The next slide shows the status for
3 resolution of a school children concern and the third reception
4 center, and I have hard copies of this slide if you'd like to
5 see them.

6 CHAIRMAN ZECH: Yes. You'd better give us copies of
7 to explain it. Do you have that passed out for the audience or
8 not?

9 MR. RUSSELL: Mr. Chairman, this is an abbreviated
10 form of the materials that were available in the room when
11 people came in. It was in the memorandum that the staff has
12 forwarded to you.

13 CHAIRMAN ZECH: Well, explain it first.

14 MR. BELLAMY: This first slide shows the status for
15 resolution of the school children concern and the third
16 reception center. It is evident that the required information
17 has been included in the draft plans and procedures and that
18 approval by the Commonwealth is still required for other
19 issues.

20 Now by complete on this slide, I mean that if the
21 information was supposed to be included in the plans and
22 procedures, it is now in those draft plans and procedures.

23 [Slide.]

24 MR. BELLAMY: The next slide shows the status of
25 resolution for the beach sheltering issue and the concerns with

1 the mobility impaired. The shelter program is ongoing, even
2 though sheltering is not specifically required. The
3 information has, again, been provided in the draft plans and
4 procedures.
5 [Slide.]
6 MR. BELLAMY: The next slide shows the status for the
7 concerns for the transportation-dependent population and the
8 overall lack of progress. Once again, information has been
9 included in the draft plans and procedures with, again, certain
10 issues needing approval by the Commonwealth.
11 In conclusion, the NRC review of the status of
12 emergency preparedness of Pilgrim indicates that while all
13 tasks have not been completed, progress is being made toward
14 resolving the issues identified by FEMA in their August 1987
15 report. In particular, significant progress has been made in
16 improving the emergency plans and procedures for schools and
17 daycare centers and for the special needs and transportation-
18 dependent populations in the emergency planning zone.
19 The development of these plans and procedures, in
20 conjunction with the training program directed toward the
21 transportation providers responsible for evacuating school
22 children and the special needs and transportation-dependent
23 populations, indicates that the off-site response plans include
24 measures to protect these groups.
25 The NRC staff will continue to assess the progress

1 being made for fully resolving the FEMA-identified issues in
2 off-site emergency preparedness.
3 CHAIRMAN ZECH: Thank you very much.
4 MR. MURLEY: Our findings then on emergency
5 preparedness at Pilgrim are the following. First, based on the
6 several previous successful exercises at Pilgrim over the years
7 where FEMA has found the plans to be adequate, the
8 infrastructure to handle emergency preparedness is still
9 largely in place. Most of the local individuals who would take
10 part in emergency actions, that is civil defense authorities,
11 police authorities, school authorities, have been working
12 closely with Boston Edison in developing the revised plans, as
13 Dr. Bellamy described.
14 Therefore, it is logical to conclude that those
15 individuals can and would implement the revised plans, even
16 though the plans are still in draft and even though there has
17 not been a full scale exercise with the revised plans. Of the
18 six major deficiencies identified by FEMA, the NRC staff has
19 reviewed improvements in the plans and observed some
20 demonstrations of these improvements and we have concluded that
21 adequate progress has been made on the deficiencies.
22 Based on successful exercises at Yankee Rowe and at
23 Vermont Yankee within the past year, the Commonwealth of
24 Massachusetts has demonstrated capability to manage an
25 emergency at the state level. Based on the findings above

1 then, we believe there is reasonable assurance that even with
2 the lack of a recent exercise adequate protective actions can
3 and will be taken in the event of an emergency at the Pilgrim
4 Plant.
5 Furthermore, we expect that the status of emergency
6 preparedness will continue to improve in the coming weeks as
7 Massachusetts and local officials continue to finalize the
8 plans in preparation for a full scale exercise. In summary
9 then, our overall conclusions with regard to Pilgrim are that
10 the staff believes the Pilgrim Plant is substantially safer
11 today than at the time of the shutdown in April of 1986.
12 There are more licensed operators and they are better
13 trained, a greater depth of management experience. There are
14 improved emergency operating procedures in place. There are
15 improved safety attitudes among the plant workers. There are
16 improved conditions of plant equipment and there have been
17 safety enhancement improvements made. We further believe that
18 emergency preparedness is in better shape today than it was in
19 April 1986.
20 We believe that the Pilgrim Plant is ready to restart
21 and can and will be operated safely. We also believe, however,
22 that there must be continued progress in finalizing the
23 resolution of outstanding emergency preparedness issues. In
24 light of the extended shutdown of the plant, we will closely
25 observe the plant and the operating staff performance as well

1 as the expected continuing progress in emergency planning to
2 assure ourselves that our findings remain valid.
3 MR. STELLO: We are through, Mr. Chairman.
4 CHAIRMAN ZECH: All right, thank you very much.
5 Questions from my fellow Commissioners? Commissioner Roberts?
6 COMMISSIONER ROBERTS: Two quick ones. The increased
7 NRC oversight, if I've got the numbers the right, an average
8 plan would be 2,500 to 3,000 up to 11,000, where is that coming
9 from, out of Region I or from Washington?
10 MR. RUSSELL: It has principally thus far come from
11 Region I, although we have had substantial support from NRR and
12 also we have had commitments from NRR to provide additional
13 support from both NRR and/or the other regions to support the
14 augmented inspection activities during power ascension.
15 COMMISSIONER ROBERTS: Second question. Is Pilgrim
16 the only Mark I BWR to affect the torus venting?
17 MR. RUSSELL: No, sir. There are other facilities
18 which have that capability, but not hardened. That has been in
19 existence since Revision 2 of the Emergency Operating
20 Procedures for General Electric and the change in this instance
21 is piping systems which are designed to handle the elevated
22 pressure rather than using installed duct work associated with
23 standby gas treatment systems, which would likely fail under
24 the increased pressures. Nine Mile Point 1, for example, has a
25 hardened vent that is similar. Peach Bottom has a venting

1 capability. Some vent paths are capable of handling the higher
2 pressures.
3 This is one that is designed specifically for that
4 purpose. It does include a rupture disk in the design. So
5 even though it is a vent, it would not be used until you got to
6 elevated pressure so that there is not a potential for an
7 inadvertent release through that path.
8 COMMISSIONER ROBERTS: Thank you. That's all I have.
9 MR. STELLO: I might add, Commissioner Roberts, that
10 that's the best one we've seen.
11 CHAIRMAN ZECH: Mr. Carr?
12 COMMISSIONER CARR: Yes. I would like to ask about
13 the Area 2 state plan. You said it was submitted to FEMA for a
14 technical review. My understanding is it was just going down
15 there for information and comment rather than for any official
16 review. Is that right?
17 MR. BELLAMY: Sir, I think that's a term that we've
18 used a great deal over the last couple of months in our
19 discussions with both FEMA and the Commonwealth of
20 Massachusetts.
21 COMMISSIONER CARR: It wasn't down there for
22 approval, I guess, is what I'm told.
23 MR. BELLAMY: The plans and procedures and the
24 Massachusetts Civil Defense Agency Area 2 plan have been
25 forwarded with documentation from Massachusetts Civil Defense

1 Agency to FEMA for what they term a technical review. It does
2 not imply that the Commonwealth has approved those plans and
3 that caveat is in each transmittal letter.
4 CHAIRMAN ZECH: Commissioner Rogers.
5 COMMISSIONER ROGERS: Well, I've heard a number of
6 presentations here today, people from Massachusetts and people
7 from the staff and we've been asked to consider them all very
8 carefully and to weigh them in making a decision. I'm trying
9 to sort out in my own mind whether I'm hearing the same things
10 from everybody.
11 I heard that there are no plans for dealing with an
12 emergency at Pilgrim in place and that none of the local
13 agencies are ready to deal with any of this. I first wonder
14 whether Massachusetts seems to be in that happy circumstance
15 that it never has any natural disasters or it can anticipate no
16 natural disasters and if it does face the reality of those, how
17 does it do it if there are no plans in place.
18 I wonder, Dr. Bellamy, if you could just say a few
19 words to try to put into some context your views and statements
20 with respect to the cooperation of local officials and their
21 ability to deal with an emergency plan with the statements that
22 we heard from other folks from Massachusetts earlier before the
23 NRC and licensee presentations.
24 MR. BELLAMY: Yes, Mr. Commissioner, I'd be glad to.
25 I think the caveat that you heard earlier today a number of

1 times that there are no plans and procedures in place
2 specifically implies or specifically states that the
3 Commonwealth has not officially approved those plans and
4 procedures and sent them to FEMA with that approval and until
5 the Commonwealth gives those plants and procedures that
6 official approval, they will continue to state that there are
7 no plans and procedures in place.
8 I have been intimately involved in this review for
9 six years. As I've indicated, the last three years have been -
10 - a lot of time spent on Pilgrim. I have personally met with
11 some of the local planning officials in the Plymouth area. I
12 have toured the Duxbury beaches. I have visited the local
13 emergency operating centers and those facilities are there and
14 they are ready to be used in an emergency.
15 The people that are generating the procedures and the
16 people that have generated the plans are the specific
17 individuals, the local emergency planning officials, the select
18 men, the mayors, fire chiefs, the civil defense directors who
19 would be charged to use those plans and procedures in the event
20 of an emergency.
21 So, they are aware of the information in those
22 procedures and would be prepared to use them if necessary.
23 COMMISSIONER CARR: Do they have copies of them?
24 MR. BELLAMY: The individuals who have been preparing
25 procedures at the administration level -- yes, sir. They do.

1 COMMISSIONER ROGERS: Just with respect to another
2 statement that was made, I guess by Senator Kennedy, Dr.
3 Murley, I wonder if you could comment on his statement that you
4 had made a commitment that emergency preparation plans
5 including a demonstration exercise of such plans would be held
6 before restart.
7 MR. MURLEY: Yes. That was -- what he was referring
8 to was in my testimony in Plymouth in January of this year.
9 What I said was that we would expect to see progress in
10 improving the plans and that we would expect to have -- to
11 observe a limited demonstration of those improvements.
12 What Dr. Bellamy described -- what his staff and my
13 staff have done over the last I believe month or two have been
14 in fact the demonstrations that we mentioned. The school bus
15 drivers and that sort of activity.
16 COMMISSIONER ROGERS: In other words, you feel you
17 have --
18 MR. MURLEY: We did not say -- we never had an
19 intention that there would be an exercise or a limited
20 exercise. Of course, that can only happen once the state
21 submits plans to FEMA and that gets scheduled. We did have in
22 mind and we have completed our observation to our satisfaction
23 that the key elements necessary to implement this plan, that
24 is, bus drivers and routes and ambulance drivers have taken
25 place and we have observed that.

1 COMMISSIONER ROGERS: Is that in fact what you were
2 talking about when you made that statement?
3 MR. MURLEY: Absolutely, yes.
4 MR. RUSSELL: Mr. Commissioner, if I could expand on
5 that because I had a meeting in Region I with various
6 representatives from the Commonwealth including the Governor's
7 office, the legislature, the Attorney General and others and I
8 described quite clearly at that meeting that there are a range
9 of ways that the staff can evaluate deficiencies. It can be
10 from a tabletop exercise. It can be from a review of the
11 plans. It can be from a limited demonstration with staff
12 members riding buses with bus drivers.
13 So, we made it quite clear in each case that the
14 standard we would use for judging is that which is necessary
15 for the staff to get the information it needs to reach its
16 conclusion. In each case, the Commonwealth has taken the
17 position that they, the Commonwealth, would only be satisfied
18 with a full-scale exercise.
19 COMMISSIONER ROGERS: I think I heard something that
20 I'd like you to repeat just once again, Dr. Murley, if you
21 could. Did I hear you say correctly, emergency procedures are
22 in better shape now than they were in 1986?
23 MR. MURLEY: That is our conclusion. Yes.
24 CHAIRMAN ZECH: Dr. Bellamy, it sounds to me like
25 from what you're telling us is that you've received a fair

1 amount of cooperation from the state and local officials; is
2 that correct?
3 MR. BELLAMY: Mr. Chairman, the cooperation that I
4 have received is in the lines of making sure that I'm aware of
5 the status of the information and the cooperation in making
6 sure that I know exactly who has done what, what plans and
7 procedures have been written, where they stand in the review
8 and the fact that they are going to FEMA now for a technical
9 review without the --
10 CHAIRMAN ZECH: But you've had a fair amount of
11 interface with the local officials.
12 MR. BELLAMY: Yes, sir.
13 CHAIRMAN ZECH: And they seem to be conversing with
14 you and working with you; is that correct?
15 MR. BELLAMY: Pretty much so. I have a number of the
16 public that call me quite regularly, that are here today and we
17 converse probably on a daily basis. Yes, sir.
18 CHAIRMAN ZECH: Do you have any difficulty as far as
19 the local officials are concerned with articulating the federal
20 responsibilities as they might be in working with the state and
21 local responsibilities?
22 MR. BELLAMY: No, sir. There's been no problem in
23 that area. We have held a number of public meetings up in that
24 area and I have in any number of occasions been up in front of
25 a large number of members of the public and elected officials

1 to make sure that they understand the responsibilities of the
2 federal community, the Nuclear Regulatory Commission, the
3 Commonwealth and the local officials. Some of these meetings
4 have dragged on till 1:30 in the morning, sir.
5 CHAIRMAN ZECH: Could you talk to me a little bit
6 about the training and perhaps when do you think that the
7 training might be completed and could you talk a little bit
8 about any other plans and procedures that should be exercised
9 at least to the extent that you might have satisfaction that in
10 a real emergency, the public health and safety would be
11 protected.
12 MR. BELLAMY: Yes, sir. There are approximately 300
13 as a round number of required implementing procedures and as I
14 indicated, there are five of those procedures that have yet to
15 be sent to the Commonwealth with any type of approval from the
16 local officials. These procedures deal specifically with the
17 schoolchildren and some of the special needs populations in
18 Plymouth which is the town that the Pilgrim Station is in and
19 in Duxbury which is also in the Emergency Planning Zone.
20 The -- to use the term, training is complete, I think
21 is misleading. You will never complete the training for
22 emergency preparedness. Emergency preparedness is a living
23 area and you always will be training new people and you always
24 have new people becoming involved in the process.
25 I would think that by the end of the year, there will

1 be the overwhelming majority of the 6,000 people trained that
2 have been specified in the Commonwealth-approved training
3 program.
4 CHAIRMAN ZECH: How about some of these areas that
5 are difficult to evacuate in the area. Could you discuss that
6 a little bit?
7 MR. BELLAMY: Yes, sir. I think the two specific
8 concerns that come up -- one is for the schoolchildren and I'd
9 like to comment on that first. The draft plans and
10 implementing procedures now indicate that at the alert stage of
11 a nuclear emergency, they will begin to assemble the necessary
12 transportation for evacuation of the schoolchildren and at the
13 site area emergency stage, they would implement that
14 evacuation.
15 That's a much necessary and needed and far-reaching
16 improvement over what's been seen in the past whereas you could
17 wait until that general emergency stage to actually consider
18 that evacuation. The schoolchildren will be moved out long
19 before that stage.
20 The beach population area -- I have toured that beach
21 population -- it is required to get on and off that beach with
22 a four-wheel drive vehicle. You could not take your car on it.
23 So, there is some limited access. There are a fair number of
24 permits that are issued to those four-wheel drive vehicles.
25 The number is in the several thousands and they have

1 made sure that the plans and procedures indicate that those
2 beaches will be closed at an early stage so that you would not
3 put more people on those beaches if there is any type of event
4 at the Pilgrim Station.
5 COMMISSIONER CARR: Do they overnight on those
6 beaches?
7 MR. BELLAMY: No, sir. They do not.
8 COMMISSIONER CARR: So they must clear out between
9 high tides.
10 MR. BELLAMY: The high tide issue is for a very small
11 section of that beach and there are approximately 2,000 to
12 4,000 people at the most that would be there during a bright,
13 sunny, summer weekend.
14 COMMISSIONER CARR: No, but I mean if they can't stay
15 overnight, it's only twelve hours between low tides. They must
16 come off in 12 hours.
17 MR. BELLAMY: The low tide issue is not for every
18 tide. That is only for flood tide type conditions. So, if you
19 got the perception from some of our earlier speakers that every
20 twelve hours that beach is isolated, I think that's a
21 misconception.
22 COMMISSIONER CARR: Well, even if it is shorter than
23 that, that would be the longest if they have to clear out by
24 dark.
25 MR. BELLAMY: Yes, sir, and those beaches are -- only

1 approximately four hours a month.

2 MR. MURLEY: Mr. Chairman, there is one thing that I

3 would like to add that might help to clarify. The deficiencies

4 that were found by FEMA were planning type deficiencies, not

5 execution deficiencies. Generally, as I said, there have been

6 many exercises up there, both full and partial. I mentioned

7 that I personally observed one.

8 The authorities know how to do their job. Bus

9 drivers know how to drive buses. Ambulance drivers know how to

10 drive ambulances. The problems have been that not all the

11 places were accounted for in the plans that they had to go to

12 and so forth. That is what we have been focusing on, to make

13 sure that those plans are in draft form have been updated.

14 CHAIRMAN ZECH: All right. To --

15 A VOICE: Mr. Chairman.

16 CHAIRMAN ZECH: Dr. Bellamy.

17 A VOICE: Mr. Chairman.

18 CHAIRMAN ZECH: Dr. Bellamy.

19 A VOICE: I wish to challenge that this presentation

20 has been made, and it's full of half-truths. I'm not going to

21 stand here and listen to this, Mr. Chairman.

22 CHAIRMAN ZECH: You don't have to stand here.

23 Dr. Bellamy, you have told us that you believe they

24 have made considerable progress and there has been a fair

25 amount of interface, at least I would consider a lot of good

1 working relationship between you and the people that are doing
2 the job in that area; is that correct?
3 MR. BELLAMY: Yes, sir; it is.
4 CHAIRMAN ZECH: On the other hand, how long would it
5 take you do you think or how much time would we need to make
6 the progress that perhaps would be necessary for a little more
7 confidence that all of the emergency planning procedures could
8 be satisfied and in your interfaces, can you give us any
9 estimate of how long it would be before the state, for example,
10 would be satisfied that their procedures are in place to the
11 point where they could submit them to FEMA and we would have
12 what I would term a closure on this? Can you give any estimate
13 at all?
14 MR. STELLO: Mr. Chairman, we talked about the issue
15 of the amount of time, the schedule it will take to complete
16 it. In my opening comments I said we talked about whether we
17 could make that estimate. We can't. We don't have that
18 schedule. Dr. Murley has indicated that once the plans have
19 been submitted to FEMA, our estimate, with no extra effort, in
20 order to get the plans reviewed, the exercise planned for and
21 conducted, would be about six months. How long it will be
22 before the Commonwealth will submit the plans, Dr. Murley has
23 indicated in our conversations when I have asked the question
24 that he has been unable to get that schedule. We will continue
25 to try to get it. The candid answers, we don't know.

1 COMMISSIONER CARR: Six months after submission of
2 the plans by the state before the exercise could be scheduled?
3 MR. STELLO: Without doing anything unusual. I think
4 if we tried, we could do better.
5 COMMISSIONER CARR: Normal.
6 MR. RUSSELL: I might point out, Mr. Chairman, that
7 issue has been requested several times in correspondence from
8 FEMA to the Commonwealth requesting the schedule and the
9 Commonwealth has not responded to that. We specifically
10 requested that of the Commonwealth on the October 5th meeting
11 and they would not give us a schedule at that time as to when
12 they would be willing to commit to submitting plans.
13 CHAIRMAN ZECH: Are you telling us, is it the staff's
14 conclusion that in your considered opinion that the Pilgrim
15 plant is ready to re-start in view of what we have heard
16 regarding emergency planning and all other issues?
17 MR. STELLO: Yes, sir.
18 CHAIRMAN ZECH: Any other comments from my fellow
19 Commissioners?
20 [No response.]
21 CHAIRMAN ZECH: Let me just say first that I would
22 like to thank the Boston Edison Company for their participation
23 here today and for their addressing these issues over the past
24 months and years. It looks like progress has been made,
25 significant efforts have gone into it, management efforts as

1 well as equipment improvements. I'd also like to commend the
2 staff for their very close and extensive work in this area on
3 the Pilgrim plant. I know an awful lot of effort has gone into
4 it, in Region I as well as Headquarters.
5 I believe that the earlier presentations we heard
6 today are important for us to consider, too. Certainly it
7 would appear from what we have heard I believe that protection
8 of the public health and safety at the Pilgrim plant has been
9 substantially enhanced by the corrective actions that have been
10 taken since the plant was shut down.
11 I'd also like to commend the continuing efforts of
12 the state and local officials for their work especially in the
13 area of emergency plans for the Pilgrim facility. The states'
14 ability to participate in and execute emergency planning
15 responsibilities has been demonstrated repeatedly at various
16 nuclear facilities within and bordering the State of
17 Massachusetts.
18 I would encourage continued efforts of the state and
19 local governments in order to complete the work on the proposed
20 improvements to the Massachusetts' portion of the program
21 emergency plans.
22 I would like to thank Senator Kennedy, Senator Kerry
23 for his efforts to be here today also, Lieutenant Governor
24 Murphy for coming to appear before us today as well as
25 Representative Studds.

1 Frankly, from what I've heard today and given the
2 information we have heard, I would propose to my fellow
3 Commissioners that we not make a re-start vote today but I
4 would ask my fellow Commissioners to carefully consider all
5 that has been said towards reaching a conclusion considering
6 re-start of the Pilgrim facility. I hope we can come to a
7 timely conclusion.
8 On the other hand, I do believe we need time to
9 reflect on what we have heard today and perhaps a little more
10 time to make more progress to enhance what we have done already
11 towards emergency planning.
12 The Commission does indeed have to have the
13 confidence that emergency plans could be executed if necessary.
14 I'd ask my fellow Commissioners if they would agree
15 with me that we not hold a vote today. Any opposed to that?
16 [Commissioners nodding in agreement.]
17 CHAIRMAN ZECH: I see none opposed. The decision is
18 that we not have a re-start vote today. I would ask Boston
19 Edison, the state and local officials with the involvement of
20 the NRC staff and FEMA as necessary, I would encourage you and
21 commend you to continue working together on this emergency
22 planning issue at the Pilgrim site so that the Commission can
23 be confident that we will be making a proper decision. We need
24 time to reflect on this. That is the decision of the
25 Commission today. I would ask those who are involved in this

1 very important matter to continue their efforts and in the
2 meantime the Commission will reflect on this issue and we will
3 expect to be hearing from the staff as progress continues in
4 the future.
5 Anything else to come before us?
6 [No response.]
7 CHAIRMAN ZECH: If not, we stand adjourned. Thank
8 you very much.
9 [Whereupon, the meeting was adjourned.]
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10/14/88

SCHEDULING NOTES

TITLE: DISCUSSION/POSSIBLE VOTE ON PILGRIM RESTART

SCHEDULED: 2:00 P.M., FRIDAY, OCTOBER 14, 1988 (OPEN)

DURATION: APPROX 1-1/2 HRS

PARTICIPANTS: U.S. SENATE* — 40 MINS

- SENATOR EDWARD M. KENNEDY (MA)
- SENATOR JOHN F. KERRY (MA)

STATE GOVERNORS

- LIEUTENANT GOVENOR EVELYN MURPHY (MA)

HOUSE OF REPRESENTATIVES

- CONGRESSMAN GERRY E. STUDDS (MA)

BOSTON EDISON COMPANY

- STEVEN J. SWEENEY, CHAIRMAN AND CHIEF EXECUTIVE OFFICER — 5 MINS
- RALPH G. BIRD, SENIOR VICE PRESIDENT, NUCLEAR — 25 MINS

NRC

- VICTOR STELLO — 5 MINS
- THOMAS MURLEY — 40 MINS
- WILLIAM RUSSELL
- SAM COLLINS

* ORDER OF PRESENTATIONS MAY VARY DEPENDING ON ARRIVAL TIME OF SPEAKERS.

PRESENTATION TO THE COMMISSIONERS
UNITED STATES NUCLEAR REGULATORY COMMISSION

by

BOSTON EDISON COMPANY

STEPHEN J. SWEENEY, CEO and
Chairman of the Board

RALPH G. BIRD, Senior Vice
President -- Nuclear

October 14, 1988

BOSTON EDISON

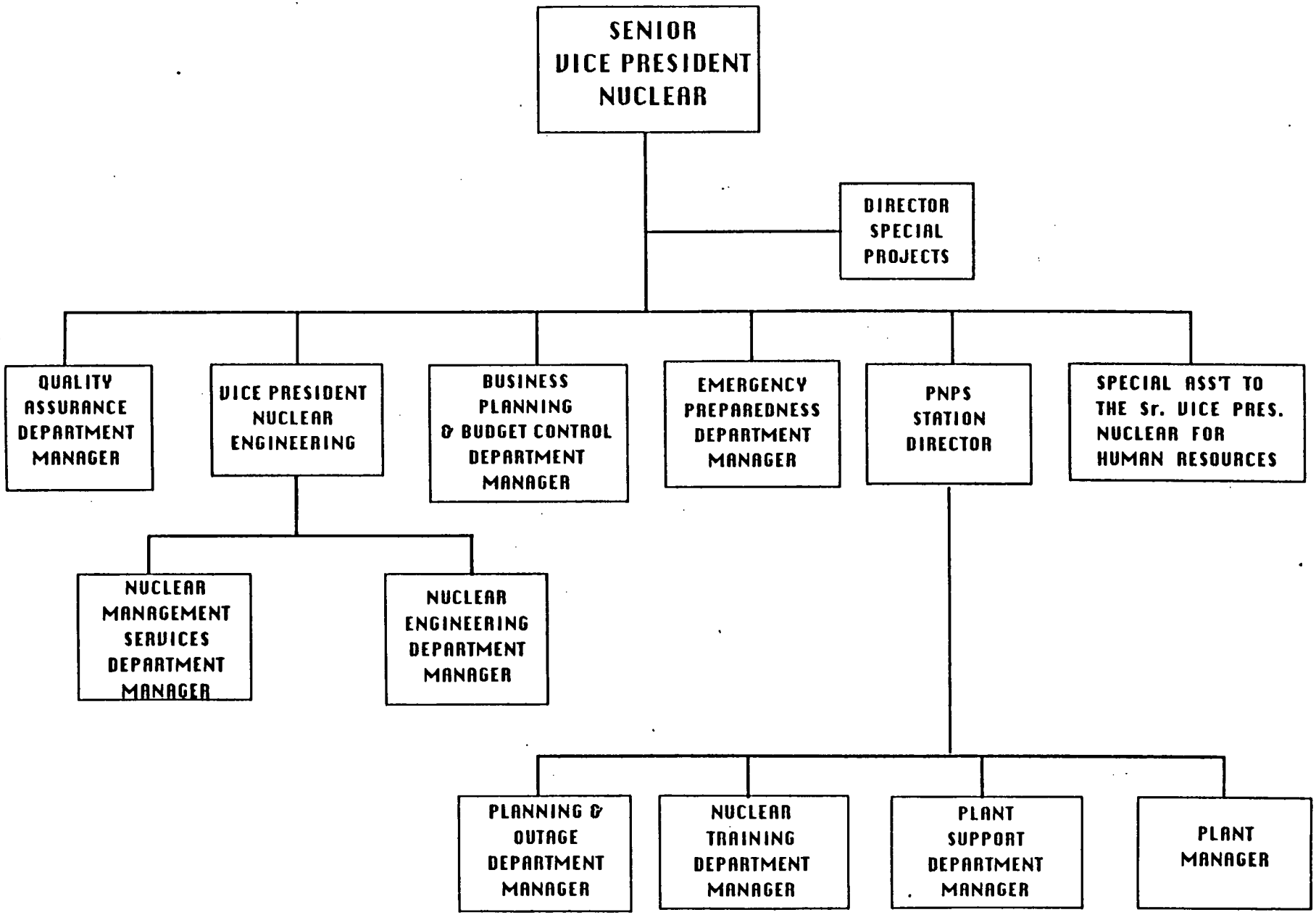
Pilgrim Station Restart Resolution

Board of Directors

September 22, 1988

NOW, THEREFORE, BE IT RESOLVED, that the management of the Company is hereby authorized to request the Nuclear Regulatory Commission to vote its agreement that Pilgrim Station is ready to restart.

NUCLEAR ORGANIZATION CHART



PLANT STATUS

RESTART PLAN ITEMS

MO&AT RESTART ITEMS

NRC OPEN RESTART ITEMS

IATI RESTART COMMITMENTS

PLANT 90% RADIOLOGICALLY CLEAN

MAINTENANCE IMPROVEMENTS

REVISED WORK CONTROL PROCESS

IMPROVED MAINTENANCE MANUAL

DETAILED WORK TRAVELERS

PROCEDURALIZED SUPERVISOR REVIEW

OPERATIONS AND SYSTEMS ENGINEERING LEAD ON PRIORITIZING WORK

RADIOLOGICAL CONTROLS

90% CLEAN

LOWER MAN-REM GOAL: 390

DECREASED RORS

PLANT MANAGER IN CHARGE OF ALARA

SOURCE TERM REDUCTION PROJECT

INTERACTIVE SURROGATE TOUR

MAINTAINING THE POSITIVE TREND

COMMITMENT TO RISING STANDARDS OF EXCELLENCE

EMPLOYEE RECRUITMENT AND DEVELOPMENT

CONTINUED RIGOROUS SELF-ASSESSMENT

SAFETY ENHANCEMENT PROGRAM

EMPHASIZE PREVENTION OF CORE DAMAGE

EQUIPMENT MODIFICATIONS

REVISE EOPs TO REV. 4 BWR GUIDELINES

OPERATIONAL READINESS

LICENSED OPERATORS TRIPLED SINCE 1986

SIX-SHIFT ROTATION AFTER POWER ASCENSION

NO OPERATOR TURNOVER THIS YEAR

ENHANCED PROFESSIONALISM

SIMULATOR ENHANCED TRAINING

SYSTEMS ENGINEERING DIVISION

EARLY PROBLEM IDENTIFICATION

ROOT-CAUSE ANALYSIS

TECHNICAL SUPPORT OF MAINTENANCE

TRAINING AND DEVELOPMENT

DEGREE PROGRAMS

CAREER DEVELOPMENT

IMPROVED PERFORMANCE APPRAISAL

MANAGEMENT DEVELOPMENT TRAINING

STATUS OF EMERGENCY PREPAREDNESS for PILGRIM NUCLEAR POWER STATION

GENERAL OVERVIEW

FEMA SIR ISSUES

POWER ASCENSION AND TEST PROGRAM

CAREFUL, METHODICAL APPROACH

NRC APPROVAL POINTS AT 5 POWER LEVELS

OPERATOR TRAINING

MANAGEMENT OVERSIGHT

CONCLUSION

PILGRIM IS READY FOR RESTART

CERTIFICATE OF TRANSCRIBER

This is to certify that the attached events of a meeting of the U.S. Nuclear Regulatory Commission entitled:

TITLE OF MEETING: DISCUSSION/POSSIBLE VOTE ON PILGRIM RESTART

PLACE OF MEETING: Washington, D.C.

DATE OF MEETING: FRIDAY, OCTOBER 14, 1988

were transcribed by me. I further certify that said transcription is accurate and complete, to the best of my ability, and that the transcript is a true and accurate record of the foregoing events.

John Trowbridge

Ann Riley & Associates, Ltd.

HANDOUTS

1. Scheduling Notes
2. Boston Edison Company viewgraphs
3. NRC staff viewgraphs
4. NRC Staff Summary of the Status of Pilgrim Offsite Emergency Planning Issues

ATTACHMENTS

1. Senator Kennedy's viewgraphs
2. Statement by Senator Kerry
3. Slides submitted for the record by David L. Quaid
4. C.U.R.E.
5. "Regulatory Performance History"
6. Letter to NRC from Board of Selectmen, dated October 4, 1988
7. Letter to NRC from Board of Selectmen, dated September 27, 1988
8. Letter to Governor Dukakis from William Griffin, Executive Secretary, Board of Selectmen, dated October 12, 1988
9. Letter to Senator Glenn, dated October 14, 1988, from Mary C. Ott, Citizens Urging Responsible Energy
10. October 14, 1988 press release by C.U.R.E.
11. Letter to Stephen B. Comley from Thomas Murley, dated October 4, 1988
12. Letter to President Reagan from Stephen B. Comley, dated August 15, 1988
13. Letter to Stephen B. Comley from Thomas Murley, dated October 4, 1988
14. October 14, October 6, and September 16, 1988, press releases by "We The People of the United States"
15. Letter to Commissioner Zech from Mary A. Dinan, dated October 12, 1988

16. Letter to Peter Agnes, Jr. from Ronald Varley, dated September 21, 1988

17. Letter to David J. Vogler from Mary Dinan and others, dated March 4, 1988

18. Letter to C. Martin Delano from Carl D. O'Neil, dated December 18, 1986

19. Letter to Barnie Yetman from Enrico Cappucci, dated February 19, 1988

20. Letter to Secretary Barry from Patricia A. Dowd, dated June 23, 1988

21. "Implementing Procedure for an Emergency at the Pilgrim Nuclear Power Station," IP-01 thru IP-08, dated July 26, 1988 (submitted by Mary Dinan). Due to the volume of this document, IP-01 thru IP-08 will be placed in the Public Document Room.

22. October 14, 1988 Press Release by the Commonwealth of Massachusetts

23. "Stop Chernobyl Here" poster

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

OCT 21 1988

MEMORANDUM FOR: Chairman Zech
Commissioner Roberts
Commissioner Carr
Commissioner Rogers
Commissioner Curtiss

FROM: Victor Stello, Jr.
Executive Director for Operations

SUBJECT: PILGRIM COMMISSION MEETING

Enclosed are annotated pages to the transcript of the October 14, 1988 Commission Meeting on Pilgrim. The staff has reviewed the transcript and, subject to the corrections contained herewith, believes the transcript has no transcription errors and is factually correct.

We are preparing a summary of meetings and discussions in which the staff participated and Pilgrim emergency preparedness issues were raised. This summary should be available for the Commissioners by November 1, 1988.

Victor Stello, Jr.
Executive Director
for Operations

Enclosure:
Annotated Commission
Meeting Transcript

cc:
SECY
OGC
OCA

problems had reached a point where we no longer had confidence that the plant, as it was being operated at that time, could continue to operate with an adequate assurance of safety.

At that time, the NRC launched a concerted effort to assure that the Boston Edison Company fully addressed the safety performance problems which ~~at~~ plagued it. In the term of that 9 to 15 months after the plant was shut down for safety reasons, a number of problems were identified concerning emergency planning matters at the facility which led to FEMA's August 1987 letter identifying six deficiencies in ~~a~~ emergency planning at Pilgrim and withdrawing the reasonable assurance.

The staff has periodically briefed the Commission on the status of ~~facts~~ facilities for which agency-wide close monitoring has been required. For some of these plants, the Commission has indicated that it wishes to be kept informed of the results of the staff review. For others like Pilgrim, the Commission has stated it will make the decision regarding the plant startup.

The staff is here ready to brief the Commission on why it believes that the Pilgrim Plant is now ready to operate safely. Over the two and a half year period since the plant was shut down, the licensee has made various significant improvements in plant systems, in operational ~~of~~ capability, and with the overall management organization and attention to safety matters at the Pilgrim Plant.

Tom Murley, Director of NRR and previous Region I

1 Administrator, and Bill Russell, Region I Administrator today,
2 are here to discuss the steps taken to improve the operational
3 safety of the Pilgrim facility and the basis for our
4 conclusions that the plant is now ready to operate safely. In
5 short, the conditions which led to the plant shutdown have now
6 been rectified and the plant is ready for power ascension.
7 Bill will describe the power ascension program which
8 will be followed if restart is approved. This phased program
9 will require some four to six months to fully evaluate
10 equipment and personnel performance. During this period, the
11 NRC will significantly increase its inspection activities,
12 including 24 hour coverage for selected evolutions. With
13 respect to emergency planning matters, there has also been
14 substantial progress in improvement of emergency response
15 planning for this facility especially directed toward the
16 deficiencies identified by FEMA in its August 1987 letter.
17 I would note that the licensee and state and local
18 governments have been working cooperatively to resolve issues.
19 This will be discussed later by Tom and Ron Bellamy of Region
20 I. There clearly is more work to be done in connection with
21 emergency planning at Pilgrim. At this time, we do not have a
22 schedule for the resolution of all of these issues. The staff
23 believes that a carefully constructed power ascension program
24 can take place safely with emergency planning in its current
25 condition provided that there is continued progress toward

1 finalizing the resolution of outstanding emergency planning
2 matters.
3 The staff plans to come back to the Commission, if it
4 approves the power ascension phase, to brief the Commission on
5 operations during power ascension and to report to the
6 Commission on the progress being made on the emergency planning
7 during this period. Thank you, Mr. Chairman, and now I will
8 turn to Dr. Murley to begin his presentation.
9 CHAIRMAN ZECH: Thank you very much. You may
10 proceed.
11 MR. MURLEY: Thank you, Mr. Chairman. Boston Edison
12 has come a long way in the 30 months since the Pilgrim Plant
13 was shut down. It took them about a year and a half to fully
14 analyze their problems and get the management team in place
15 that could deal effectively with the problems. The past year
16 has seen a dramatic improvement in the condition of the plant
17 and the readiness of the plant staff to operate the plant
18 safely.
19 I inspected the plant myself several times in recent
20 months and the contrast is striking between its present
21 condition and the condition when I was a Regional Administrator
22 in Region I a few years ago. I believe, and Bill Russell and
23 the NRR and regional staffs join in this belief, that the
24 Pilgrim Plant is substantially safer now than it was at the
25 time of shutdown in April 1986.

There are several reasons for this view. They have more licensed operators, they work less overtime, they are better trained, and they have a new simulator to train on. There is a greater depth of management experience from the Executive Vice President down through the first level supervisors. They have implemented improved emergency operating procedures. They have improved safety attitudes among the plant workers.

There is an improved material condition of the plant equipment and they have implemented a safety enhancement program that goes beyond current NRC requirements, particularly for the Mark I containment. Boston Edison, on their own initiative, has installed improvements that we are considering as generic requirements for all BWR Mark I containments. In some cases they have gone beyond even what we are considering for generic improvements.

Now, Bill Russell will describe the comprehensive NRC inspections and evaluations that were done in recent months and I will return to discussion of emergency preparedness issues later.

MR. RUSSELL: Thank you, Mr. Murley. Mr. Chairman, I'd like to cover the background a little bit in some detail to set the stage, review again the restart criteria that we discussed with you in June when we were here. I will describe in-depth the staff assessment activities and the results of

1 those activities. I will cover the physical condition of plant
2 as it exists today and will discuss in-depth the power
3 ascension program and the plans for staff monitoring of that
4 program should you approve restart.
5 By way of background, the facility was shut down on
6 April 12, 1986 for technical reasons. The staff issued a
7 confirmatory action letter that it was a result of continuing
8 hardware problems. We had had repetitive failures associated
9 with the RHR system, with inter-system leakage. This is
10 leakage from a high pressure reactor coolant system into the
11 lower pressure RHR system.
12 We had had spurious containment isolation and
13 failures of the outboard main steam isolation valve to open
14 when it should have. We required in this initial confirmation
15 of action letter that the licensee investigate these technical
16 problems, develop the root causes for them, and propose
17 corrective action satisfactory to the NRC staff prior to a
18 resumption of operation.
19 While that technical review was ongoing, the licensee
20 chose to enter into a refueling outage. Just prior to this, we
21 had been concerned about the management activities at the plant
22 and we documented in a SALP report some substantial management
23 concerns, particularly as they related to incomplete staffing,
24 the management view expressed to the staff on occasion that the
25 improvements to date were sufficient and further improvements

1 were not necessary, a reluctance to acknowledge problems at the
2 facility, and a dependence upon third parties to identify
3 problems to get them resolved.
4 Based upon these concerns, the staff supplemented the
5 confirmation of action letter to require the facility remain
6 shut down until these management issues had been adequately
7 addressed in addition to the technical issues. The supplement
8 required a formal assessment of the facility's readiness for
9 resumption of operations, a formal restart program with a
10 schedule for implementing that program including a power
11 ascension program, and it specifically included NRC review and
12 approval of those programs.
13 Approximately midway through the outage, at least
14 midway to where we are now, the staff issued a SALP report ~~in~~ for
15 the period which ended January of 1987. The report was issued
16 approximately in April. This report identified weak
17 performance in five areas. In the areas of radiological
18 controls, surveillance, fire protection, security, and most
19 importantly, assurance of quality.
20 This constituted the background of the performance at
21 the facility up until the time of early 1987. In August of
22 1987, we received the FEMA findings on emergency preparedness
23 which Dr. Murley has described. This was a self-initiated
24 review based upon planning deficiencies, not based upon an
25 exercise or identified exercise deficiencies.

1 receiving the company's own self-assessment report and their
2 conclusions that the facility was ready, we conducted an
3 Integrated Assessment Team inspection. This involved 13
4 inspectors, approximately 1,100 hours of direct inspection
5 activity, and it was observed by two personnel for the
6 Commonwealth of Massachusetts.
7 In addition, we have held numerous meetings in the
8 vicinity and specifically meetings to solicit public and local
9 official input as it relates to the plans submitted by Boston
10 Edison Company, the staff review, the conduct of the
11 inspection, and identifying issues of concern to the local
12 people in the area.
13 MR. RUSSELL: Some specific examples were followed up
14 on based upon that public input or associated with the
15 questions regarding ~~Capetown~~ KAPTON wire. The management issues with
16 respect to the span of control and the effectiveness of the
17 management team were raised in a public meeting and questions
18 regarding the lack of boiling water reactor experience on the
19 part of some of the new managers that came into the company.
20 These issues have been followed up on and have been
21 addressed in our restart readiness assessment report.
22 In addition, we have had an advisory committee of
23 Reactor Safeguards Subcommittee meeting and full Committee
24 meeting and they have forwarded a letter to you, Mr. Chairman,
25 that indicates that the plant is ready for the resumption of

1 operation as it relates to management and technical issues and
2 recommends a plan as it relates to emergency preparedness
3 issues, that is, a staff plan.
4 I mentioned the Pilgrim restart assessment panel.
5 They had performed an independent review activity. They
6 completed their work and provided a report to me on the 26th of
7 September. Based upon the hearing that was conducted by
8 Senator Kennedy in the Plymouth area, I committed to make that
9 report public and to discuss with members of the public for the
10 reasons for the staff's conclusion. In addition, I have
11 physically inspected the plant. I have reviewed the status of
12 all the open items since that time and I have given serious
13 consideration to the comments that I received during that
14 meeting.
15 I have forwarded my recommendation to Dr. Murley and
16 I will review shortly with you that recommendation.
17 I would like to shift now to Slide No. 5.
18 I am now going to cover the criteria which we have
19 articulated on several occasions as the basis for a restart
20 decision and give you the results of our inspection and
21 assessment activities to date.
22 In the first area of stable and effective management
23 being in place, the staff concludes that there is substantial
24 improvement in the depth of management experience within the
25 facility, from the Senior Vice President down to the first line

1 supervisors.

2 The organizational structure has been expanded and
3 significantly strengthened. There are extensive management
4 improvements and staff increases. Let me highlight some of
5 those management improvements.

6 The responsibilities and accountability of the
7 organization are now well defined and understood. Previously
8 there had been a series of various management directives,
9 documents issued. They had not been pulled together in one
10 place, and in the course of staff interviews and inspections we
11 found that these policies were not well understood at the first
12 line supervisor level. That has substantially been corrected.
13 They now have a mission, organization and policy manual which
14 has been promulgated, which in one place describes the policies
15 and the procedures and the expectations of the organization.

16 We have interviewed all levels of the organization
17 including first line supervisors and conclude that they
18 understand well what is expected.

19 The effectiveness of the management team has been
20 confirmed through the results of the integrated assessment team
21 inspection. The process was one of holding the company
22 accountable for ~~taking the~~ STATING first "what is the condition of the
23 plant" and detailing in all aspects on the results of their own
24 review. We then went in and independently evaluated to see
25 what we found.

to by way of example identify what were the strengths and the weaknesses that came out of the integrated assessment team inspection such that you would be able to judge the bases for the staff's conclusions.

In the area of fire protection, a notable strength is the staff and the maintenance of the fire protection equipment and the significant upgrades to fire barriers in the maintenance program. We identified no weaknesses in this area.

In the area of security, the contract guard force, there has been significant increases in dedicated management activities to ~~fire protection~~ security with increased oversight of the guard force and the contractor. This was identified as a significant strength. We did not identify any weaknesses in that area.

As it relates to surveillance testing, we did identify a question on the once per refueling outage surveillances ~~or~~ because this plant would have been shut down for 30 months and we felt it was appropriate to go back and re-look at those surveillances to justify why some of those should not be performed again. The licensee has agreed to do that and that review is now completed by the licensee. It is the only NRC item which is open from the Appendix M to the restart report on which I updated for you last night. I indicated there were three items open at that time. We are now down to one, with all licensee actions completed.

1 On that one item, on the once per refueling outage surveillance
2 review, is about 80 percent complete by the staff and we have
3 agreed with their findings thus far. We're just not complete
4 with our own review.
5 We did conclude that there was a significant
6 improvement in the area of planning for surveillance testing
7 and the coordination of surveillance testing. That was
8 identified as a significant strength.
9 In the area of assurance of quality, this is how well
10 does management manage the activities and oversee the
11 activities, we found a significant strength in the safety
12 review and audit committee, in the attitude throughout the
13 organization from the first-line supervisor right through to
14 the senior vice president and noteworthy communications
15 improvements between the quality assurance organization and the
16 operations organization.
17 We did identify some weaknesses associated with the
18 Operations Review Committee, the fact that they had multiple
19 action lists and they were not consolidated. It was not known
20 that everything was being covered and there were some questions
21 about tracking and follow-up on quality assurance reports.
22 Each of these items have been subsequently addressed to the
23 satisfaction of the staff.
24 The reason I highlight these is these are the results
25 of the inspection that also included direct observation by the

1 Commonwealth. It was an extensive inspection. Those observers
2 had access to all parts of inspection planning, to the staff
3 caucuses, the results, and they participated in the exit
4 meeting with the company and had their opportunity to provide
5 additional comments on both the strengths and the weaknesses
6 and the findings of the inspection.
7 In one area that was rated as a SALP Category 3, that
8 is the area of radiological controls, we noted in the most
9 recent report that this was still a Category 3 but the 3 was
10 improving.
11 We looked into this area extensively during the
12 integrated assessment team inspection and concluded that it was
13 continuing to improve. What we were concerned about and why we
14 did not rate it as a Category 2 is we felt that the problems
15 that had existed in the past were so sufficient, so serious
16 that we wanted to see sustained improvement over a period of
17 time and we took the issue of looking at what types of
18 resources the staff would be applying because recall the
19 Category 3 rating relates to staff resources and how we budget
20 and plan for activities.
21 Subsequent even to the close of the integrated
22 assessment team inspection, we have had additional meetings
23 with the licensee on the area of radiological controls and I
24 think a recent example establishes a good benchmark for how far
25 they have come.

1 We had problems with a control rod drive mechanism
2 lower unit just over the past two or three weeks. This was an
3 activity which the company, planned, established a budget for
4 that was very ambitious and completed the work with a planned
5 budget of three man-rem for the total job with an actual
6 exposure of 2.8 man-rem. It was well planned and well managed,
7 so we are seeing that the recent work in the area of
8 radiological controls is being very well handled.
9 In the area of the maintenance program and the work-
10 back log, this was a significant concern that we had back in
11 June when we met with you. There have been significant
12 increases in organization and staffing. Those have been
13 described by Mr. Bird, the President of the company, and I
14 won't repeat those.
15 There are some areas I would like to highlight,
16 however. There are improved maintenance and post-work test
17 procedures. This was a concern that we had, that there was not
18 adequate tracking of the early maintenance work and the
19 necessary retest following that maintenance.
20 There is a much more thorough program, set of
21 procedures, on how work is managed both from the time you start
22 the work and you go out of service until the it is returned to
23 service and retested. This is the Traveler System as was
24 described by Mr. Bird.
25 Most importantly, though, the backlog of maintenance

We have tested them and observed the testing to the extent we can in a shutdown facility and in fact the licensee has brought in a portable boiler -- I call it a shore boiler -- to test the reactor coolant injection system, HPCI and ~~RCOI~~ RCIC. However, there is a limitation on how much you can test when you are shut down and we are going to have to wait until the plant is operational to complete some of that maintenance retest.

I'd like to at this point discuss the program that we have planned ~~from~~ for the power ascension program. This is Slide No. 7.

This program provides for a deliberate and controlled return to power operation. It provides for special testing to be accomplished, the testing that is necessary for the maintenance items that I've just discussed.

In addition, we'll be conducting some unique tests. We'll be performing a shutdown from outside the control room to demonstrate conformance to the Appendix R requirements.

The program includes hold points as were described by Mr. Bird, five initial criticality, 5 percent, 25 percent, 50, 75 and finally one at 100, which is the point at which the staff will evaluate the total program and ~~describe~~ determine whether we can release the company from the confirmation of action letter.

In this process are built in management assessment points where there will be a senior management team that will

1 assess the quality of operations. After they have satisfied
2 themselves with the quality of operations at each plateau, that
3 special team will stand down and we will get an opportunity to
4 evaluate, then, operations by the normal control room
5 complement to determine ourselves that the facility is ready to
6 operate without increased or augmented coverage.
7 After observing both the results of the management
8 assessment activities by Boston Edison Company, our own
9 observations during the plateau, the steady state operation at
10 reduced power, the NRC staff through the restart assessment
11 panel process will make a recommendation to me regarding the
12 readiness of the plant to proceed to the next power level or
13 plateau.
14 This process will be followed for each of the hold
15 points. It is a very deliberative process and we will include
16 'round the clock coverage during the times of power changes and
17 when significant testing and activity is ongoing.
18 As I indicated, we are expecting that this could
19 require as much as a thousand hours of direct inspection
20 activity per month for the next four to six months.
21 Let me describe what would be the situation for plant
22 status and the expected date that the plant would be ready for
23 criticality, should that decision be made by the Commission.
24 Presently we expect that most work items will be completed
25 either today or over the course of the weekend. Following

that, we anticipate that there are going to be approximately four to five days of surveillance testing.

The critical testing is a loss-of-power test to demonstrate the on-site AC power systems, and some load shedding tests which are associated with modifications and once per outage ~~priority~~ surveillances that will be conducted. If that work progresses well and the schedule has been going well, a day or two later, we anticipate that the facility would have all requirements complete and ready to proceed to criticality on the 19th of October, such that criticality could occur as early as the 20th, based upon plant, material, readiness and documentation.

At this point, I'd like to turn the discussion back to Dr. Murley who will provide some comments regarding the status of emergency preparedness.

MR. MURLEY: I need to set the stage with some background on emergency preparedness. The accident at Three Mile Island II, taught us the importance of emergency preparedness. It taught us that it's essential that decision-makers have a range of options for protective actions, and that they do not have to rely on an ad hoc response to an emergency as was the case at Three Mile Island.

In the aftermath of TMI, the NRC added what is essentially a fourth layer to our defense-in-depth safety philosophy. To see where this fits into our regulatory fabric,

1 you recall the first level of our safety defense, is to require
2 high quality in the design and the construction and the
3 operation of the plant in the first place. The second level of
4 our safety defense is to assume that there may be failures of
5 equipment and to require that safety systems be installed to
6 shut down the plant and the chain reaction and keep the fuel
7 cooled.

8 Beyond that, we add yet a third level of safety
9 defense, and we postulate that, in spite of those safety
10 systems, that serious accidents can happen, and that we
11 nevertheless require a containment structure to prevent the
12 release of radioactivity. Now we have added yet a fourth level
13 to that safety defense. We postulate the possibility of an
14 off-site release in any event, and we provide that ~~their~~ there be
15 emergency planning options for authorities to take to protect
16 the population in the vicinity of nuclear plants.

17 Thus we see that emergency planning is the last in a
18 series of barriers in the defense-in-depth safety philosophy to
19 protect the public. We have just described the actions taken
20 by Boston Edison over the past 30 months to strengthen their
21 operational staff, the safety equipment and their containment
22 structure to strengthen these first three lines of defense.
23 Now, I'll discuss what's been done to improve the fourth line
24 of defense which is emergency planning.

25 Our regulations do not require perfection in

1 emergency planing. In fact, it is not possible to guarantee
2 that emergency planning actions will protect all of the people
3 near a nuclear plant under all accident conditions and in all
4 weather conditions. Our regulations recognize this reality and
5 they only require a reasonable assurance finding that
6 protective actions can and will be taken in the event of an
7 emergency.

8 We recognize that emergency planning is a dynamic
9 process; that perfection is not attainable; that deficiencies
10 will occur from time to time, and that the deficiencies can be
11 corrected while the plant is operating. With this general
12 background on emergency planing, let me summarize the specific
13 case at Pilgrim. Our conclusions, I should add, at Pilgrim,
14 consider all of the information that's available to us today,
15 including the recent report from Secretary Barry.

16 The initial plans for Pilgrim were submitted to FEMA
17 by the Commonwealth of Massachusetts in June, 1981. There
18 were revisions required and they were resubmitted by the
19 Commonwealth in October of 1981. With those plans in place,
20 the first full-scale exercise at Pilgrim was held in March,
21 1982. There were several deficiencies noted. They were
22 corrected and in September of 1982, FEMA issued an interim
23 finding that the state and the local plans were adequate.

24 In June of 1983, there was a second full-scale
25 exercise. I was the regional administrator at the time, and I

1 plant was shut down. In December of 1986, Secretary Barry from
2 the Commonwealth sent a report to NRC and FEMA describing
3 problems that Massachusetts saw with emergency plans near
4 Pilgrim. In August, 1987, FEMA sent to the NRC their report to
5 the NRC of their findings from a self-initiated review. These
6 have been discussed and will be discussed in more detail.
7 There were six major deficiencies that FEMA found.
8 They found that the off-site emergency preparedness
9 had deteriorated at the site and that they could not longer
10 make the finding that state and local plans were adequate. The
11 plant was shut down at the time, of course, and we concluded
12 that there was no need to take any enforcement action. Boston
13 Edison had been working with the state and local officials at
14 that time to improve the plans, and we could see that
15 improvements were already being made.
16 Now, the situation at Pilgrim is not unique. The NRC
17 oversees 108 operating plants at 72 different sites in the
18 country, in 33 different states. We have a great deal of
19 experience in working on emergency planning with FEMA and with
20 the 33 states with nuclear plants. Emergency planning is a
21 dynamic process. It's not uncommon for deficiencies to appear
22 in the plans or in the exercises.
23 For example, even today, at Duane Arnold site, FEMA
24 has notified the state of Iowa of deficiencies regarding
25 relocation centers, bus drivers and other matters. These

1 Nonetheless, we recognize that there is more work
2 that needs to be done before we can receive a FEMA finding of
3 adequacy. In some cases, Massachusetts wants to go beyond NRC
4 requirements. We don't object to that, of course, but it does
5 delay the state in finalizing the plans. The next steps are
6 that the state will have to submit final plans to FEMA. FEMA
7 must review them and approve them and schedule and exercise.
8 The state and the licensee and FEMA and the NRC then
9 must conduct the exercise. If there are any deficiencies, they
10 must be corrected. Finally, we would get a formal report from
11 FEMA to the NRC of the finding of adequacy. We estimate that it
12 would take about six months after Massachusetts submits the
13 final plans before we could receive such a formal FEMA finding.
14 In the meantime, the staff believes that we have
15 sufficient information to come to our own conclusions
16 concerning the significance of the outstanding issues, pending
17 completion of the formal FEMA process. The last full exercise,
18 as I mentioned, was in 1985. We have issued and exemption to
19 the regulation requiring a full participation exercise every
20 two years.
21 Of course, we cannot schedule an exercise until the
22 Commonwealth of Massachusetts submits revised plans to FEMA.
23 Ron Bellamy will now summarize the improvements that have been
24 made in the plans and the NRC observations of these
25 improvements.

1 CHAIRMAN ZECH: Thank you very much. You may
2 proceed.
3 MR. BELLAMY: I am the regional branch chief with the
4 responsibility for the review of emergency preparedness issues.
5 Next month will complete six years that I have been charged
6 with that responsibility. If you'll turn to the next slide,
7 the next slide will discuss the status of emergency
8 preparedness.
9 [Slide.]
10 MR. BELLAMY: Although emergency preparedness was not
11 an issue of the Pilgrim plant shutdown in April, 1986, the NRC
12 staff has continuously monitored the status of emergency
13 preparedness. The Federal Emergency Management Agency began
14 their self-initiated review in September of 1986, due to a lack
15 of progress in the resolution of documented concerns. The FEMA
16 self-initiated review was issued in August 1987, and identified
17 six specific issues: the lack of evacuation plans for certain
18 public and private schools and daycare centers; the lack of a
19 reception center for people evacuating to the North; the lack
20 of identifiable shelters for the beach population; inadequate
21 planning for the evacuation of the special needs population;
22 inadequate planning for the evacuation of the transportation
23 dependent population and an overall lack of progress and
24 planning and apparent diminution of emergency preparedness.
25 This report was immediately transmitted to the Boston

review.

Implementing procedures for three of the EPZ communities and the two reception communities have also been forwarded to the Commonwealth and of these, the procedures for one of the EPZ communities and the two reception communities have been forwarded to FEMA for a technical review. The Massachusetts Civil Defense Agency Area II Plan, which covers the area around Pilgrim, has been sent to FEMA for technical review and work is progressing on the Commonwealth statewide plans and procedures.

It is noted that the statewide plans and procedures were demonstrated at full-scale exercises at Yankee Rowe in April, 1988, and at Vermont Yankee in August, 1988. The progress in generating revised plans and procedures is due to the efforts of local officials, including Selectmen, town managers, civil defense directors, police chiefs, fire chiefs, department of ~~government~~ public works officials, school administrators, nursing home administrators, hospital administrators, day care administrators, harbor masters, owners of private buildings identified for use as shelters and members of the general public working in concert with licensing employees.

As such, these individuals are thoroughly familiar with the contents of these documents and could implement these plans and procedures if necessary. There are five procedures for two EPZ communities for Plymouth and ~~Duxbury~~ Duxbury that,

are undergoing review by the local officials, and these 5 procedures as well as all the procedures for these 2 EPZ communities

1 although prepared, have not yet been approved by the local
2 officials for forwarding to the Commonwealth for technical
3 review, as already discussed.
4 A training program, approved by the Commonwealth, is
5 being conducted. The NRC staff has audited this training
6 program, including the individual lesson plans and staff from
7 both Region I and NRR have observed the training of bus and
8 ambulance drivers from companies providing transportation for
9 school and daycare centers, the special needs population, and
10 the transportation-dependent persons.
11 This training includes use of route maps and travel
12 on the actual routes to be used in an emergency. The staff has
13 audited six different training sessions and witnessed
14 implementation of the training for approximately 50
15 transportation providers, which is 25 percent of that training
16 that has already been conducted. These limited demonstrations
17 provide the staff with the basis to conclude that significant
18 progress has been made in improving the emergency plans and
19 procedures for schools and daycare centers and for the special
20 needs and transportation-dependent populations in the emergency
21 planning zone.
22 Regarding lack of a reception center for people
23 evacuating to the north, the Commonwealth has tentatively
24 designated a state-owned facility in Wellsley as a northern
25 reception center and has conducted a feasibility study that

1 indicates the facility is feasible for use as a reception
2 center. Boston Edison has performed an analysis which
3 concludes that the two reception centers that are presently in
4 existence at Taunton and Bridgewater, with appropriate
5 renovations and additional equipment, have the capability to
6 support an evacuation from the emergency planning zone, yet
7 they are supporting the potential for a third center.
8 The Bridgewater State College facility is capable of
9 serving as a location for evacu~~xx~~ees from the emergency
10 planning zone to assemble and lacks improvements ~~and~~ in hardware
11 for monitoring of radioactive material to be able to monitor
12 the 20 percent of those arriving at the reception center within
13 12 hours. These modifications could be completed in short
14 timeframe, and by short timeframe I mean approximately one
15 month after approval by the Commonwealth.
16 The reception center at the Taunton State Hospital is
17 an existing structure that needs modifications including
18 monitoring equipment that would take three to four months to
19 complete after approval by the Commonwealth. The Taunton Civil
20 Defense Director has documented his belief that he would use
21 portions of the facility in an emergency, even if the
22 renovations were not complete and he also stated that there are
23 no outstanding program issues that would interfere with
24 implementation of workable plans and procedures.
25 Regarding a lack of identifiable beach shelters for

1 MR. RUSSELL: Mr. Chairman, this is in the form of
2 the materials that were available in the room when people came
3 in. It was in the memorandum that the staff has forwarded to
4 you.
5 CHAIRMAN ZECH: Well, explain it first.
6 MR. BELLAMY: This first slide shows the status for
7 resolution of the school children concern and the third
8 reception center. It is evident that the required information
9 has been included in the draft plans and procedures and that
10 approval by the Commonwealth is still required ~~to~~ for other issues.
11 Now by complete on this slide, I mean that if the
12 information was supposed to be included in the plans and
13 procedures, it is now in those draft plans and procedures.
14 [Slide.]
15 MR. BELLAMY: The next slide shows the status of
16 resolution for the beach sheltering issue and the concerns with
17 the mobility impaired. The shelter program is ongoing, even
18 though sheltering is not specifically required. The
19 information has, again, been provided in the draft plans and
20 procedures.
21 [Slide.]
22 MR. BELLAMY: The next slide shows the status for the
23 concerns for the transportation-dependent population and the
24 overall lack of progress. Once again, information has been
25 included in the draft plans and procedures with, again, certain

1 part in emergency actions, that is civil defense authorities,
2 police authorities, school authorities, have been working
3 closely with Boston Edison in developing the revised plans, as
4 Dr. Bellamy described.

5 Therefore, it is logical to conclude that those
6 individuals can and would implement the revised plans, even
7 though the plans are still in draft and even though there has
8 not been a full scale exercise with the revised plans. Of the
9 six major deficiencies identified by FEMA, the NRC staff has
10 reviewed improvements in the plans and observed some
11 demonstrations of these improvements and we have concluded that
12 adequate progress has been made on the deficiencies.

13 Based on successful exercises at Yankee Rowe and Vermont Yankee
14 within the past year, the Commonwealth of Massachusetts has
15 demonstrated capability to manage an emergency at the state
16 level. Based on the findings above then, we believe there is
17 reasonable assurance that even with the lack of a recent
18 exercise adequate protective actions can and will be taken in
19 the event of an emergency at the Pilgrim Plant.

20 Furthermore, we expect that the status of emergency
21 preparedness will continue to improve in the coming weeks as
22 Massachusetts and local officials continue to finalize the
23 plans in preparation for a full scale exercise. In summary
24 then, our overall conclusions with regard to Pilgrim are that
25 the staff believes the Pilgrim Plant is substantially safer

1 today than at the time of the shutdown in April of 1986.

2 There are more licensed operators and they are better

3 trained, a greater depth of management experience. There are

4 improved emergency operating procedures in place. There are

5 improved safety attitudes among the plant workers. There are

6 improved conditions of plant equipment and there have been

7 safety enhancement improvements made. We further believe that

8 emergency preparedness is in better shape today than it was in

9 April 1986.

10 We believe that the Pilgrim Plant is ready to restart

11 and can and will be operated safely. We also believe, however,

12 that there must be continued progress in finalizing the

13 resolution of outstanding emergency preparedness issues. In

14 light of the extended shutdown of ~~a~~ the plant, we will closely

15 observe the plant and the operating staff performance as well

16 as the expected continuing progress in emergency planning to

17 assure ourselves that our findings remain valid.

18 MR. STELLO: We are through, Mr. Chairman.

19 CHAIRMAN ZECH: All right, thank you very much.

20 Questions from my fellow Commissioners? Commissioner Roberts?

21 COMMISSIONER ROBERTS: Two quick ones. The increased

22 NRC oversight, if I've got the numbers the right, an average

23 plan would be 2,500 to 3,000 up to 11,000, where is that coming

24 from, out of Region I or from Washington?

25 MR. RUSSELL: It has principally thus far come from

1 I heard that there are no plans for dealing with an
2 ~~urgency~~ emergency at Pilgrim in place and that none of the local agencies
3 are ready to deal with any of this. I first wonder whether
4 Massachusetts seems to be in that happy circumstance that it
5 never has any natural disasters or it can anticipate no natural
6 disasters and if it does face the reality of those, how does it
7 do it if there are no plans in place.
8 I wonder, Dr. Bellamy, if you could just say a few
9 words to try to put into some context your views and statements
10 with respect to the cooperation of local officials and their
11 ability to deal with an emergency plan with the statements that
12 we heard from other folks from Massachusetts earlier before the
13 NRC and licensee presentations.
14 MR. BELLAMY: Yes, Mr. Commissioner, I'd be glad to.
15 I think the caveat that you heard earlier today that there are
16 no plans and procedures in place specifically implies or
17 specifically states that the Commonwealth has not officially
18 approved those plans and procedures and sent them to FEMA with
19 that approval and until the Commonwealth gives those ~~plants~~ Plans and
20 procedures that official approval, they will continue to state
21 that there are no plans and procedures in place.
22 I have been intimately involved in this review for
23 six years. As I've indicated, the last three years have been -
24 - a lot of time spent on Pilgrim. I have personally met with
25 some of the local planning officials in the Plymouth area. I

1 have toured the Duxbury beaches. I have visited the Duxbury local
2 emergency operating center and those facilities are there and
3 they are ready to be used in an emergency.
4 The people that are generating the procedures and the
5 people that have generated the plans are the specific
6 individuals, the local emergency planning officials, the select
7 men, the mayors, fire chiefs, the civil defense directors who
8 would be charged to use those plans and procedures in the event
9 of an emergency.
10 So, they are aware of the information in those
11 procedures and would be prepared to use them if necessary.
12 COMMISSIONER CARR: Do they have copies of them?
13 MR. BELLAMY: The individuals who have been preparing
14 procedures at the administration level -- yes, sir. They do.
15 COMMISSIONER ROGERS: Just with respect to another
16 statement that was made, I guess by Senator Kennedy, Dr.
17 Murley, I wonder if you could comment on his statement that you
18 had made a commitment that emergency preparation plans
19 including a demonstration exercise of such plans would be held
20 before restart.
21 MR. MURLEY: Yes. That was -- what he was referring
22 to was in my testimony in Plymouth in January of this year.
23 What I said was that we would expect to see progress in
24 improving the plans and that we would expect to have -- to
25 observe a limited demonstration of those improvements.

undergoing review by the local planning boards of Plymouth and Duxbury. No implementing procedures for Plymouth and Duxbury

1 MR. BELLAMY: Yes, sir. There are approximately 300
2 as a round number of required implementing procedures and as I
3 indicated, there are five of those procedures ~~that~~ have yet ~~to~~
4 been ~~be~~ sent to the Commonwealth with any type of approval from the
5 local officials. These five procedures deal specifically with the
6 schoolchildren and some of the special needs populations in
7 Plymouth which is the town that the Pilgrim Station is in and
8 in Duxbury which is also in the Emergency Planning Zone.
9 The -- to use the term, training is complete, I think
10 is misleading. You will never complete the training for
11 emergency preparedness. Emergency preparedness is a living
12 area and you always will be training new people and you always
13 have new people becoming involved in the process.
14 I would think that by the end of the year, there will
15 be the overwhelming majority of the 6,000 people trained that
16 have been specified in the Commonwealth-approved training
17 program.
18 CHAIRMAN ZECH: How about some of these areas that
19 are difficult to evacuate in the area. Could you discuss that
20 a little bit?
21 MR. BELLAMY: Yes, sir. I think the two specific
22 concerns that come up -- one is for the schoolchildren and I'd
23 like to comment on that first. The draft plans and
24 implementing procedures now indicate that at the alert stage of
25 a nuclear emergency, they will begin to assemble the necessary

1 transportation for evacuation of the schoolchildren and at the
2 site area of emergency stage, they would implement that
3 evacuation.
4 That's a much necessary and needed and far-reaching
5 improvement over what's been seen in the past whereas you could
6 wait until that general emergency stage to actually consider
7 that evacuation. The schoolchildren will be moved out long
8 before that stage.
9 The beach population area -- I have toured that beach
10 population -- it is required to get on and off that beach with
11 a four-wheel drive vehicle. You could not take your car on it.
12 So, there is unlimited access. There are a fair number of
13 permits that are issued to those four-wheel drive vehicles.
14 The number is in the several thousands and they have
15 made sure that the plans and procedures indicate that those
16 beaches will be closed at an early stage so that you would not
17 put more people on those beaches if there is any type of event
18 at the Pilgrim Station.
19 COMMISSIONER CARR: Do they overnight on those
20 beaches?
21 MR. BELLAMY: No, sir. They do not.
22 COMMISSIONER CARR: So they must clear out between
23 high tides.
24 MR. BELLAMY: The high tide issue is for a very small
25 section of that beach and there are approximately 2,000 to

1 4,000 people at the most that would be there during a bright,
2 sunny, summer weekend.
3 COMMISSIONER CARR: No, but I mean if they can't stay
4 overnight, it's only twelve hours between low tides. They must
5 come out.
6 MR. BELLAMY: The low tide issue is not for every
7 tide. That is only for flood tide type conditions. So, if you
8 got the perception from some of our earlier speakers that every
9 twelve hours that beach is isolated, I think that's a
10 misconception.
11 COMMISSIONER CARR: Well, even if it is shorter than
12 that, that would be the longest if they have to clear out by
13 dark.
14 MR. BELLAMY: Yes, sir, and those beaches are -- only
15 approximately four hours a month.
16 MR. MURLEY: Mr. Chairman, there is one thing that I
17 would like to add that might help to clarify. The deficiencies
18 that were found by FEMA were planning type deficiencies, not
19 execution deficiencies. Generally, as I said, there have been
20 many exercises up there, both full and partial. I mentioned
21 that I personally observed one.
22 The authorities know how to do their job. Bus
23 drivers know how to drive buses. Ambulance drivers know how to
24 drive ambulances. The problems have been that not all the
25 places were accounted for in the plans that they had to go to

COMMISSION MEETING

CONSIDERATION OF RESTART

OF THE

PILGRIM NUCLEAR POWER STATION

OCTOBER 14, 1988

PRESENTATION OUTLINE

BACKGROUND

RESTART CRITERIA

STAFF ASSESSMENT ACTIVITIES AND RESULTS

POWER ASCENSION PROGRAM

EMERGENCY PREPAREDNESS STATUS

CONCLUSION

BACKGROUND

SHUTDOWN APRIL 12, 1986

CONFIRMATORY ACTION LETTER 86-10 AND SUPPLEMENT

TECHNICAL AND MANAGEMENT ISSUES

- TECHNICAL AND EQUIPMENT PROBLEMS
- MANAGEMENT CONCERNS
- SALP FINDINGS

OTHER ISSUES

- FEMA EMERGENCY PREPAREDNESS FINDINGS
- SAFETY ENHANCEMENT PROGRAM (SEP) INITIATIVE
- 2.206 PETITIONS AND PUBLIC PARTICIPATION

RESTART CRITERIA

STABLE AND EFFECTIVE MANAGEMENT AND STAFF AT PILGRIM

RESOLUTION OF MAJOR TECHNICAL ISSUES

DEMONSTRATED IMPROVEMENT IN SALP PROBLEM AREAS

MAINTENANCE PROGRAM AND WORK BACKLOG ISSUES ADDRESSED

NRC SATISFIED THAT CERTAIN EMERGENCY PLAN IMPROVEMENTS HAVE BEEN MADE

ASSESSMENT ACTIVITIES AND RESULTS

AUGMENTED INSPECTION AND REVIEW EFFORTS

- PILGRIM RESTART ASSESSMENT PANEL
- AUGMENTED INSPECTION EFFORT THROUGHOUT SHUTDOWN PERIOD
- SALP REPORT NO. 50-293/87-99
- INTEGRATED ASSESSMENT TEAM INSPECTION (IATI)

MEETINGS AND PUBLIC/LOCAL OFFICIALS INPUT

RESULTS

- RESTART READINESS ASSESSMENT REPORT
- ACRS RECOMMENDATION

ASSESSMENT ACTIVITIES AND RESULTS (CONT)

1. STABLE AND EFFECTIVE MANAGEMENT IS IN PLACE
   - ORGANIZATIONAL STRUCTURE EXPANDED AND STRENGTHENED
   - EXTENSIVE MANAGEMENT IMPROVEMENTS AND STAFF INCREASES
   - BECo SELF ASSESSMENT PROGRAM

2. MAJOR TECHNICAL ISSUES ARE RESOLVED
   - ORIGINAL TECHNICAL ISSUES THAT LED TO PLANT SHUTDOWN RESOLVED
   - EXTENSIVE PLANT AND PROCEDURE MODIFICATIONS
   - SAFETY ENHANCEMENT PROGRAM

ASSESSMENT ACTIVITIES AND RESULTS (CONT)

3. IMPROVEMENTS IN SALP PROBLEM AREAS

   - PROGRAMMATIC IMPROVEMENTS IN SECURITY, FIRE PROTECTION, SURVEILLANCE AND ASSURANCE OF QUALITY RESULTED IN CATEGORY 2 RATING (UP FROM CATEGORY 3)

   - RADIOLOGICAL CONTROLS RATED AS CATEGORY 3-IMPROVING, WITH FURTHER IMPROVEMENTS NOTED SUBSEQUENT TO SALP

4. MAINTENANCE PROGRAM AND WORK BACKLOG IMPROVEMENTS

   - ORGANIZATION AND STAFFING IMPROVEMENTS

   - IMPROVED MAINTENANCE AND POST-WORK TEST PROCEDURES

   - BACKLOG REDUCED AND PRIORITIZATION OF OPEN WORK ACCOMPLISHED

POWER ASCENSION PROGRAM

- PROVIDES FOR DELIBERATE AND CONTROLLED RETURN TO POWER OPERATION
- FIVE HOLD POINTS SPECIFIED AND NRC APPROVAL REQUIRED TO PROCEED BEYOND EACH POINT
- AUGMENTED INSPECTION COVERAGE WILL BE PROVIDED
- STAFF WILL FORM CONCLUSION ON EFFECTIVENESS OF PROGRAM AND BECo OPERATION OF PILGRIM

OFFSITE EMERGENCY PREPAREDNESS STATUS

- SIGNIFICANT PROGRESS MADE TOWARD RESOLVING ISSUES IDENTIFIED BY FEMA IN AUGUST 1987
- PROGRESS ON IMPROVING PLANS AND PROCEDURES FOR SCHOOLS, DAYCARE CENTERS AND SPECIAL NEEDS AND TRANSPORTATION DEPENDENT POPULATIONS IN EPZ
- TRAINING FOR OFFSITE EMERGENCY RESPONSE PERSONNEL IS IN PROGRESS
- DRAFT REVISIONS OF LOCAL PLANS AND MCDA AREA II PLAN ESSENTIALLY COMPLETE AND SUBMITTED TO FEMA. DRAFT IMPLEMENTING PROCEDURES LARGELY COMPLETE. REVISION OF STATEWIDE PLAN IN PROGRESS.
- NRC STAFF HAS OBSERVED LIMITED DEMONSTRATIONS ASSOCIATED WITH EVACUATION PLANS FOR SCHOOLS AND DAY CARE CENTERS, TRANSPORTATION DEPENDENT AND SPECIAL NEEDS POPULATIONS
- STAFF ASSESSMENTS OF EP PROGRESS WILL CONTINUE

CONCLUSION

- TECHNICAL AND MANAGEMENT ISSUES RESOLVED
- EMERGENCY PLANNING IMPROVEMENTS MADE
- AUGUMENTED INSPECTION OF POWER ASCENSION PROGRAM
- CONTINUE ASSESSMENTS OF EMERGENCY PREPAREDNESS

October 14, 1988

NRC Staff Summary of the Status of
Pilgrim Offsite Emergency Planning Issues

A number of emergency preparedness (EP) issues have been raised since the Pilgrim plant was shutdown in April of 1986. As a result of its self-initiated review (SIR) of the overall state of emergency preparedness at Pilgrim, the Federal Emergency Management Agency (FEMA) identified (August 1987) six areas of major concern in the emergency plans for the Pilgrim ten-mile emergency planning zone (EPZ).* Although separate from the technical and management issues which initiated plant shutdown by the licensee and NRC Confirmatory Action Letters, the NRC has indicated that the progress towards resolution of these issues will be considered by the agency as a part of a decision on Pilgrim restart. Specifically the six significant emergency preparedness issues identified by FEMA are summarized below:

1. Lack of evacuation plans for public and private schools and day-care centers.
2. Lack of a reception center for people evacuating to the North.
3. Lack of identifiable shelters for the beach population.
4. Inadequate planning for the evacuation of the special needs population.
5. Inadequate planning for the evacuation of the transportation-dependent population.
6. Overall lack of progress in planning and apparent diminution in emergency preparedness.

*As a result of the specific issues identified in the existing Commonwealth and local offsite emergency plans, FEMA withdrew (8/87) its interim adequacy finding on offsite emergency preparedness for Pilgrim. The adequacy finding on Commonwealth and local response planning was issued by FEMA in September 1982.

The staff has been carrying out an ongoing assessment of progress towards resolving these issues. In evaluating the current status of emergency planning, the NRC staff has reviewed the revised emergency plans and implementing procedures, available to the NRC staff, which have been developed through cooperative efforts by the utility, and Commonwealth and local governments. NRC staff efforts have also included discussions with FEMA Region I staff, Commonwealth emergency planning officials and Boston Edison representatives. In addition, NRC Region I and Headquarters staff have made several visits to the site area to observe limited demonstrations, asssociated with emergency worker training, of evacuation plans for schools and day care centers, the transportation-dependent population and the special-needs population.

Considerable progress has been made in drafting plans and procedures for the plume exposure pathway emergency planning zone (EPZ) and reception center communities to correct the FEMA-identified issues (Issues Nos. 1, 4 and 5). The draft revised plans for all seven of the EPZ (5) and reception center (2) communities have been submitted by the Commonwealth for informal technical review by FEMA. FEMA and the NRC member of the Regional Assistance Committee (RAC) have reviewed and commented on the draft plans submitted by the Commonwealth for the EPZ communities of Plymouth, Kingston, Carver and Duxbury, and the reception center communities of Taunton and Bridgewater. The FEMA comments, as well as additional comments from the Massachusetts Civil Defense Agency (MCDA), have been incorporated into the plans and procedures drafted for these towns as well as the remaining EPZ community of Marshfield. The status of the plans is summarized as follows:

1. Marshfield - the draft Plan, Implementing Procedures (IPs) and Shelter Implementation Program were authorized by the Selectmen for submittal and have been forwarded to MCDA and transmitted to FEMA for review.

2. Taunton - the draft Plan and Implementing Procedures were authorized by the Mayor for submittal and have been forwarded to MCDA and transmitted to FEMA for review.

3. Duxbury - all documents are complete except for two IPs. These are in draft form and have been sent to the town planning committee for review prior to submission to MCDA.

4. Plymouth - all documents are complete except for three IPs. These are in draft form and have been sent to the town planning committee for review prior to submission to MCDA.

5. Kingston - all documents are complete and were authorized by the Selectmen for submittal and have been forwarded to MCDA.

6. Carver - all documents are complete and were authorized by the Selectmen for submittal and have been forwarded to MCDA.

7. Bridgewater - the draft Plan and Implementing Procedures were authorized by the Selectmen for submittal and have been forwarded to MCDA and transmitted to FEMA for review.

The revised plans and procedures include; 1) identification of schools, day-care centers, the special needs population and the transportation-dependent population; 2) detailed evacuation procedures for these populations and 3) identification of transportation resources. In support of the revised plans and procedures, BECO has developed an evacuation time estimate (ETE) and traffic management plan update for the 10-mile EPZ which was submitted to FEMA by the Commonwealth in March 1988 for review. The ETE study was further updated and distributed to the local planners and MCDA on August 26, 1988. BECO is also developing, for submittal to MCDA, a traffic management plan for certain areas beyond the EPZ.

In addition to the local plans, the revision of the MCDA Area II emergency plan* and procedures and the revision of the Commonwealth's state-wide plan emergency plan** and procedures which support local plans are essentially complete. The MCDA Area II plan has been transmitted by the Commonwealth to FEMA for informal technical review. The state-wide plan remains to be submitted by the Commonwealth to FEMA for review.

Thus far the plans submitted by the Commonwealth to FEMA have been submitted for "informal technical review." The Commonwealth while participating in the revised plan development process continues to characterize all of the revised plans as "draft". In correspondence with the Commonwealth dated March 30, 1988 and August 22, 1988, FEMA has recognized the progress being made in improving emergency plans for Pilgrim and has encouraged the development, by the Commonwealth, of a schedule indicating Commonwealth milestones for completing the overall planning process. The Commonwealth has not yet indicated when revised plans will be formally submitted to FEMA.

The revised plans and procedures for the EPZ and reception center towns are in sufficiently final form that training is being conducted in accordance with a

* The MCDA Area II Plan provides for coordination of response among EPZ and reception center communities, and details how State resources should be requested and provided to support local response.

**The State Radiological Emergency Response Plan details overall coordination of emergency response, the duties of State agencies in support of local response, and the relationships with Federal agencies and adjacent States.

training program approved by the Commonwealth. Almost all of the training modules and lesson plans have been prepared, and training of emergency response personnel by Commonwealth certified instructors is well underway. General overview training has been conducted for many offsite organizations, and specific training is being conducted including training for transportation providers. The NRC staff has reviewed the training program, including the individual lesson plans, and has observed the training of bus and ambulance drivers from companies providing transportation for schools and daycare centers, special-needs population and transportation-dependent persons. The training includes use of dosimetry and route maps, and travel on the actual routes to be used in an emergency. The training program is currently ongoing and most emergency response personnel are expected to be fully trained in their response duties by the end of the year.

Regarding Issue No. 2, lack of a reception center for people evacuating to the north, the Commonwealth has tentatively designated a state-run facility in the town of Wellesley as the northern reception center and is currently conducting a feasibility study to determine if the facility is suitable for a reception center. This study is expected to be completed in several weeks and, if the results of the study are favorable, the Commonwealth has indicated that it will undertake capital improvements and procedure development. As a related matter, Boston Edison has performed an analysis that concludes that the existing two reception centers (Taunton and Bridgewater), with appropriate renovations and additional equipment, have the capability to support an evacuation from the EPZ. The Commonwealth has not yet authorized these improvements and has indicated that it will pursue development of a third reception center.

Regarding Issue No. 3, lack of identifiable shelters for the beach population, FEMA in a letter to the Commonwealth dated August 22, 1988, reiterated its position, supported by the NRC, that "a range of protective actions" could be satisfied by evacuation alone for the beach population. The FEMA position on shelters for the beach population was developed subsequent to the issuance of FEMA's Pilgrim report in August 1987. Thus the issue of shelters for the beach population has been removed as a concern by FEMA. Prior to this determination, BECO completed a shelter survey and developed a shelter implementation program, including shelter identification, letters of agreement, and shelter procedures. BECO has indicated that, FEMA's position notwithstanding, it will continue it's shelter program for the beach population.

Issue No. 6, overall lack of progress and support in emergency preparedness, is being resolved by the progress being made in correcting the other specific FEMA-identified issues including the development of revised State plans.

In summary, the NRC review of the status of emergency preparedness at Pilgrim indicates that while all tasks have not been completed, progress is being made toward resolving the issues identified by FEMA in their August 1987 report. In particular, significant progress has been made in improving the emergency plans and procedures for schools and day care centers and for the special-needs and transportation-dependent populations in the EPZ. The development of these plans and procedures, in conjunction with the training program directed toward the transportation providers responsible for evacuating school children and the special needs and transportation-dependent populations, indicates that the off-

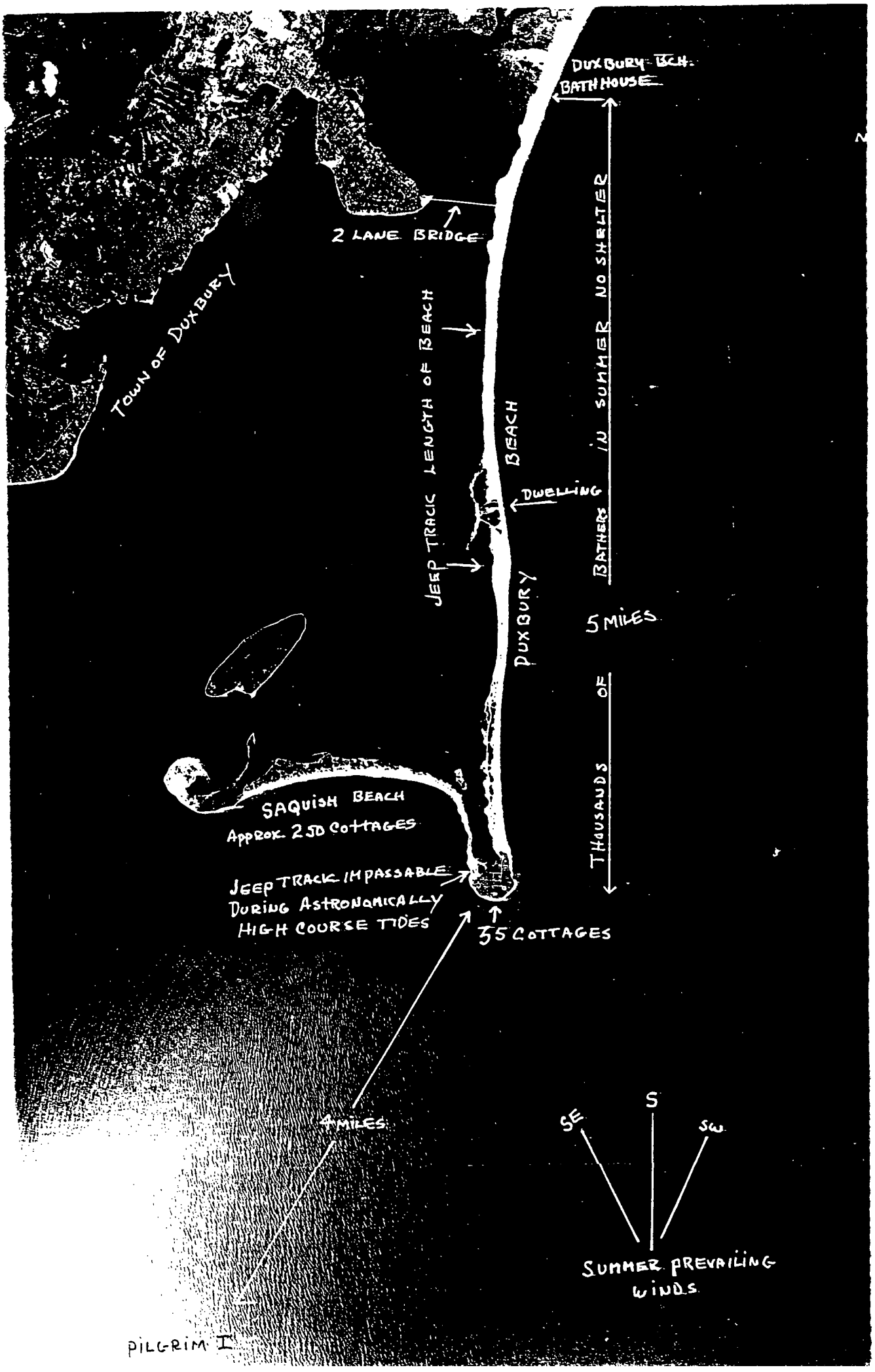
site response plans include measures to protect these sensitive groups. The NRC plans to continue to assess the progress made toward fully resolving the FEMA-identified issues in offsite preparedness.

Regarding the scheduling of an exercise, Boston Edison was granted an exemption from conducting a full-participation exercise because ongoing improvement efforts in the offsite response plans were not complete. A full-participation emergency preparedness exercise will be required to be conducted, in accordance with the regulations, upon the completion and submittal of the revised plans and procedures by the Commonwealth to FEMA.

ATTACHMENT 1

Senator Kennedy's viewgraphs*

*Viewgraphs condensed. Original copy is on file at the Office of the Secretary, NRC.


DUXBURY BCH.
BATHHOUSE
2 LANE BRIDGE
TOWN OF DUXBURY
JEEP TRACK LENGTH OF BEACH
BEACH
DWELLING
JEEP TRACK
DUXBURY
BATHERS IN SUMMER NO SHELTER
5 MILES
THOUSANDS OF
SAQUISH BEACH
APPROX. 250 COTTAGES
JEEP TRACK IMPASSABLE
DURING ASTRONOMICALLY
HIGH COURSE TIDES
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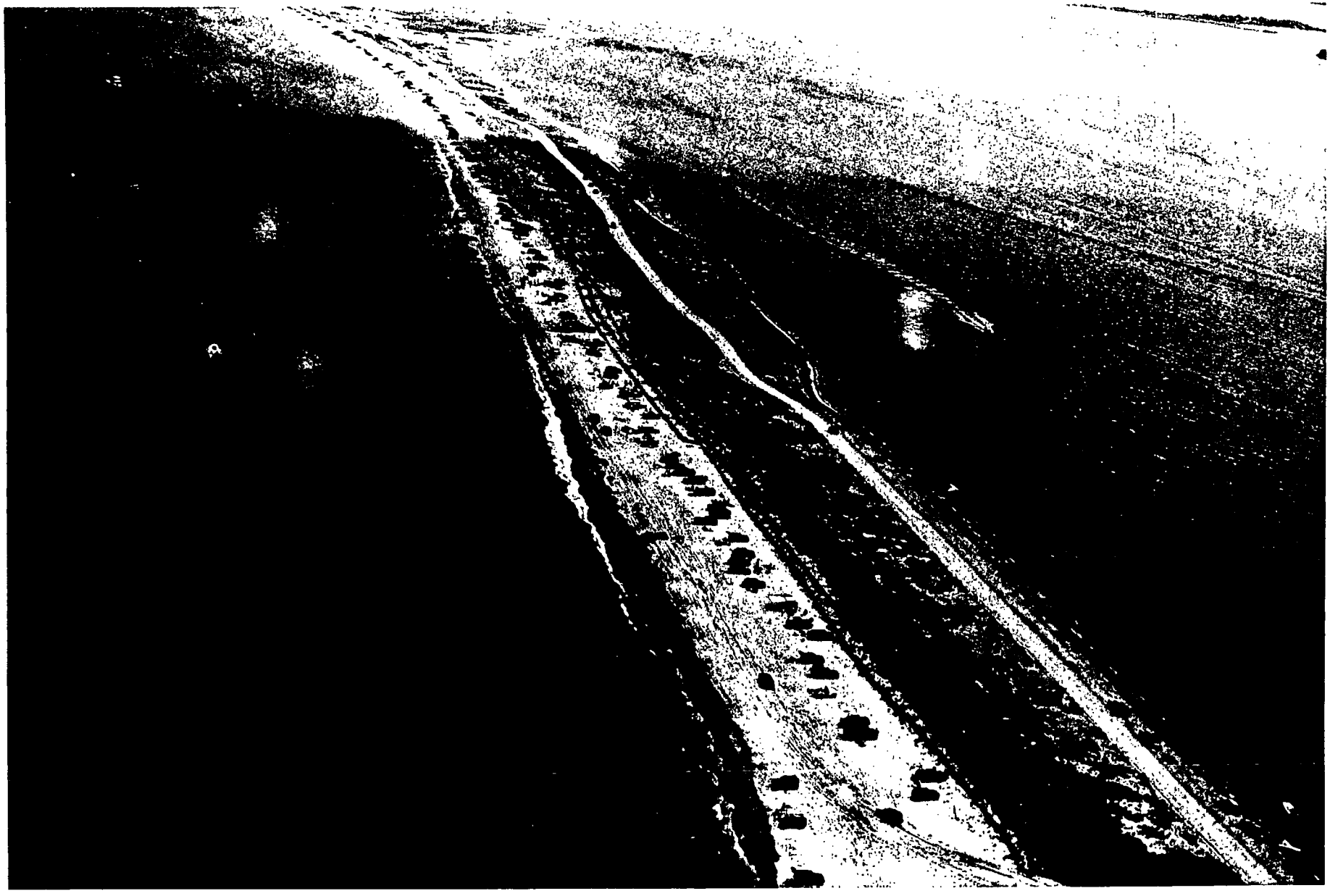
PILGRIM I



DUXBURY BEACH

#2

Access Road to Saquish - under water at high tide #3

ATTACHMENT 2

Statement by Senator Kerry

Statement by Senator John Kerry

before

the Nuclear Regulatory Commission

regarding the restart of the

Pilgrim Nuclear Power Plant

October 14, 1988

Mr. Chairman, I want to thank you for giving me the opportunity today to testify before the Commission on an issue which is so important to me and the citizens of my State, the issue of whether or not the Commission should vote for the restart of the Pilgrim Nuclear Power Plant in Plymouth Massachusetts. Before I begin my testimony, however, I must also express my deep disappointment that the Commission has decided not to allow local elected and public safety officials to present their views today. As you know, the Commission has denied itself the opportunity to hear from those citizens with the greatest expertise and knowledge about an issue that should be of tremendous concern; whether restart of this plant before a tested and approved emergency plan is in place threatens the health and safety of the communities surrounding Pilgrim.

I would also once again like to state that opportunities for public input to date have not satisfied the

Commonwealth's request for a full adjudicatory hearing on the adequacy of emergency preparedness and containment problems. I believe that the Commission has failed to provide sufficient opportunities for meaningful input from the surrounding communities, and has only reduced its own access to valuable information.

As I and my colleagues have stated repeatedly, the recent history of the Pilgrim Nuclear Power Plant is one of failure and neglect. Served with the largest penalty ever issued by the Commission, the plant was closed in April, 1986 because of repeated failures of its emergency equipment and for chronic management problems. Even after the shutdown, the plant continued to experience serious safety problems, including the loss of off-site power, as late as November, 1987.

Since the shutdown, a great deal of time and money have been spent addressing these problems. Boston Edison has undertaken an extensive upgrade and management improvement program. The NRC staff has spent considerable time inspecting and reviewing the plant. At Governor Dukakis' initiative, the state has established a unit devoted exclusively to nuclear emergency safety. And local public safety officials and selectpeople have spent thousands of hours in an effort to develop workable off-site emergency plans. No doubt, all involved in the process are working

toward making this facility safe from the standpoint of public health and safety.

While I applaud these efforts, this process is far from complete, and I believe that today's hearing is premature. The NRC should postpone its decision until all outstanding safety issues have been adequately addressed.

Most important is an issue that the NRC has not addressed in any meaningful way - offsite emergency preparedness. Despite the extensive efforts by civil defense officials to prepare workable emergency plans, their task is far from complete. At a recent public meeting conducted by NRC Region I in Plymouth, Massachusetts, Commission staff indicated that "progress has occurred in drafting upgraded plans," and that "FEMA and RAC have reviewed and commented on some draft plans." While technically accurate, these statements present a picture that is far too optimistic. Because they are unable to speak for themselves today, I would like to quote some of the people who have worked diligently on preparing workable plans. At a hearing sponsored by the Massachusetts Office of Public Safety on October 6, public safety officials were unanimous in their opposition to the restart of the plant until tested and approved emergency plans are in place.

Mrs. Alba Thompson, Chairman of the Plymouth Board of Selectmen, stated that "Plymouth, while working every day on planning issues, has no accepted plan and even our draft document is lacking in implementing procedures for police, for fire, for our hospital and for our schools, the very core of preparedness."

Mr. Daniel MacDonald, Selectman of the Town of Marshfield, stated that the claim by an NRC official that Marshfield's plans have been approved by the Selectmen was false. "It must be clearly understood that the Marshfield Board of Selectmen has not approved or endorsed the plan. We still have major reservations regarding its' viability."

Mr. John MacMahon, Chairman of Marshfield's Board of Selectmen, eloquently summed up the situation. He said, "this is not an issue about the merits or deficiencies of nuclear power. This is not an issue about Boston Edison's efforts to date, to improve the structural integrity of their facility...The only relevant matter before the Board of Selectmen...is whether or not we have a workable plan to safely evacuate our citizens in the event of a radiological accident at Pilgrim Nuclear Power Plant. The answer is emphatically, no."

And Mr. Dennis Tavares, Civil Defense Director of the Town of Kingston said, "Until we have an approved plan, until we

have all our personnel trained, until everything is in order, I think that it would be foolish for me, as Civil Defense Director, to say that we are 100% ready."

These comments come from people who have worked long and hard on this issue. They have both professional responsibility and personal concern for the safety of all residents in their communities. They have made considerable progress on improving plans that FEMA found to be wholly inadequate in August, 1987. However, they have all concluded that these plans, as they stand today, could not protect their communities in the event of an accident.

Further, the Commonwealth Office of Public Safety has recently issued its own report finding that progress on emergency preparedness is incomplete, and that only through a successful, full-scale emergency exercise of all off-site emergency plans will the adequacy of those plans be able to be assessed.

These are the agencies and individuals who must respond in the event of an emergency. These are the people responsible for the movement of children, the elderly, the handicapped, and those in hospitals, for whom there are no tested plans. By granting a restart license today, you give them the responsibility but none of the tools. Plans approved only in concept, plans without the necessary equipment to implement

them, and plans which at the present time leave out entire portions of the population are, in reality, no plans at all.

I am aware of the fact that NRC regulations do not require an approved emergency plan for facilities licensed before Three Mile Island. But I am also aware that the mission of the NRC is to ensure the safe operation of commercial nuclear facilities. And the NRC itself has already indicated in the case of Pilgrim that emergency preparedness is an important, although not determinative, issue. I urge the Commission not to ignore the overwhelming evidence that emergency planning is still too incomplete to support the restart of this plant.

I would also like to raise two other critical issues which I believe have not received the full attention that they deserve. First, I was deeply disturbed by the most recent SALP report, covering the period from February, 1987 through May, 1988, which indicated only modest improvement. Most disturbing was the fact that the rating for Radiological Control remained at the lowest level, despite Boston Edison's efforts. The report cites recurring problems, including the loss of off-site power and inadequate procedures and guidance for technicians. In spite of these continuing problems, the NRC granted Boston Edison's request for an Integrated Assessment Team Inspection in August of this year. While I have no doubt that this week-long inspection was thorough, I

seriously doubt that adequate improvements have been made in areas found deficient in the SALP report just three months earlier.

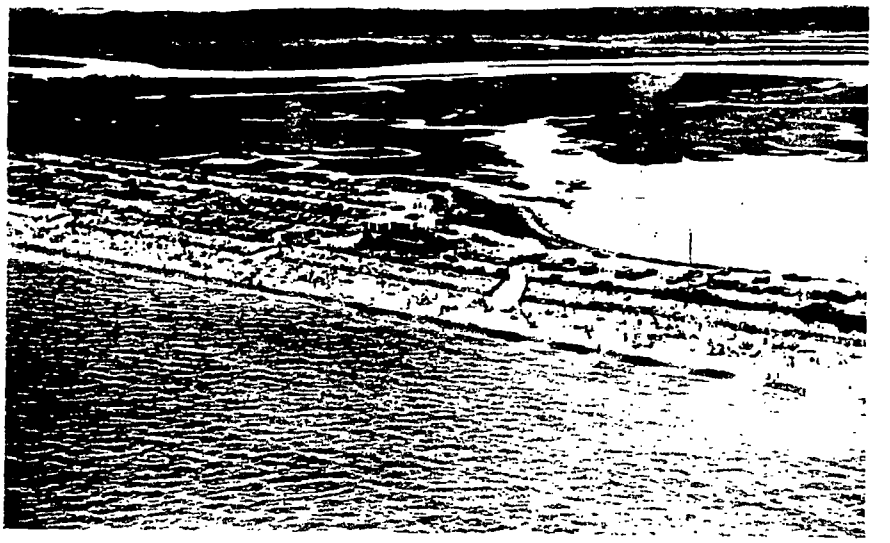
In addition, I am extremely troubled that serious concerns regarding the Mark I containment have yet to be addressed by the Commission. Despite the fact that last January, Brookhaven National Labratory Report raised serious safety concerns with the containment and despite the fact that this report was presented to the Commission, -- to date, no final decisions have yet been made. It is my understanding that the Commission does not plan to take up this issue until December of this year. If that is true, why are we considering restart? No restart of Pilgrim should be made until the Commission has addressed this critical problem. Secondly, however, I am very concerned about how the Commission plans to integrate the backfit rule, which asserts that if safety improvements are not "cost-effective" they need not be implemented despite their safety value. The backfit rule should not be used to allow this plant to avoid making safety-related improvements which might not be cost-effective because the plant is back on-line.

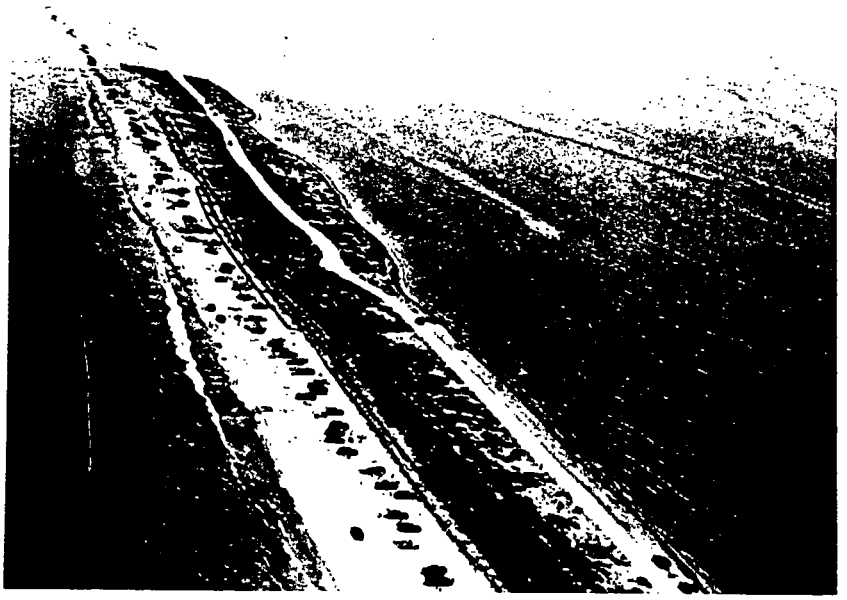
Finally Mr. Chairman, as you know the show cause petition filed by State Senator William Golden and the Massachusetts Public Research Group in July 1986 was denied by the Commission on the issues of emergency response plans and

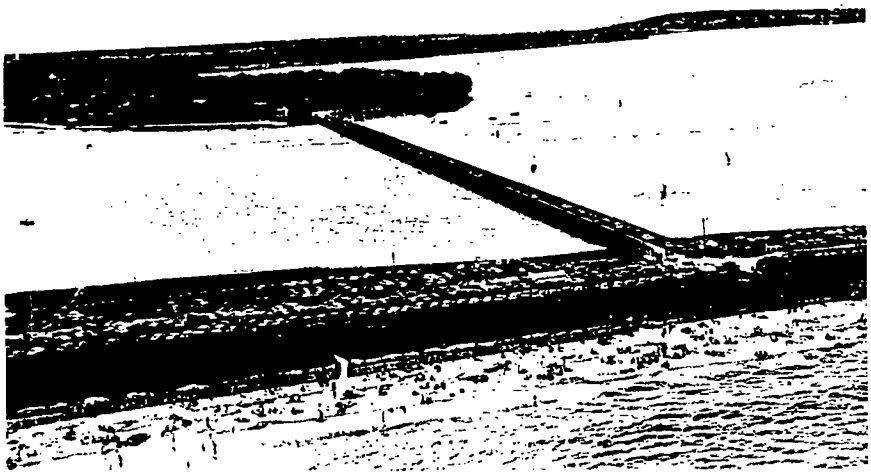
design flaws in the plant's containment structure. On appeal, the First Circuit court determined that these issues were not subject to judicial review but stated that "the NRC will not allow the restart of Pilgrim until the deficiencies are resolved to its satisfaction." With untested, incomplete emergency response plans and unresolved containment issues, the Commission can hardly state that these deficiencies have been resolved. Unfortunately, it appears the the Commission may do just that. I urge the Commission to prove the court right and to postpone its decision until these issues are fully resolved.

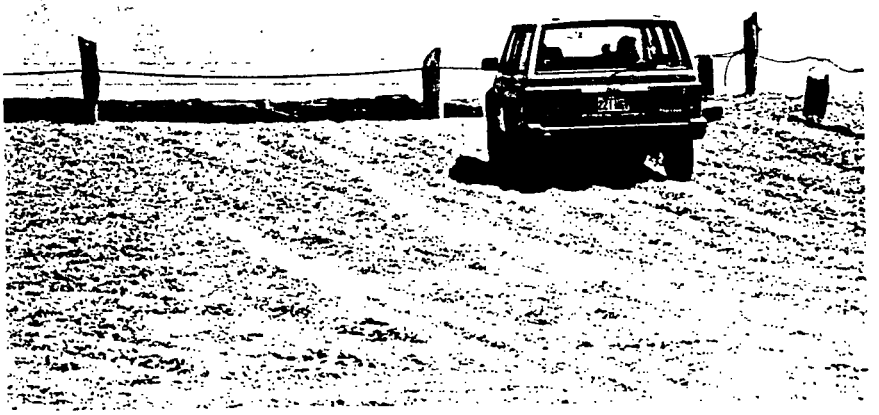
ATTACHMENT 3

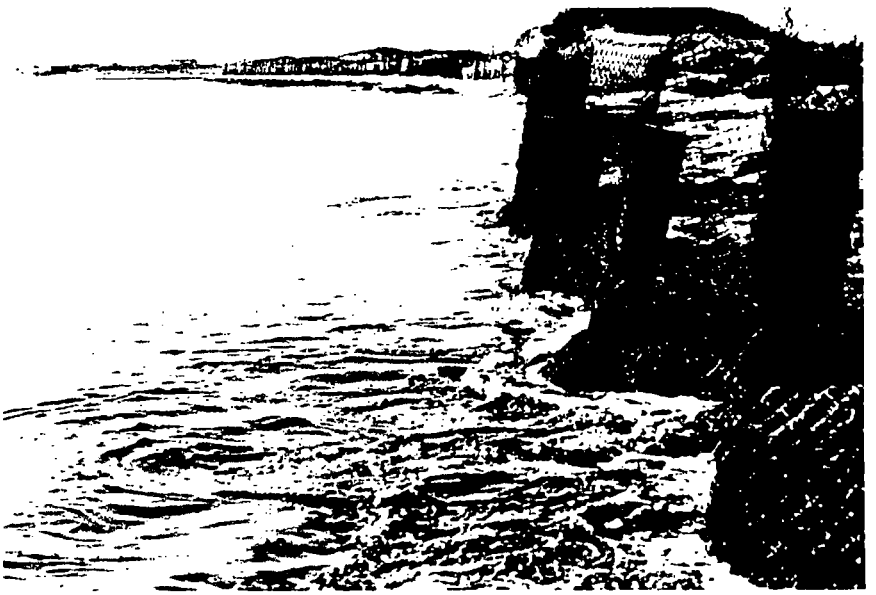
Slides submitted for the record by David L. Quaid

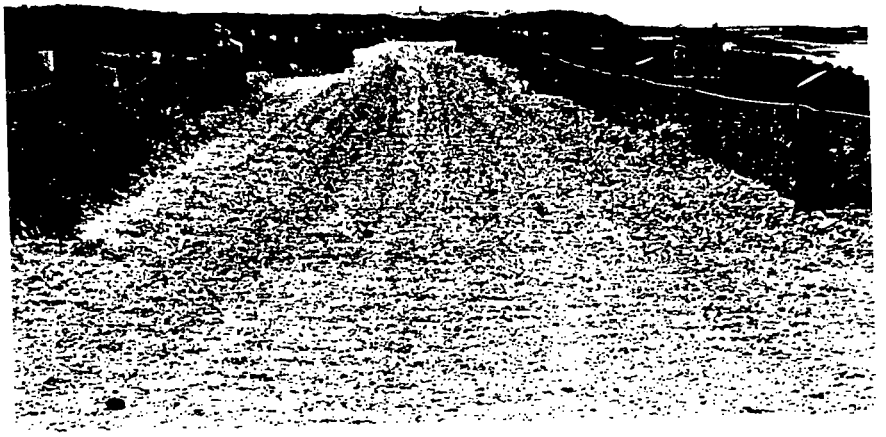


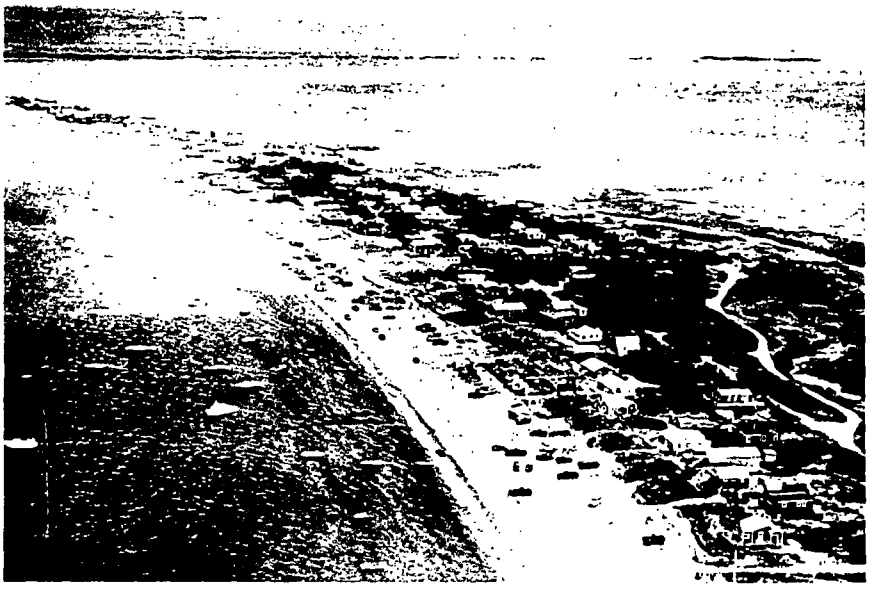


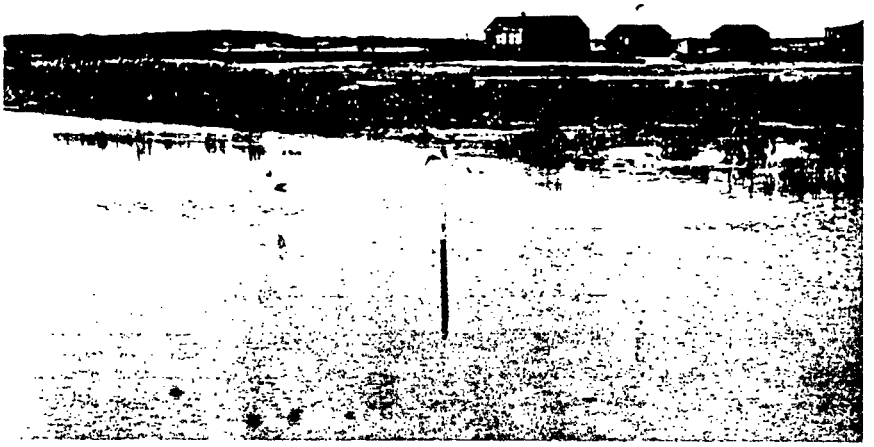


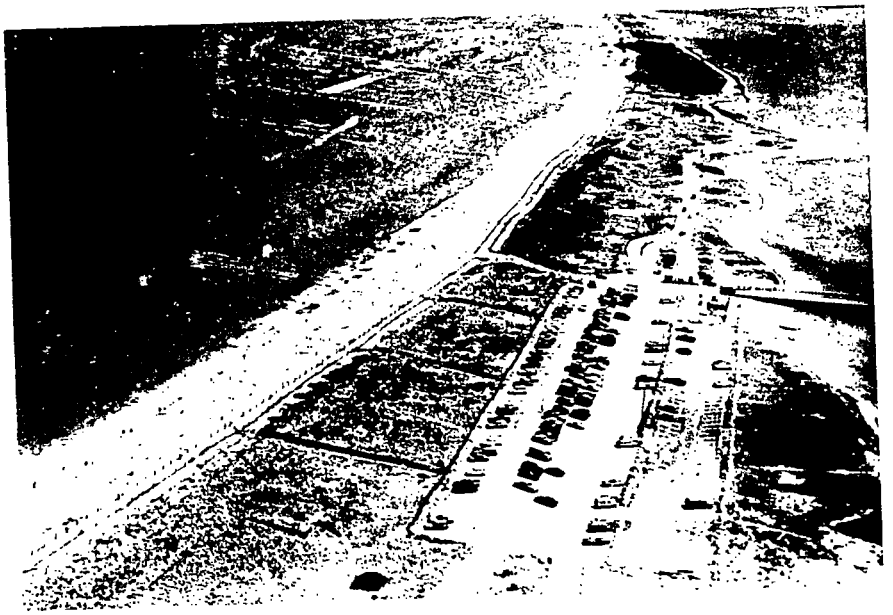












ATTACHMENT 4

C.U.R.E.

Pilgrim Station
Docket No. 50-309

REGULATORY PERFORMANCE HISTORY
As produced by the
Subcommittee on Energy Conservation and Power of the Committee on Energy and Commerce
A tabulation of significant milestones and enforcement actions

The following is the regulatory history of the Pilgrim Nuclear Power Plant:

*June 1972 issued operating license.
*December 1973 Shutdown order issued to inspect for and repair fuel channel box damage.
*December 1974 Fuel Failure: Hydriding and pellet-clad interaction failures resulted in high gaseous activity. Operation with fuel cladding perforations resulted in high dose rates in locations requiring access for operation and maintenance. During 1975, 76, and 77, power was limited between 60-80% to maintain offgas activity within regulatory requirements. The last of the defective fuel bundles was replaced during the 1977 refueling outage.
* May 1975 A civil penalty ($12,000) was assessed for violations concerning inservice inspection activities identified during an inspection conducted December 1974-February 1975.
* July 1976 Management meeting to discuss concerns related to the management and the implementation of the Health Physics Program.
* October 1976 Management meeting to discuss concerns related to the management and the implementation of the Health Physics Program.
*November 1977 Management meeting to review licensee efforts to strengthen Radiation Protection Program.
*March 1978 A civil penalty ($16,000) was assessed for violations identified in inspection report 50-293/77-31. The violations were: over exposure of one individual; failure to instruct personnel in accordance with 10 CFR 19; failure to perform required air sampling; and failure to follow procedures.
*September 1978 Management meeting to discuss concerns on recent inspection findings (all areas)
*September 1979 Management meeting to discuss violation of primary containment integrity.
*October 1979 A civil penalty ($5,000) was assessed for a violation identified in inspection report 50-293/79-15 involving a failure to follow Security Plan.
*February 1980 A civil penalty ($5,000) was assessed for shipping radioactive materials with external radiation levels in excess of regulatory limits.
*March 1981 (SALP) Management meeting to discuss the results of the SALP for the period January 1, 1980 to December 31, 1980.
*April 1981 A civil penalty ($13,000) was assessed for events surrounding movement of irradiated fuel without secondary containment as identified in inspection report 50-293/80-09.
*July 1981 a management meeting was held in July 1981 to discuss concerns for TMI Action Plan Items involving post accident sampling procedures and equipment and an Immediate Action Letter was issued regarding implementation of these items. Meeting was prompted by a June 1981 radiation protection inspection (50-293/81-14) which found the licensee failed to conform with NRC criteria in connection with 4 of 5 NUREG-0578 Category A items inspected.
*June-Sept 1981 Inspections 50-293/81-18 and 81-82 identified six problems; inoperable combustible gas control system; failure to perform an adequate 50.59 review; failure to provide appropriate procedures and drawings; failure to make a report required by Technical Specifications; failure to provide accurate information to the NRC; and failure to satisfy a Limiting Condition for Operation (LCO) regarding primary containment isolation valves. These inspections were subsequently the subject of enforcement actions taken in January 1982.
*July-Aug 1981 A performance Appraisal Inspection (50-293/81-20) found 6 of 8 areas examined below average. These were: committee activities; quality assurance audits; maintenance; corrective action systems; licensed and non-licensed training; and procurement. Plant operations and design changes and modifications were found to be average; however, significant weaknesses were identified in both areas.
*October 1981 Enforcement conference to discuss management controls of safety related activities including the violations identified during inspections 50-293/81-18 and 81-82, the Performance Appraisal Inspection result, and an interim SALP review (period September 1, 1980-August 31, 1981).
*January 1982 Civil penalty ($550,000) assessed for failure to comply with requirements of 10 CFR 50.44; submittal of false information to NRC and subsequent delay of notification to NRC of known inaccurate information; and failure to comply with LCO for RCIC containment isolation valves.

(PIP) Order modifying license required licensee to submit a comprehensive plan of action that would yield an independent appraisal of site and corporate management, recommendations for improvements in management controls and oversight, and a review of previous compliance with NRC requirements.

Management meeting to discuss implementing requirements of the NOV/proposed civil penalty and order modifying license regarding the independent appraisal of Boston Edison Company (BECo) management practices.

January 1982 Inspection report 50-293/81-26 identified a severity level III violation for transportation of radioactive materials with liquid in the containers. This violation was based on an inspection in August 1981 by the State of South Carolina which resulted in issuance of a civil penalty ($1,000)
*March 1982 Boston Edison Company (BECo) submitted the Performance Improvement Program (PIP) required by the January 1982 Order.

NRC Management meetings to review status of the Performance Improvement Program were held approximately every six weeks until September 1984.
*June 1982 A special inspection (50-293/82-20) conducted of licensee actions after radioactive spent resin was found on roof tops and pavement

within the protected area. No violations identified. Confirmatory Action Letter issued concerning actions to be taken regarding the spent resin.
*July 1982 Enforcement Conference to discuss exceeding an LCO associated with the Reactor Protection System water level instrumentation.
*August 1982 Enforcement Conference to discuss exceeding an LCO associated with the Vacuum Breaker Alarm System.
*September 1982 (SALP) Management meeting to discuss the results of the SALP for the period September 1, 1981 to June 30, 1982.
*August 1983 A shutdown order was issued requiring the licensee to shut down in December 1983 and inspect the recirculation system piping for Intergranular Stress Corrosion Cracking. It required them to remain in cold shutdown until authorized to restart by the Director of NRC. The licensee replaced the recirculation system piping and was authorized to restart in December 1984.
*September 1983 (SALP) Management meeting to discuss the results of the SALP for the period July 1, 1982 to June 30, 1983.
*November 1983 Management meeting to discuss refueling/pipe replacement preparations.
*January 1984 confirmatory Action Letter issued regarding licensee actions relative to health physics practices following the discovery of small, highly radioactive sources in the control rod drive repair room.
*February 1984 Enforcement conference regarding the uncontrolled handling of small, highly radioactive sources in the control rod drive repair room.
*April 1984 A civil penalty ($40,000) was assessed for problems in connection with the uncontrolled handling of small, highly radioactive sources in the control rod drive repair room between January 14 and 18, 1984. The violation involved identified problems with the labeling of containers, the use of extremity dosimetry, and the adequacy of instructions given to individuals working in the repair room.
*September 1984 Management meeting to discuss a second instance of the uncontrolled presence of small, highly radioactive sources in the control rod drive repair room.
*October 1984 Enforcement conference on the unplanned extremity exposure (within regulatory limits) connected with the small, highly radioactive sources in the control rod drive repair room. (Follow-up to September 1984 management meetings on same subject.)

Confirmatory Action Letter issued in connection with recurring radiation protection program weaknesses. The letter outlined licensee plans for evaluating and correcting these weaknesses.
*November 1984 An order modifying the license was issued in connection with recurring weaknesses in the radiation protection program. The order required the licensee to complete an independent contractor assessment of the radiological controls program and to submit to NRC review and approval a Radiological Improvement Plan (RIP) for upgrading the radiological controls program. Follow-up inspections conducted in May, August, and November 1985 and April 1986.

A Severity Level III violation (no civil penalty) was issued for failure to perform radiation surveys; failure to instruct workers in accordance with 10 CFR 19; and failure to properly implement a procedure in connection with the unplanned exposure noted above.

Enforcement conference to discuss weaknesses in the control and monitoring of neutron instrumentation during refueling operations.
*January 1985 (SALP) Management meeting to discuss the results of the SALP for the period July 1, 1983 to September 30, 1984.

Enforcement conference to discuss an unplanned occupational radiation exposure within regulatory limits associated with sludge-lancing operations on a waste tank as identified in inspection 50-293/84-44.
*August 1985 Enforcement conference to discuss licensee's action on abnormal surveillance test results and a degraded vital area barrier.
*October 1985 A civil penalty ($50,000) was assessed for the degradation of a vital area barrier.
*November 1985 A safety system functional team inspection (50-293/85-30) was conducted by the Office of Inspection and Enforcement to assess the operational readiness and function of selected safety systems. The inspection identified that the license had not effectively mitigated a water hammer problem associated with the HPCI turbine exhaust line which had been occurring since the beginning of plant operation. Weaknesses were also identified with the licensee's design change process; control of plant instrumentation; handling of vendor information; program for approving and validating emergency operating procedures; capability to conduct a plant shutdown from outside the control room; and maintenance program for motor operated valves.
*February 1986 Inspection report 50-293/84-04 identified a severity level III violation for failure to meet packaging requirements for low specific activity radioactive materials. This violation was based on an inspection in January 1986 by the State of South Carolina which resulted in issuance of a civil penalty ($1,000).
*March 1986 (SALP) Management meeting to discuss the results of the SALP for the period October 1, 1984-October 31, 1985.
*Feb-March 1986 A special diagnostic team inspection (50-293/86-06) was conducted to determine the underlying reasons for the licensee's poor performance described in the most recent SALP and to ascertain whether they could have an adverse impact on the safety of plant operations.
*April 1986 An Augmented Inspection Team (AIT) conducted an inspection of recent operations events which included:
1) the spurious group one primary containment isolations (and associated reactor scrams) that occurred on April 4 and 12, 1986;
2) the failure of the main steam isolation valves to promptly reopen after the containment isolations, and
3) the recurring pressurizations of the residual heat removal system.
The AIT found the licensee's evaluations following the second event to be carefully structured and thorough. A Confirmatory Action Letter concerning the events was issued which required the licensee to provide a written report prior to restart containing the results of the evaluation and corrective actions. The CAL also required Regional Administrator authorization for restart.

Inspection (50-293/86-10) reviewed implementation of the RIP. The inspection found the licensee adequately addressed 13 of 34 items reviewed.
*May 1986 Management meeting to discuss evaluations and corrective actions concerning the operational events of April 4 and 12, 1986.
*June 1986 The first in a planned series of management meetings scheduled to review BECo management oversight of the implementation of the licensee improvement programs in progress.

FOR MORE INFORMATION CONTACT:
DUXBURY CURE
P.O. BOX 2621
DUXBURY, MASSACUSETTS 02331

ATTACHMENT 5

"Regulatory Performance History"

C.U.R.E.

Box 2621
Duxbury, MA 02331

We urge you to write to any or all of the following officials stating your concerns regarding the safe operation of Pilgrim Nuclear Power Station.

Governor Michael Dukakis
Room 300
State House
Boston, MA 02133
727-3600

U.S. Congressman Gerry E. Studds
237 Cannon HOB
Washington, DC 20515
826-3866 (Pembroke, MA)

U.S. Senator Edward M. Kennedy
Room 2400A
J.F.K. Federal Building
Boston, MA 02203
565-3170

State Representative Charles Mann
Room 489
State House
Boston, MA 02133
722-2000

U.S. Senator John F. Kerry
Room 3220
Transportation Building
10 Park Plaza
Boston, MA 02116
565-8519

State Senator William Golden
Room 416B
State House
Boston, MA 02133
722-1646

Peter Agnes
Asst. Secretary Public Safety
1 Ashburton Place, Room 2133
Boston, MA 02108
727-7775

Edward Thomas
Federal Emergency Management Agency
422 J. W. McCormick Bldg.
Boston, MA 02108

Nuclear Regulatory Commission
Lando Zech
1717 H Street, NW
Washington, DC 20555

Robert Boulay
Director/Mass. Civil Defense Agency
400 Worcester Road
P.O. Box 1496
Framingham, MA 01701-0317

Duxbury Citizens Urging Responsible Energy (C.U.R.E.) is a non-profit grassroots, action group formed in September of 1986 to educate and inform members and the public as to the public health, safety, and environmental dangers inherent in the irresponsible use of nuclear energy. **We are not anti-nuclear.** The group is not affiliated with or supported by utility companies. Membership is open to all. The group is made up of doctors, lawyers, homemakers and even nuclear engineers who support the common goal of keeping the Pilgrim Nuclear Power Station shut down because of unresolved safety, evacuation, and health concerns.

For more information or to ask about other ways you can help, please telephone 934-5574.

Donald M. Muirhead Jr., M.D.
Mary C. Ott
Co-Chairmen

The following information is for you to consider, if you wish, when writing officials listed on the reverse side of this sheet.

PLANT DESIGN — The Pilgrim Nuclear Power Station (PNPS) is a boiling water reactor (BWR) with a GE Mark I containment structure. Even the Nuclear Regulatory Commission (NRC) said in a recent risk assessment study, "In 9 out of 10 types of serious accidents, the GE Mark I would fail — the small containment shell would not be able to withstand high pressures of steam or gas — the shell would crack with resultant release of radioactive gases into the atmosphere." Boston Edison Company (BECo) says that they have resolved the problem by spending 30 million dollars on a Safety Enhancement Program which includes Direct Torus Venting. But the NRC has halted construction on this improvement, saying in Ohio (July, 1987) that they were dropping specific solutions proposed last year because of uncertainty about unintended side effects. These same officials say that they have no plans to do anything about the problem soon, even though they concede that the nation's 24 Mark I's, if new, would not be able to obtain a license unless dramatic changes were made.

MANAGEMENT RECORD — Since its licensing in 1972, Pilgrim's management has been, and continues to be, a serious regulatory concern. The NRC has rated Pilgrim among the ten worst licensed reactors in this country (109 current total). In a "show cause" petition filed with the NRC, Governor Dukakis and Attorney General James Shannon point out that the "short term solutions BECo has adapted in response to criticism have invariably permitted the re-occurrence of original problems."

January, 1982 - Edison was hit with the highest fine in the history of the NRC - $550,000 for major deficiencies in management controls. The details behind this fine were outlined in a "Report to Congress on Abnormal Occurrences (NUREG-0090, Vol. 5). Associated with this fine was a violation for submitting false information to the NRC. The most recent SALP (Systematic Assessment of Licensee Performance) report from the NRC says in part... The lack of a clear organizational structure, recurring management changes, and chronic staffing vacancies delayed the establishment of a stable licensee management team at the plant and inhibited progress..." Since that report, eight key management people have left Pilgrim.

EVACUATION PLAN — We do not have one. Duxbury Selectmen, State Secretary of Public Safety, the Governor, and even the Federal Emergency Management Agency have withdrawn their approval of the 1985 plan, stating that it is "not adequate to protect public health and safety in the event of an accident at Pilgrim."

Glaring deficiencies include:

* A lack of evacuation plans for public and private schools and daycare centers.
* A lack of a reception center for people evacuating to the north.
* A lack of identifiable public shelters for the beach population.
* Inadequate planning for the evacuation of the special needs population.
* Inadequate planning for the evacuation of the transport dependent population.
* An overall lack of progress in planning and apparent diminution in emergency preparedness.

WASTE STORAGE — A federal repository for high level waste has never been sited, therefore all the high level radioactive waste that Pilgrim has generated since it began operation in 1972 is presently stored on site in a spent fuel pool, and amounts to well over 400 tons. The spent fuel pool was originally designed to store 880 spent fuel assemblies, yet with NRC permission, Edison has "reracked" to accommodate the current total of 1,320.

HEALTH ISSUES — Although a conclusive link has not been found, Pilgrim's history of abnormal releases of radiation into the atmosphere have heightened suspicion of the connection between the plant and the alarming increase of cancer in towns downwind. The State Department of Public Health issued a report confirming the cancer increase. Because the report was widely criticized for omitting crucial data, a new study was promised two years ago. The new report, yet to be released, is to include more recent data, causal factors, occupational risks, and a study of cancer incidence in communities near nuclear power plants in New England. The Department of Public Health however, has recently confirmed the wind theory stating that "winds blow onshore and these winds would (carry) Pilgrim plant power emissions over populated regions."

ATTACHMENT 6

Letter to NRC from Board of Selectmen,

dated October 4, 1988

TOWN OF PLYMOUTH
OFFICE OF
THE SELECTMEN
11 Lincoln Street
Plymouth, Massachusetts 02360
(508) 747-1620

WILLIAM R. GRIFFIN
EXECUTIVE SECRETARY

SELECTMEN
BRUCE M. ARONS
GEORGE W. BUTTERS
ALBA C. THOMPSON *Chairman*
DAVID F. MALAGUTI
GEORGE W. CAMERON

October 4, 1988

Nuclear Regulatory Commission
Washington, D.C. 20555

Gentlemen:

The Plymouth Board of Selectmen is astonished to learn that the Nuclear Regulatory Commission has requested Boston Edison to appear in Washington on October 5, 1988 to discuss off-site emergency preparedness and to provide a written description of Boston Edison's "current understanding of the state of the off-site program and the status of the issues raised in FEMA's August, 1987 "Self-Initiated Response."

Why is the "current understanding" of a utility seeking restart of the Pilgrim Nuclear Power Station a valid basis for judgement? Since the utility is not responsible for off-site preparedness and the Town of Plymouth is, why was the Town not invited to testify at the October 5, 1988 meeting?

We repeat here the findings of FEMA's Region I, August 22, 1988 in a letter responding to Charles V. Barry, Secretary, Executive Office of Public Safety; Commonwealth of Massachusetts concerning radiological off-site emergency planning and preparedness for Pilgrim and quoted to this Board by FEMA, Washington, D.C. in its letter to us under date of September 9, 1988: ". . . reviews indicate that there has been some progress made in improving and upgrading local plans. Overall, however, the plans remain incomplete, lack specific details in certain areas, and do not include required implementing procedures." (emphasis added).

It should be clear to your Commission from the above as to the truth of the status of off-site radiological planning in this and other communities in the EPZ.

This Board knows the truth far better than any utility which will, without doubt, seek to put the best face on a dangerous situation. That you should ask it and not a town official to tell you the present status of the Town of Plymouth's emergency planning is to lose credibility.

We thoroughly question the validity of this course of action and deny that you can arrive at the truth of areas under our jurisdiction by asking for "current understandings" from Boston Edison.

Indeed, we are astonished that you should do so while ignoring our own officials' "current understandings." We refer to our civil defense director, our chairman of our Radiological Emergency Response Planning Committee, and to our selectmen who are responsible for writing, implementing, testing, and approving our plans.

We invite your response, but more particularly we urge you to consult with Plymouth's Board of Selectmen and our Civil Defense Director, and our heads of departments if you are truly interested in the status of emergency planning in this community. Any other course avoids the facts. That surely cannot be your purpose.

Very truly yours

BOARD OF SELECTMEN

Alba C. Thompson
Chairman

ACT/lt

ATTACHMENT 7

Letter to NRC from Board of Selectmen,

dated September 27, 1988

TOWN OF PLYMOUTH
OFFICE OF
THE SELECTMEN
11 Lincoln Street
Plymouth, Massachusetts 02360
(508) 747-1620

WILLIAM R. GRIFFIN
EXECUTIVE SECRETARY

SELECTMEN
BRUCE M. ARONS
GEORGE W. BUTTERS
ALBA C. THOMPSON *Chairman*
DAVID F. MALAGUTI
GEORGE W. CAMERON

September 27, 1988

Nuclear Regulatory Commission
Washington, D.C. 20555

Gentlemen:

We, the Plymouth Board of Selectmen, have tried in every way to apprise you of the fact that this community does not have an approved nor tested radiological response plan in being.

We have repeatedly advised you that the Pilgrim Nuclear Power Station ought not be permitted to restart until the citizens of this town are protected by a response plan in the event of a major accident.

We have many times testified, witnessed, and written to this effect. The Nuclear Regulatory Commission, its staff, the Federal Emergency Management Agency, the Reactor Safeguards Committee, and the Commonwealth of Massachusetts are well informed of our position.

The Board of Selectmen of the 45,000 inhabitants of the historic town of Plymouth, all of whom live within ten miles of the Pilgrim Nuclear Plant, now reiterate our position that until an approved radiological response plan is in place, the plant ought not be given permission to restart.

Not once in the past three years has any official of the NRC nor of FEMA visited this community to monitor the conditions of our readiness to respond to nuclear emergency or to consult with our Civil Defense Director or any elected official. Yet 20,000 hours of inspection have been recently completed by the NRC at Pilgrim. This is a deplorable ratio of concern, particularly since we have been told at public hearings that the NRC would indeed consider emergency planning prior to restart.

We who have sworn to uphold the public safety and who know best the circumstances of the community remind the NRC that all the technical evaluations do not outweigh the necessity to consider the public health and safety. Let it be known that the full weight of decision rests with the NRC, and we hold it accountable in this matter.

Very truly yours,

BOARD OF SELECTMEN

Alba C. Thompson

Alba C. Thompson
Chairman

ACT/lt

cc Congressman G. Studds
Senator J. Kerry
Senator E. Kennedy
Secretary Barry, MA Department of Public Safety
State Representative P. Forman
State Senator E. Kirby
FEMA
Plymouth Civil Defense Director

ATTACHMENT 8

Letter to Governor Dukakis from William Griffin, Executive Secretary Board of Selectmen, dated October 12, 1988

TOWN OF PLYMOUTH
OFFICE OF
THE SELECTMEN
11 Lincoln Street
Plymouth, Massachusetts 02360
(508) 747-1620

WILLIAM R. GRIFFIN
EXECUTIVE SECRETARY

SELECTMEN
BRUCE M. ARONS
GEORGE W. BUTTERS
ALBA C. THOMPSON *Chairman*
DAVID F. MALAGUTI
GEORGE W. CAMERON

October 12, 1988

The Honorable Michael S. Dukakis
Governor of the Commonwealth
State House
Boston, MA

Dear Governor Dukakis:

It is with a strong sense of urgency that the Board of Selectmen writes to you in reference to the Pilgrim Nuclear Power Station. By unanimous vote of the Board of Selectmen on Tuesday, October 11, 1988, the Board hereby requests that you take all action necessary to prohibit the restart of the Pilgrim Nuclear Power Station in the event of a restart vote by the Nuclear Regulatory Commission.

This definitive action is necessitated by the lack of a complete and tested radiological emergency response plan for the Emergency Planning Zone encompassing Plymouth, Carver, Kingston, Marshfield and Duxbury. The lack of a complete and tested plan has been verified by local boards of selectmen, civil defense directors, communities radiological emergency response plan committees and many other interested officials and committees.

The Board of Selectmen again calls upon you to exercise the authority of your office as Governor of the Commonwealth to physically prohibit the restart of the Pilgrim Nuclear Power Station until a complete and tested radiological emergency response plan is in place for the towns in the Emergency Planning Zone. Thank you.

Very truly yours,

William R. Griffin
Executive Secretary

c.c. Selectmen, Carver
Selectmen, Kingston
Selectmen, Marshfield
Selectmen, Duxbury

ATTACHMENT 9

Letter to Senator Glenn, dated October 14, 1988, from Mary C. Ott and others, Citizens Urging Responsible Energy

CITIZENS URGING RESPONSIBLE ENERGY

October 14, 1988

The Honorable John Glenn, Jr., Chairman
Government Affairs Committee
Hart 503
Washington, DC 20510

Dear Senator Glenn:

Citizens Urging Responsible Energy is an educational safe energy group founded in the summer of 1986 in response to residents growing concerns about safety issues involving the restart of the Pilgrim Nuclear Power Station in Plymouth. We are not anti-nuclear.

Over the past two years we have done extensive research on the subject of Pilgrim, and have tried to work with the utility and with the Region I office of the Nuclear Regulatory Commission to resolve our concerns and learn the truth about Pilgrim's troubled history. To our surprise, the "system" is not working.

The past two years have demonstrated that the Nuclear Regulatory Commission is more concerned with getting Pilgrim back on line then they are with protecting public health and safety. Meetings held for public participation have been a farce and have limited testimony from even state safety officials to 5 minutes. We have no workable evacuation plan. The health study of our high cancer rates is incomplete. There has been no resolution of the GE Mark I containment issue. Pilgrim has shown signs of embrittlement. Investigations into the receipt and installation of fraudulent equipment at Pilgrim are incomplete. The current SALP lists 26 violations of Edison's operating license, 39 mishaps and the highest worker exposure to radiation at a domestic reactor in 1987. This report encompasses the first 15 months of Pilgrim's new management team. In the face of all this evidence, Region I NRC officials have given the go ahead for Pilgrim's restart. Today the commissioners will hold at meeting to hear Boston Edison's request.

We have been denied an adjudicatory hearing to learn the truth about Pilgrim's history, the NRC has not responded to many of our inquiries; forcing us, as well as state officials to resort to the use of the Freedom of Information Act to obtain answers. In short, the NRC'S conduct has caused thousands of citizens to lose confidence in their government.

We charge that the NRC is in violation of the Code of Federal Regulations, Part O, subpart A. We would like to request that a congressional investigation of the Region I NRC office be initiated. Please inform us of the type of evidence your committee would require to undertake such an inquiry. We will gladly provide testimony, transcripts, correspondence and recordings.

We look forward to hearing from you at your earliest convenience.

Sincerely yours,

Mary C. Ott Donald M Muirhead Jr. Diane Buckbee

Mary C. Ott
Duxbury Chapter
P. O. Box 2621
Duxbury, MA 02331

Donald M. Muirhead, Jr.,M.D.

Diane Buckbee
Plymouth Chapter
P.O.Box 1754
Plymouth, MA 02360

ATTACHMENT 10

October 14, 1988 press release by C.U.R.E.

October 14, 1988

For Immediate Release

From: Citizens Urging Responsible Energy (CURE)
Mary Ott, Duxbury, MA. 617-934-0498
Diane Buckbee, Plymouth MA 617-747-4286

Citizens Urging Responsible Energy, a Massachusetts based safe energy group, today hand-delivered a letter to the office of Senator John Glenn, Chairman of the Government Affairs Committee, requesting a congressional investigation of the conduct of the Nuclear Regulatory Commission's (NRC) Region I office.

Plymouth CURE President, Diane Buckbee, and Duxbury CURE Co-Chairman, Mary Ott said today that they made the committment to come to Rockville, Maryland representing thousands of CURE supporters to formally request an inquiry.

The group, which is not anti-nuclear, is opposed to the restart of the Pilgrim Nuclear Power Station located in Plymouth, MA. CURE has been an active participant in the controversy about the plant which has been closed for over 2 years because of serious operational and management problems. The NRC has rated Pilgrim among the nation's worst reactors for the last 3 evaluations. The group contends that neither Boston Edison or the NRC have been accountable in resolving the serious safety concerns of area residents.

Ott and Buckbee stated that it is unconscionable that the Boston Edison Company would request or the NRC consider Pilgrim's restart without workable, tested evacuation plans in place to

protect the health and safety of area residents. They charge that today's NRC meeting illustrates the failure of the regulatory process.

October 14, 1988

For Immediate Release

From: Citizens Urging Responsible Energy (CURE)
Mary Ott, Duxbury, MA. 617-934-0498
Diane Buckbee, Plymouth MA 617-747-4286

Citizens Urging Responsible Energy, a Massachusetts based safe energy group, today hand-delivered a letter to the office of Senator John Glenn, Chairman of the Government Affairs Committee, requesting a congressional investigation of the conduct of the Nuclear Regulatory Commission's (NRC) Region I office.

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ATTACHMENT 11

Letter to Stephen B. Comley from Thomas Murley,

dated October 4, 1988

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

OCT 04 1988

Enc - NRCB-88-05
" SP-1
HRCB - " " 2
87-02
" SP 1
SP 2

Mr. Stephen B. Comley
Executive Director
We The People of the United States
Box 277
Rowley, Massachusetts 01969

Dear Mr. Comley:

Your letter of August 15, 1988, to President Ronald Reagan expressing your concerns regarding Seabrook Station has been referred to me for response.

I share your concern about the potential use of substandard piping fixtures at nuclear power facilities. Therefore, NRC issued NRC Bulletin No. 88-05 and Supplements 1 and 2 thereto (copies enclosed) to inform applicants and licensees of this potential problem. The Seabrook Station licensee reviewed the Seabrook Station construction records in accordance with the requirements of the bulletin and supplements and determined that 369 suspect fixtures were installed in the Seabrook Unit 1 plant. A report of the licensee's review was submitted to NRC on August 25, 1988, and is currently being reviewed by the NRC staff. The applicant must demonstrate to the satisfaction of the NRC staff that all of these suspect fixtures provide an acceptable level of quality and safety.

A second concern expressed in your letter was that an unqualified inspector had been used at Seabrook Station. An Authorized Nuclear Inspector (ANI) trainee was assigned to the Seabrook Station from May to December 1985. The NRC review determined that the ANI trainee performed assignments in accordance with his assigned training program and that qualified ANIs had evaluated and monitored his training, progress, and inspection work. The NRC concluded that there was neither a noncompliance with the American Society of Mechanical Engineers Code nor evidence of wrongdoing.

You also expressed a concern regarding the thoroughness of the licensee's inspection to determine that "counterfeit" bolts were not built into Seabrook Station. The licensee's initial inspection, performed in response to NRC Bulletin No. 87-02 (copy enclosed), determined that the fasteners used in Seabrook Station were acceptable. After that initial inspection, NRC issued Supplements 1 and 2 (copies enclosed) to NRC Bulletin No. 87-02. These supplements requested and then clarified the request for additional information on the suppliers and manufacturers from whom the subject fasteners may have been purchased. The NRC reviewed the information submitted by the Seabrook Station licensee in response to Supplements 1 and 2 to NRC Bulletin No. 87-02 and concluded that the actions taken by the licensee were both complete and adequate and that the fasteners installed in Seabrook Station are acceptable for their intended uses.

Thank you for your interest in these matters.

Sincerely,

Frank J. Miraglia

for Thomas E. Murley, Director
Office of Nuclear Reactor Regulation

Enclosures:
As stated

ATTACHMENT 12

Letter to President Reagan from Stephen B. Comley,

dated August 15, 1988

of the United States
Stop Chernobyl Here

IF REAGAN SEES ME, IT WILL HELP BRING THE TRUTH OUT.

August 15, 1988

President Ronald Reagan
The White House
1600 Pennsylvania Ave.
Washington, D. C.

SEE NOTE ON 2ND PAGE

Dear Mr. President:

I am writing to you as a lifetime member of the Presidential Task Force and Inner Circle. I have written to you in the past on the matter of nuclear power in this country, and have sent you information on safety problems in the industry. I have also sent you information on the Nuclear Regulatory Commission's inability to regulate nuclear power plants adequately. A recent General Accounting Office report (enclosed) substantiates the belief of the people of the Town of Rowley, Massachusetts, that the NRC does not always properly investigate problems with nuclear plants and poor practices within the agency itself. Two years ago, 80% of Rowley signed a petition (enclosed) asking you to undertake an investigation of the NRC's practices. The people of Rowley are still waiting for an acknowledgment of their request.

I am the owner and administrator of Sea View Nursing Home in Rowley, Massachusetts which lies just outside the Emergency Preparedness Zone for the Seabrook, New Hampshire, Nuclear Power Plant. I fully agree with the State of Massachusetts' conclusion that the population could not be evacuated in the event of a serious nuclear accident at the plant. I am also the Executive Director of We The People Inc. of the United States which is a non-profit organization established to educate the American public about nuclear power.

Several years ago, regarding the Shoreham, New York, nuclear plant, you said you would not interfere with the state's powers to decide if evacuation is possible in case of a nuclear accident. (enclosed) Now you are considering signing an executive order which would take that power away from the state of Massachusetts for the communities near the Seabrook, New Hampshire, nuclear plant. I strongly urge you to avoid signing such an order.

Apart from the fact that evacuation of those communities is impossible, there are serious safety matters at Seabrook Station still under investigation by the NRC and others. One is the strong possibility that substandard piping fixtures were built into the plant (see enclosed documentation-NRC bulletin No. 88-05, May 6, 1988), such piping in the safety system compromises the health and safety of the public. These piping fixtures are currently failing testing and could result in a serious accident at any of the 38 plants involved.

Another problem under investigation at Seabrook Station is the inspection of important safety systems by an unqualified inspector. (enclosed) Despite knowledge of the plant builders that this inspector did not have the proper credentials to perform the work, he was allowed to act in an inspectors' capacity for a year.

Box 277, Rowley, MA 01969, (508) 948-7959
50 Court St., Plymouth, MA 02361, (617) 746-9300
National Press Bldg., 14 & F. Sts., N.W., Washington, D.C. 20045
Offices 5 & 6, 3 Pleasant St., Concord, NH 03301, (603) 228-9484

OVER

Another problem, also common to military equipment, is substandard bolts which become malleable or shear off under stress. Although the NRC claims that the utilities' inspection proves that these "counterfeit" bolts are not built into Seabrook Station, the inspection was very cursory and incomplete.

For reasons of safety, and also to uphold the idea that the federal government should not interfere in powers reserved to the states, I urge you to forego the executive order which would undermine Massachusetts' determination that evacuation around the Seabrook nuclear plant is impossible.

Last October 26, at the gala event for you hosted by the Inner Circle, I gave you a letter (copy of letter enclosed) with information and asked you to meet with me. I was trying to convey to you information we had about substandard materials, information which was not widely known at the time. I would still like to meet with you because there is additional information available other than what has now been provided, and more will be forthcoming. Like the problem of the substandard equipment, the NRC also has the information we have about nuclear plant problems, but is doing nothing about it, except perhaps to cover it up. Lastly, the NRC people that we have been working with for the past two years are willing to meet with you privately to inform you of the corruption which has deliberately jeopardized the safety of the American people. These violations, I have been told, are just the soft underbelly of the nuclear industry and the NRC.

I am sure you can understand the concern of these individuals over the consequences of coming forward and, I am sure you can understand that these individuals will only come forward if there are some reasonable assurances that a full and fair investigation will ensue.

I strongly believe that a full and fair investigation will uncover one of the biggest violations of the public trust this country has experienced. It is clear that, at this point in time, a large segment, if not a vast majority, of the American people have lost confidence in the ability of the Nuclear Regulatory Commission to protect their interest in health and safety over the financial interests of the large utility companies. An impartial investigation of the NRC will be a step toward restoring the confidence of the public in its government.

I know you have to be concerned about these matters, and I want to thank you for your consideration of them. Please let me know when it would be convenient for us to meet.

Sincerely,

Stephen B. Comley

Stephen B. Comley
Executive Director

Enc: GAO report, Rowley Petition,
Shoreham comment, NRC Bulletin 88-05,
Seabrook Allegations, Letter of Oct. 26, 1987

ATTACHMENT 13

Letter to Stephen B. Comley from Thomas Murley,*

dated October 4, 1988

*Enclosure to letter not provided.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

OCT 04 1988

Mr. Stephen B. Comley, Executive Director
We the People of the United States
Box 277
Rowley, Massachusetts 01969

Dear Mr. Comley:

In your letters of August 26, 1988, to Chairman Zech and Mr. Stello regarding NRC Bulletin No. 88-05, you stated that you would like to know why NRC suspended Bulletin No. 88-05 while the available data is being assessed instead of continuing investigations and gathering as much information as possible. I partially addressed this question in the third paragraph of my August 15, 1988, letter to you. Enclosed is a copy of Supplement 2 to Bulletin No. 88-05 that provides additional information supporting the NRC decision to suspend temporarily the requirements of Bulletin No. 88-05 and Supplement 1. Note that engineering analyses have been performed to demonstrate that material that does not meet certain hardness values is still acceptable for its application in nuclear power plants. Further nuclear industry tests and analysis of the material have shown that the continued use of these materials does not present a safety problem.

NRC is reviewing these data and tests to determine what future regulatory action is appropriate.

Sincerely,

T Murley

Thomas E. Murley, ~~Director~~
Office of Nuclear Reactor Regulation

Enclosure:
NRC Bulletin 88-05, Supplement 2,
dated August 3, 1988

ATTACHMENT 14

October 14, October 6, and September 16, 1988,

press releases by "We The People of the United States"

We The People
of the United States
Stop Chernobyl Here

IMMEDIATE PRESS RELEASE
DATE: FRIDAY OCTOBER 14, 1988
LOCATION: BETHESDA, MARYLAND

Massachusetts antinuclear groups today urged the NRC to keep the troubled Pilgrim nuclear plant closed, and charged that state officials are not acting strongly enough to keep it closed.

At the NRC meeting in Bethesda, MD Stephen Comley representing the groups We The People, The Anti Nuclear Media Fund and the Mass Alert Referendum Campaign expressed little hope that the NRC will vote to keep Pilgrim closed.

"The NRC is racing to turn this plant on before the November 8th referendum vote," charged Comley, "they are endangering the public". A binding referendum appears on the Massachusetts ballot which would close down Pilgrim and the smaller Yankee Rowe plant by July 4, 1989.

Comley also had advice for Lt. Governor Evelyn Murphy who is representing the state in Bethesda. "In 1986 when Evelyn Murphy ran for Lt. Gov., she was attacked for accepting nuclear industry campaign contributions. One week later to prove no conflict, she held a press conference in front of Pilgrim calling for the shut down of both Pilgrim and Yankee Rowe", said Comley. "We believed her and she was elected. But now, she won't raise her voice in favor of the only way to keep Pilgrim closed - voting yes on Question 4."

"The state has already admitted the law suit to keep Pilgrim closed will fail. The only alternative left is to vote yes on 4", added Comley. "We're getting tired of politicians who say one thing and do the opposite. If she's really serious about closing Pilgrim, she'll endorse a yes vote on 4."

Box 277, Rowley, MA 01969, (508) 948-7959
50 Court St., Plymouth, MA 02361, (617) 746-9300
National Press Bldg., 14 & F. Sts., N.W., Washington, D.C. 20045
Offices 5 & 6, 3 Pleasant St., Concord, NH 03301, (603) 228-9484

We The People
of the United States
Stop Chernobyl Here

IMMEDIATE PRESS RELEASE
DATE: OCTOBER 6, 1988
LOCATION: PARK SQUARE, BOSTON & ROUTE 6, WAREHAM IN PILGRIM EVACUATION ZONE
PRESS CONTACT: STEPHEN B. COMLEY, EXECUTIVE DIRECTOR
WE THE PEOPLE, INC. OF THE UNITED STATES
508-948-7959

BILLBOARDS URGE: "KEEP PILGRIM CLOSED"

The national antinuclear group, We The People, Inc. today erected billboards in Boston's Park Square and the Pilgrim Evacuation Zone (Route 6 in Wareham) with the message "SAVE MONEY. SAVE LIVES. KEEP PILGRIM CLOSED." The troubled Pilgrim nuclear plant in Plymouth is scheduled to be restarted this month by the U.S. Nuclear Regulatory Commission (NRC). "The NRC is about to turn on the most dangerous nuclear reactor in America," said Stephen B. Comley, Director of We The People, "we hope these billboards will help alert the public."

Earlier this year, We The People co-sponsored billboards against the Seabrook, N. H. nuclear plant with the Institute of Contemporary Arts in Boston. The anti-Pilgrim billboard is designed by artists Jay Critchley and Kathy Chapman who also designed the Seabrook project.

"The NRC and public need to know that if Pilgrim reopens, it will raise electric rates and endanger all of eastern Massachusetts" said Comley, a north shore nursing home administrator. "If Chernobyl happens here, the elderly, the handicapped and everyone on Cape Cod will be stranded. An accident here would cause 3,000 immediate deaths and 20,000 cases of cancer according to the federal government's own study. By keeping Pilgrim closed, we indeed save money and lives."

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We The People of the United States

Stop Chernobyl Here

FOR IMMEDIATE RELEASE: SEPTEMBER 16, 1988

PRESS CONTACT: STEPHEN B. COMLEY, EXECUTIVE DIRECTOR
BOX 277
ROWLEY, MA 01969
508-948-7959

The Commissioners of the Nuclear Regulatory Commission have again demonstrated their willingness to sacrifice the public's health and safety for nuclear industry profits. "In deciding to excuse Seabrook Station from evacuation planning requirements that all other nuclear plants must follow, the NRC is violating their own regulations," said Stephen B. Comley, Director of We The People.

Comley pointed out that the NRC's action today, particularly endangers the public since recent investigations reported in NRC Bulletin 88-05 show that safety systems at Seabrook Station have been built with substandard materials. "Since the NRC knows Seabrook Station is not as safe as it is required to be, common sense should tell them that they should strengthen, not weaken, evacuation plans meant to protect the public during a nuclear accident," Comley said.

Even though the NRC found that at least 57 nuclear plants including Seabrook Station and the Pilgrim Plant, have used substandard materials in safety systems, the agency told the industry they need not test or replace those materials.

The NRC based that conclusion on an industry-sponsored preliminary computer analysis using insufficient data. The analysis by Bechtel, a multi-national nuclear corporation, stated that testing and replacement of substandard materials was too expensive. Therefore, Bechtel argued, further testing by utilities would not turn up any relevant information.

"What happened was the NRC realized that this substandard materials problem was so massive, it could mean nuclear utilities would find it more profitable to close the plants than to replace bad parts," Comley said. "Since such an outcome is unthinkable for the NRC, the agency instead eagerly accepted the industry argument that there is no problem."

"Every time the NRC makes this kind of decision, public opinion turns even more against the agency and the nuclear industry. The NRC ignores the fact that this is a democracy and they are accountable to the people, just as they have consistently ignored the Congressional mandate to protect public health and safety," Comley concluded.

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Save money. Save lives.

Keep Pilgrim CLOSED.

Sponsored by We The People, Inc.
Box 277 Rowley, MA 01969
Photo: Chapman/Critchley

Location Park Square, Boston. Wareham, Route 6 in Pilgrim evacuation zone.
For information, contact We The People, Box 277, Rowley, MA 01969.

ATTACHMENT 15

Letter to Commissioner Zech from Mary A. Dinan,

dated October 12, 1988

15 Jeremiah Drive

Duxbury,Ma.02332

October 12,1988

Commissioner Lando Zech

United States Regulatory Commission

Washington D.C.

Commissioner Zech ,

I wish to have the following statment added to the Public Record, The October 16,1988 hearing on the Restart of the Pilgrim I Nuclear Power Plant (operated by The Bosto Edison Company).

I wish to take exception to following statments made by MR. Ronald Varley in a letter to Mr. Peter Agnes. The information he uses and forwarded to the U.S.Nuclear Regulatory Commisssion and to The Federal Emergency Managment Agency is incorrect.In particular,the following statements are not true

1.item 2' "Completed draft plans have,in fact, been developed by each of the five EPZ and two reception center towns and forwarded to the Commonwealth for transmittal to FEMA for informal technical review."

The following from the March 4,1988 selectmens letter containing the comments of the Emergency Response Committee (see attached letter) reflect the intent of the Committee.

"The draft is a framework or skeleton which will be fleshed out by a series of procedures sometime in the future.Only when we have reviewed all of the procedures at some time in the future can we know whether the draft the draft plan will be adequate and workable."

"Collectively our study committee has found the draft to be lacking. Lacking ,not only in details but in evidence as to whether or not these plans will work".

"No studies have been completed to date by the Commonwealth of Massachusetss to verify the workability of the KLD Time Estimate Study, the Stone and Webster Shelter report, the bus survey and the necessity of a third reception center.The material we have examined uses these studies as a basis for the Duxbury Draft plan,yet we are uncertain as to their validity."

"The issue and difficulty is not in developing a structure.Rather,it is in the development of a practical and workable plan. At this point no such plan exists"

These comments reflect the true intent of the "Draft". They are the only statments made collectively by the Emergency Response Study Committee and by the Selectmen of the Town of Duxbury as of this October 15,1988 .

2.item 3 "when in fact such officals have been intimately involved in the preparation of such materials working

closely with Boston Edison Reprsentatives for well over a year."

The following changes are not reflected in this draft The Fire Department p30- 32 references are made regarding Martin Delano as Selectmen. Mr. Delano was replaced by Mr. Abdul Hamadeh last March.

p33 of the same section references the Town Manager Mr. Thomas Groux, Despite the facts that Mr. Groux is responsible for all town departments, he is completely omitted from the "draft". The town manager form of Government is noted numerous times in this draft.

p 34 has Thorndike Lithchfield listed as director of Public Works. As of last June Mr. Litchfield was no longer employed by the town of Duxbury.

3.item 5 "On the contrary, the implementing procedures are the product of considerable interaction and cooperation with local officals."

The Town manager has within the past month under taken the responsibility of rewriting the Selectmens procedure. This is long after the Sept. 21,1988 date of Mr. Varley's letter.

"It is important to understand that each of the towns implementing procedures was prepared in a collaborative effort with the cognizant local officals and agency heads

, and modified until responsible officals were satisfied with their signatures."

There is no evidence to date of any procedure being signed. Pgs 35-42 of the agency head and cognizant local officals are blank. There is no signature on record any where within this "draft".

See attached letter Police Chief Enrico Cappucci to Mr. Barney Yetman February 19,1988. "However ,I have very seroius concerns as to whether or not we can supply the amount of personel necessary to carry out the plan..... Our budget has somewhat significantly limited resources available."

"It is absolutely essential that Edison understands that without the resources as mentioned in this correspondence.It would be virtually impossible as Chief of Police in this town, to summon the necessary manpower to carry out the responsibilities of the evacuation as proposed in this draft." February 19,1988

4.item 6 Mr. Varley letter."In addition,the specfic reference to the school procedure (there is no separate school plan) creates in our view,the misrepresentation that the school program is not as far along as other elements of the revised planning program. This is not accurate since school related planning documents were prepared contemporaneously with other planning documents."

pps 38 through 81 of the School procedures are blank forms while pgs 25-35 are near -duplicate blank forms of School status Sheets.

Currently it has not been established whether the school -age children will remain at the school or be sent home at as an early dismissal. Nursary schoolchildren have been promised an appropriate response by The Edison planners which has the supertindent notifying the schools even though he has no legal responsibility for them.

No decontaimation /reception center has been set for these students.

Only 20 % of the entire population within the EPZ are planned for. The School age children in Duxbury alone are over three thousand children. This is 20% of our towns population in and of itself.

5.item 7 of Mr. Varleys letter,refers to a third reception center. The selectmen of the Town of Duxbury are unanimous in their oppsition of the Wellesly site. See attached letter June 23,1988.

6. item 9 Mr. Varleys glib response to the Commonwealth's justifiable concern for the handicapped and transporatation dependent is at best deporable. Large segments of the population are left stranded in this draft. They are not even noted. "they are not even mentioned even in the most basic planning phases." appendix A Selectemen's March 4,1988 leter.

In conclusion I too hope that my comments provide you with useful insights on some of the September 21,1988 issues.and that they will assist you in developing an accurate report regarding the progress made concerning emergency planning .

Sincerly,

Mary A. Dinan Mary A. Dinan

(Vice chairman Town of the Duxbury Emergeny Response Study Committee)

ATTACHMENT 16

Letter to Peter Agnes, Jr. from Ronald Varley,

dated September 21, 1988

BOSTON EDISON
Emergency Preparedness Department
59 Industrial Park Road
Plymouth, Massachusetts 02360

September 21, 1988
EP 88-1160

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

Dear Peter:

We are in receipt of your minutes of the August 22, 1988 meeting between Commonwealth officials and NRC Region I representatives. The minutes describe the Commonwealth's impressions of the status of offsite emergency preparedness around Pilgrim Station (as presented during the August 22 meeting), and state that a report for the Governor is currently being prepared on that subject.

Our review of the minutes indicates that the Commonwealth may be under some misimpressions regarding the status of offsite emergency preparedness. Since we are aware that you are engaged in preparing the report to the Governor, I thought it might be useful if I pointed out some of the more important aspects of the minutes which we believe to be in error. I should note, however, that I have not attempted to address every issue raised in the minutes, or to take issue with the Commonwealth's apparent criticisms on the overall adequacy or status of the program. Nevertheless, I felt that providing the comments below might aid you in your effort to compile an accurate report to the Governor.

First, in item 2 of the August 22 minutes, you state that "a completed draft of the Pilgrim plans has yet to be produced." Completed draft plans have, in fact, been developed by each of the five EPZ and two reception center towns and forwarded to the Commonwealth for transmittal to FEMA for informal technical review. As you know, FEMA has commented favorable on each of those reviewed to date and provided specific comments which have been incorporated. In addition, based on our recent conversations, it is my understanding that a revised draft MCDA Area II plan has now been completed and is being forwarded to FEMA as well.

Second, item 3 of the minutes states that the planning process "was designed to initially permit local officials to review draft planning material...."

This statement suggests that the Commonwealth is "permitting" local officials to merely "review" materials, when in fact such officials have been intimately involved in the preparation of such materials, working closely with Boston Edison representatives for well over a year. It is, of course, the Commonwealth which is undertaking the "review" of the draft planning documents prepared by the towns, with Boston Edison assistance.

Third, item 5 of the minutes states that "most implementing procedures exist in draft form; many have been provided (by BECo) to towns, but have not been formally reviewed or approved." It is important to understand that each of the town implementing procedures was prepared in a collaborative effort with the cognizant local officials and agency heads, and modified until the responsible officials were satisfied with the fidelity of the procedures and indicated so with their signature. The impression left by the quoted segment is that Boston Edison has "provided" materials to the towns with which they are not familiar. On the contrary, the implementing procedures are the product of considerable interaction and cooperation between local officials and Boston Edison.

Fourth, item 6 states that six of seven draft plans have been completed and that "plans and procedures for schools have been completely revised and the local review process is not yet complete." Draft plans for all seven towns are now complete. In addition, the specific reference to the school procedures (there is no separate school plan) creates, in our view, the misimpression that the school program is not as far along as other elements of the revised planning program. This is not accurate since school related planning documents were prepared contemporaneously with other planning documents.

Fifth, item 7 refers to the possibility of a third reception center. Boston Edison did not "recommend" the use of two reception centers, but did assess the feasibility of relying on two and did issue a report summarizing its analysis. We believe that it should be noted that the Commonwealth's feasibility analysis of the proposed Wellesley facility has been underway since March, 1988.

Next, item 9 of the minutes states that the "special needs lists currently in use by local Civil Defense Directors are woefully inadequate ...." Secretary Barry's 1987 report to the Governor stated that "it may not be necessary or prudent to compile exhaustive lists of special needs populations."

In any event, it should be noted that Boston Edison stands ready and willing to commission the new special needs survey to provide information to upgrade the lists as soon as MCDA/OEP forwards the modified Request for Proposal (RFP), and we have received and reviewed the Commonwealth's policy on protection of the special needs population (which is referenced in the RFP). We have been awaiting both the MCDA/OEP modified RFP and the cited policy for some time. In addition, we have encouraged the towns to upgrade their existing lists through telephone contacts with individuals and social service agencies, and are aware that some of the lists have been upgraded. Moreover, we have assisted in the development of Town Implementing Procedures which permit prompt "self-identification" in the event of an emergency. In addition, while we agree with your apparent recognition that there has not been a "lack of progress in planning", we think there are numerous areas where Commonwealth action would most assuredly help speed the planning process.

Next, item 10 refers to agreements "between BECo and private [transportation] providers for emergency response resources." As you know, the form of those agreements is between the providers and the Commonwealth, not Boston Edison. MCDA authored the agreements and MCDA representatives participated in their negotiation. While transportation providers representing a large number of resources have entered into such agreements, the agreements have been in the Commonwealth's hands for signature since March 1988. What agreements?

Next, while item 13 points out that the Taunton State Hospital and Bridgewater State College reception centers are in need of capital improvements, it should be noted that we have been awaiting authorization from the Commonwealth to begin improvements since December, 1987, when our feasibility study listed what we believed were the appropriate improvements.

Next, item 14 states that Cape Cod (which is outside the EPZ) would be "isolated" in the event of a plant accident. On the contrary, planning provisions call for one of the two bridges over the canal to remain open at all times to provide access from Cape Cod and for the other to be opened at the Commonwealth's discretion.

Item 15 refers to "substantial revisions" to the PIB made by the Commonwealth. The numerous revisions made by MCDA, to date, have not in our opinion significantly altered the original format or content, and MCDA has not scheduled a meeting on this issue until October 17.

Finally, item 18 states that an exercise is required before final approval of the plans can be given, and that such an exercise is "premature given the unfinished state of the plans." We believe that given the considerable lead time associated with the preparation for an exercise, it is not at all too early to <u>begin</u> to work toward that objective. While we have broached this subject on several occasions with the Commonwealth, it has been unwilling to act to even initiate the exercise planning process.

Moreover, FEMA has now responded to the two referenced Commonwealth letters, and has commented extensively on the draft local plans. While the program does remain "unfinished" to some degree, this is not due to intransigeance on the part of Boston Edison, the towns, or FEMA.

In conclusion, I hope that my comments provide you with useful insights on some of the issues raised in the August 22 minutes and that they will assist you in preparing an accurate report to the Governor. Recognizing the significant progress that has been made in offsite planning over the last year, we look forward to reviewing the Secretary's report.

Sincerely,

Ronald A. Varley

cc: Samuel J. Collins
William Kerr
William Lazarus
Jack Dolan

AS/cs
ID# 1811

ATTACHMENT 17

Letter to David J. Vogler from Mary Dinan and others,

dated March 4, 1988

Town of Duxbury, Massachusetts

02332

March 4, 1988

David J. Vogler, Chairman
Duxbury Board of Selectmen
Town Hall
Duxbury, MA 02332

Dear Chairman Vogler:

The Emergency Response Plan Committee requests that the Selectmen forward to Civil Defense Area II for technical review, the Phase I DRAFT of Duxbury's Emergency Response Plan. Area II will forward the DRAFT to FEMA for a similar technical review.

In making this request we want to be clear that our Committee is not making a recommendation with respect to approving the DRAFT. The DRAFT is a framework or skeleton which will be fleshed out by a series of "procedures" at some time in the future. Only when we have reviewed all of the "procedures" can we know whether the DRAFT plan will be adequate and workable. Yet we must start somewhere, and the "technical review" step is first. After technical review, certain additions and amendments will be necessary. A similar process will be followed with the detailed procedures. Our reasons for being careful that the forwarding of the DRAFT is not construed as approval, are that documents have been mis-described in the recent past.

Our Committee, upon review of the Phase I DRAFT material submitted by Boston Edison Company, has in no way endorsed any part of this plan nor will we do so until the fully completed plan and procedures have been submitted. While the DRAFT has provided an outline, it must be underscored that it merely represents the form, not the substance, of an emergency plan/procedure.

Collectively our study committee has found many areas in the draft to be lacking. Lacking, not only in details, but also lacking in evidence as to whether or not these plans will work. No studies have been completed to date by the Commonwealth of Massachusetts to verify the workability of the KLD Time Estimate study, the Stone and Webster Shelter report, the bus survey and the necessity of a third reception center. The material we have examined uses these studies as a basis for the Duxbury DRAFT plan, yet we are uncertain as to their validity.

We have been assured by both the Commonwealth (Civil Defense and Department of Public Safety) and by Boston Edison Company that these "details" would be completely dealt with in Phase II procedures. Given the inadequacy of past detailed plans, some doubt must exist for such prospective plans. The Committee feels it is difficult to determine the feasibility of any plan when it is being considered as a single, separate entity and not part of a whole. Agreeing "in concept" has little meaning if the facts are not solidly based.

The areas of long-term evacuation, lack of any details for the elderly and special needs populations, the complete omission of provisions for "latch key" children, strong reliance on volunteers (especially in reference to snow removal, teachers staying with children, bus drivers without contracts, afterschool activities -- a heavy populaton) are some of the details that must be forthcoming in Phase II procedures.

In addition, the necessity of a viable decontamination and reception center must be addressed. A procedure must be devised that insists contaminated individuals be decontaminated not only for their own protection, but for the general well-being of society. This critical issue of a reception center must be resolved before the process continues. Further, many emergency workers will function in situations which can lead to acute radiation sickness. Serious thought must be given to persons who have had this exposure. These matters must be anticipated and addressed in the procedures.

The issue and difficulty is not in developing a structure. Rather, it is in the development of a practical and workable plan. At this point, no such practical and workable plan exists. The sixteen questions our Committee identified over a year ago have yet to be answered. Thus, we want to be clear once again: our request for a technical review of the DRAFT plan -- a DRAFT which at the moment lacks its implementing procedures -- is simply a request for feedback from Civil Defense and FEMA, not an endorsement. We will continue to proceed in good faith with the planning process. We trust that our actions will be reported and portrayed accurately.

Radiological Emergency Response Plan Study Committee

Carl D. O'Neil, Chairman
Chief of the Fire Department and Civil Defense Director

Mary Dinan, Vice Chairman
Enrico Cappucci, Chief of Police
Claire Donahue
Helen Dyer
Neil Johnson
Donald G. Kennedy, Superintendent of Schools
Thorndike Litchfield, Director of Public Works
Donald Muirhead, M.D.

Phase I of three phases for the emergency response plan has been submitted by the Boston Edison Company for review. From our perspective our Committee's original questions that have been identified and applied to subsequent plans have not yet been answered. Also, subsequent questions have not been answered. It is our opinion that Phase I is merely an outline, a paraphrase of Nuclear Regulation 0643 dated October, 1980. Phase I provides only definitions, or answers only base requirements. It does so in an outline form and could serve as a format. It must not be presented or viewed as a major improvement.

Committee members have elected to address their concerns individually. From our perspective we have found the following areas to be worth particular note:

1. The second paragraph of the introduction. We question its pertinence to an Emergency Response Plan. The basic premise of a plan is that one is needed. To speculate on the likelihood of its being invoked is just that - speculation. Such a paragraph has no meaning.

2. There seems to be an inconsistency in a basic assumption made in the draft evacuation plan: the source term used as the basis for evacuation planning and sheltering assumes that the containment remains intact in the unlikely event of a worst case accident.

While this is consistent with present regulatory requirements, common sense would dictate that higher source term requirements may be appropriate for a plant such as Pilgrim I which has a GE boiling water reactor with a Mark I Containment.

It is our understanding that with the GE boiling water reactor with a Mark I Containment, the odds are high (Harold Denton - Chief Reactor Regulator) that this type of containment would fail under a worst case accident.

3. The Special Needs Population. The Phase I draft deals in a very ineffective manner with these populations. The draft assumes that only the handicapped, the gravely ill, or those populations in detention centers have special needs. Nowhere in the outline are provisions made for children of working parents. These children comprise a large section of our population. They are of an age where they are left at home alone. Comments as to whether this parental practice is appropriate (or not) serve only to confuse and muddle the issue. Yet it is a fact of life. Large numbers of children and dependent and must be provided for. A bus that they might flag down is simply not enough. Twenty-seven telephone lines in an emergency operations center will hardly suffice to "mitigate the damage", not will the potential distribution of potassium iodide. Much work even in the outline phase remains to be done in this area. It is totally unacceptable to leave these dependent populations behind, yet there seems to be no provision anywhere for them, even in the most basic planning phases. Ironically these populations are an ever-changing segment. There are at present no adequate means of

even identifying them, let alone protecting them.

4. The sirens. The sirens have been tested and found to be lacking. Although Boston Edison contends that the sirens need not be heard (Duxbury meeting 1987, Mr. Ron Varley). If that point were correct, why would sirens be required? One would again question sirens' effectiveness as a primary means of notification. In addition, we are not aware that it has ever been established clearly as to who owns and is responsible for the sirens. Nor has it been established whether the sirens are capable of alerting the community.

5. The lack of any information available for long-term evacuation (more than a few hours). On several occasions we have attempted to discuss these issues with the Boston Edison Company and with the Commonwealth. No data are currently available to us and it is completely omitted from the Phase I draft. If a family is to evacuate for a long period of time, they will take family pets with them. At first glance this may seem like a minor problem. It does, however, pose a very real health threat for the Commonwealth, as many potentially radioactive animals will be randomly abandoned by their owners in the reception communities.

6. The evacuation of only eight percent (8%) of the Town of Marshfield. This estimate is a particular concern to the Town of Duxbury. The main evacuation routes for Duxbury are through Marshfield. It is reasonable to assume that the remaining unaccounted ninety-two percent (92%) of Marshfield will not sit idly by while the Town of Duxbury passes though it, nor is it easily feasible to contend that the buses for Duxbury's special needs populations and schools, will be able to pass through Marshfield unnoticed and unimpeded to arrive at their designated spots.

It must be reiterated that any Emergency Response Plan has serious overtones. The Phase II aspects of the plan must contain the implementation procedures. The Commonwealth must validate the accuracy of anything that is written. Reception communities must not be designated if they are not feasible. Shelters must be in place for dependent populations. They must be functional as well as available. Time estimates and bus providers must be documented by separate studies.

The people in the area of Pilgrim I continue to bear a risk. Outlines of a response plan serve a purpose. They make the problems very real and very concrete. The emergency response issues, however, still remain abstract.

Comments submitted by the following:

Mary Dinan MD
Donald Muirhead, M.D.
Helen Dyer HD
Claire Donahue
Neil M. Johnson
Donald G. Kennedy
Carl D. O'Neil

ATTACHMENT 18

Letter to C. Martin Delano from Carl D. O'Neil,

dated December 18, 1986

Town of Duxbury, Massachusetts
02332

December 18, 1986

C. Martin Delano, Chairman
Board of Selectmen
Duxbury Town Hall
Tremont St.
Duxbury, MA 02332

Dear Marty:

Attached is the list of questions that we have compiled in the process of reviewing the Emergency Response Plan for the Town of Duxbury.

We request that you submit these questions to Secretary Barry and to Robert Boulay of the Civil Defense to bring attention to the lack of information that we have to provide for the health and safety of the citizens of Duxbury. In order to have a plan, we must have answers clearly spelled out so there can be no misunderstanding on how we are to conclude our review of this plan.

This agenda-setting step is in preparation for a joint meeting of the Selectmen and our Committee with Civil Defense -- hopefully in January. As soon as Civil Defense officials have had a few days to review our questions, we will speak with them to learn which questions are beyond the scope of Civil Defense and who they can suggest to answer the questions. We expect Civil Defense will arrange for persons from appropriate agencies (Massachusetts Department of Public Health? FEMA?) to attend our joint meeting in order to answer the questions.

Thank you for your concern for the health and safety of Duxbury residents which you exhibited at the meeting of November 24.

Sincerely,

Carl D. O'Neil, Chairman
Duxbury Emergency Response Plan Committee
Enc.
cc: Area II Civil Defense

AGENDA FOR JOINT MEETING OF SELECTMEN AND
EMERGENCY RESPONSE PLAN COMMITTEE

The questions below will be forwarded to Massachusetts Civil Defense, so that they can have time to prepare answers. If questions are better answered by another agency, what agency do they suggest? Can Civil Defense officials arrange for the presence of these additional persons at our joint meeting? Related to each of these questions is the follow-up "With whom can we verify this point?" Our reason for asking the verification question is that our Committee has found in making telephone calls to other agencies (National Guard, Hanover Town Hall, FEMA, Boston Edison, etc.) that promised planning steps have not always been followed through upon, even though Duxbury had been assured that the steps already had been taken. At the joint meeting, our Committee will ask the verification question in each instance where it is omitted.

1. Whose responsibility is it to educate the general public about types of radiation and radiation hazards in order to reduce panic should the plan need to be implemented? Who pays for the training? Who organizes training for businesses, restaurants, after school coaches, etc?

2. What is the status of the Hanover Mall as Duxbury's designated reception center? What alternative locations are under consideration? It is our understanding from conversations with the Hanover Town Hall that Hanover does not wish its mall to be a reception center, partially because the drains run off into the town water supply. How many people are expected at the reception center? How many parking spaces are there?

3. When will a traffic study be completed, and by whom, to assure that evacuation routes are capable of handling evacuees? Will traffic from towns outside of the 10 mile zone be restricted?

4. Will traffic prevent (or make difficult) school busses from leaving Duxbury enroute to the reception center? Will the school busses be able to return to Duxbury? What is the estimated round trip time under the traffic conditions which are predicted?

5. Will additional busses be made immediately available in order to transport school children directly to the reception center in one trip? If so, where will the busses come from and how long will it take them to arrive at the schools? Duxbury's bus contractor can transport only one-third of our students on a single run.

6. Will specialized vehicles such as ambulances and wheelchair vans be provided for citizens requiring them? If so, where will they come from and how long will it take?

7. Into whose custody are school children turned over by bus drivers at the reception center? ... pre-school children/infants in day care?

8. If sheltering of school children and adults is to be accomplished in Duxbury, what provisions will be made to create the shelter (food, water, trash bags, masks with glycerine, medical supplies, shelter management personnel, bedding, etc.? who pays?

9. Should potassium iodide tablets be made available and stored in Duxbury Civil Defense headquarters? ... Duxbury shelters?

10. How will the decontamination facilities for emergency workers be provided? Where will the equipment come from? How long does the decontamination process take? (Information from CD: Showers coming "from west of Boston". Where?; Information from CD: "Cotton gowns would be available." From where?; Information from CD: "Towels would be confiscated from stores." Do stores know this? If accident occurred during winter, would shoes, jackets, etc. be available? From where?)

11. Who covers the cost of implementing the various functions of the plan?

12. Should a graded response plan be developed rather than the present plan?

13. What is the sequence for approving a Town's proposed response plan? Who is the final approving authority? Is there an appeal procedure if a Town is not satisfied? Who draws up a plan for Duxbury if Duxbury is not able to?

14. What is advised regarding pets in the event of an evacuation? Leave food? Bring pets?

15. What is advised regarding the special problems of evacuating Duxbury Beach?

16. What training has the National Guard/Army Reserve had, or will have, to assist with the emergency response. From whom can we learn more about this point.

ATTACHMENT 19

Letter to Barnie Yetman from Enrico Cappucci,

dated February 19, 1988

Duxbury
POLICE

.RICO C. CAPPUCCI
Chief of Police

(617) 934-5656

443 West Street
Duxbury, Mass. 02332

February 19, 1988

Mr. Barnie Yetman
Boston Edison
Cherry Street
Plymouth, MA 02360

Re: Duxbury Evacuation Plan

Dear Mr. Yetman:

As a result of a meeting with your assistant, Carlos Garcia, on February 5, 1988, I would like to make the following notations concerning the Duxbury Evacuation Plan draft as submitted to me by your company.

As I expressed to Mr. Garcia in reviewing the draft as submitted to me, I am in complete agreement with Boston Edison with regards to the general theme of the plan itself. There is little doubt in my mind that with the proper resources and available manpower, the plan as it presently exists in a draft form would significantly improve the chances of the Community of Duxbury to evacuate its citizens in the event of a major emergency at the Edison Plant.

However, I have very serious concerns as to whether or not we can supply the amount of personnel necessary to carry out the plan. This concern arises from the fact that the Duxbury Police Department, due to Proposition 2½ and other limitations on our budget over the past several years, has somewhat significantly limited resources available.

Understanding that the plan itself is predicated on the ability of Duxbury to respond with sufficient manpower, I have recommended to Mr. Garcia that Boston Edison seriously consider purchasing portable radios for all of the officers in the department and to include in that purchase nine car radios to replace the old and outdated radios which no longer work effectively. I am enclosing in this letter to Boston Edison a report from Officer Robert M. Maloney concerning radio problems in the very area that would be addressed in the event that we need to evacuate the Town of Duxbury as a result of a problem at the Power Plant. I can assure you that this has been an ongoing problem for the last several years, but, due to limited funds, the town has not been able to address this situation.

I am also enclosing within this letter a list of the necessary radios and a repeater system which would be mounted on the water tower in the very area of major concern to the Duxbury Police Department with regard to present radio communications. A recent study in that area indicated that, because of the present location of our repeater in the Town of Pembroke, we have serious radio frequency problems in the southeastern part of our community. The placement of a repeater at the water tower would eliminate this situation.

It is absolutely essential that Edison understands that without the resources as mentioned in this correspondence, it would be virtually impossible in my opinion as the Chief of Police in this town, to summon the necessary manpower to carry out the responsiblities of the evacuation as proposed in the present draft. Therefore, it is important to note that I would be unwilling to give my support to any such draft or plan without such resources. I must be emphatic about the need for these particular items in order to carry out my duties and responsibilities as presented in the present draft.

I thank you for your cooperation and for the time and concern you have given to this community in the preparation of such a draft.

Sincerely,

Enrico C. Cappucci
Chief of Police

ECC/esd

cc: Peter Agnes - Office of Public Safety
Ralph G. Bird - Boston Edison
Carolos Garcia - Boston Edison
Chief Carl O'Neil - Duxbury Fire Department
David Vogler - Chairman, Board of Selectmen

ATTACHMENT 20

Letter to Secretary Barry from Patricia A. Dowd,

dated June 23, 1988

Town of Duxbury, Massachusetts

Office of Selectmen

PATRICIA DOWD

DAVID J. VOGLER

ABDULKADER C. HAMADEH

June 23, 1988

Charles Barry
Secretary of Public Safety
Massachusetts Civil Defense Agency
One Ashburton Place
Boston, Ma. 02108

Dear Secretary Barry:

The Board of Selectmen have voted unaminously to advise the Massachusetts Civil Defense Agency that it is opposed to the choice of Wellesley as an emergency reception center for Duxbury residents in the event of an incident involving the Pilgrim Nuclear Station.

The Board believes that the Wellesley site would not be suitable for the following reasons:

1. Access via Route 3 would be very difficult due to congestion, especially if any incident occurred during rush hours; poor weather conditions, etc.

2. lack of easily accessible fuel (gasoline) along the route

3. distance (time and miles) from Duxbury is too great and would pose problems regarding transportation and supervision of children; problems involving food and drink, etc.

4. capacity would appear to be limited - assuming the Wellesley site could accomodate 20% of Duxbury's population where will the remaining residents be sheltered.

To our knowledge Duxbury officials have not yet been given a tour of the Wellesley site, thus it is difficult to assess the specific facility. In any event, the Board wishes to be certain that your office is aware of the Town's objection to a Wellesley shelter location at this time.

Sincerely,

Patricia A. Dowd

Patricia A. Dowd
Chairman, Board of Selection

cc: Attached List
PD/fbh

878 Tremont Street • Duxbury, Massachusetts 02332 • (617) 934-6586

CHIEF CARL D. O'NEIL
CIVIL DEFENSE DIRECTOR
DUXBURY FIRE DEPARTMENT
DUXBURY, MA. 02331-1153

ROBERT J. BOULAY, DIRECTOR
CIVIL DEFENSE AGENCY
400 WORCESTER RD., P.O. BOX 1496
FRAMINGHAM, MA. 01701-0317

EDWARD THOMAS
FEDERAL EMERGENCY MANAGEMENT AGENCY
422 JOHN MCCORMACK BUILDING
POST OFFICE SQUARE
BOSTON, MASS. 02109

PETER AGNES
ASSISTANT SECRETARY OF PUBLIC SAFETY
1 ASHBURTON PLACE
BOSTON, MA. 02108

CHIEF ENRICO CAPPUCCI
CHIEF OF POLICE
DUXBURY POLICE DEPARTMENT
DUXBURY, MA. 02332

AL SLANEY
MASS. CIVIL DEFENSE AGENCY, AREA II
MASS CORRECTIONAL INSTITUTE
P.O. BOX 54
BRIDGEWATER, MA. 02324

NEIL JOHNSON
NUCLEAR AFFAIRS COMMITTEE
261 HIGH STREET
DUXBURY, MA. 02332

MARY DINAN
EMERGENCY RESPONSE STUDY PLAN COMMITTEE
15 JEREMIAH DRIVE
DUXBURY, MA. 02332

Mailing List for Pilgrim Nuclear Correspondence - June, 1988 - BOS - Surrounding Towns

Chairman
Board of Selectmen
Town Hall, 23 Green St.,
Kingston, Mass. 02364

Chairman
Board of Selectmen
Town Hall, 870 Moraine Street
Marshfield, Mass., 02050

Chairman
Board of Selectmen
Town Hall, 11 Lincoln Street
Plymouth, Mass., 02360

Chairman
Board of Selectmen
Town Hall 100 Center Street
Pembroke, Mass. 02359

Chairman
Board of Selectmen
Town Hall, Main Street
Carver, Ma. 02330

ATTACHMENT 21

"Implementing Procedure for an Emergency

at the Pilgrim Nuclear Power Station"

IP-01 thru IP-08

dated July 26, 1988

(Submitted by Mary Dinan)

Due to the volume of this document, IP-01 thru IP-08 will be placed in the Public Document Room.

ATTACHMENT 22

October 14, 1988 press release by the

Commonwealth of Massachusetts

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE DEPARTMENT
STATE HOUSE • BOSTON 02133

EVELYN F. MURPHY
LIEUTENANT GOVERNOR

ROOM 259
(617) 727-7200

FOR IMMEDIATE RELEASE

CONTACT: Carrie Kimball
617-727-7200

LT. GOVERNOR MURPHY URGES AGAINST PILGRIM RESTART

Rockville, Maryland...October 14, 1988...In a strongly worded statement, Lieutenant Governor Evelyn F. Murphy today urged the Nuclear Regulatory Commission to prohibit the Pilgrim Nuclear Power Station from reopening until adaquate emergency plans are tested and in place.

Murphy, speaking for the Dukakis Administration at a special NRC meeting on Pilgrim, stated that while the Boston Edison and the NRC staff will argue that Pilgrim has achieved some progress, the Commonwealth is far from satisfied.

"Boston Edison argues that progress has been made and that cooperation has improved. But progress and cooperation do not save families," Murphy said. "A family's chance for a safe evacuation will not come until emergency response plans are complete, tested and approved, and until equipment and personnel are fully in place. There is no emergency reponse plan for Pilgrim."

-more-

Murphy demanded that specific problems be solved. "There has been no local community approval of a plan and implementing prccedures, the 6,000 emergency workers have not been trained, there is no way to evacuate children and persons with special needs, and there is no system for notifying local communities and emergency workers during an emergency," Murphy said. "This is unacceptable."

Murphy stated that in light of the unprecendented scrunity of Pilgrim Station, the NRC must not allow a restart until these problems are resolved. "The NRC is unable to guarantee that an accident at the Pilgrim reactor will not occur, the Commission therefore must assure the citizens of the Commonwealth that an approved and tested emergency response plan is in place," Murphy said.

ATTACHMENT 23

"Stop Chernobyl Here" poster

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Box 277 Rowley, MA 01969

Photo: Chapman/Critchley

Location Park Square, Boston. Wareham, Route 6 in Pilgrim evacuation zone.
For information, contact We The People, Box 277, Rowley, MA 01969.

Access Road to Saquish - under water at high tide

#3

DUXBURY BEACH

#2 ~~#4~~

~~#3~~

THIS PAGE IS AN OVERSIZED DRAWING

THAT CAN BE VIEWED AT THE RECORD TITLED:

10-14-88 Comm. Meeting Discussion/Possible vote on Pilgrim Restart

WITHIN THIS PACKAGE

D-01X