



The Commonwealth of Massachusetts

Executive Office of Public Safety

One Ashburton Place

Boston, Massachusetts 02108 (617) 727-7775

Michael S. Dukakis
Governor

Charles V. Barry
Secretary

MEMORANDUM

TO: MARIE MILLER, NRC STATE LIAISON OFFICER

FROM: PETER W. *Agnew*, ASSISTANT SECRETARY

DATE: OCTOBER 1, 1987

RE: MEETING SCHEDULED FOR OCTOBER 8, 1987: PROPOSED AGENDA

1. On the basis of our telephone conversation yesterday, I propose the following agenda items for our meeting on October 8, 1987 in King of Prussia, Pennsylvania:

(a) Status of NRC Review of Security Violations reported by BECo. and allegations of excessive overtime.

(b) NRC Position on off-site emergency planning deficiencies identified in the August, 1987 FEMA Interim Finding and by the Commonwealth of Massachusetts in Secretary Barry's report of December, 1986.

(c) NRC Response to BECo. proposal to postpone Biennial Exercise.

(d) Review of, and if possible the schedule of, the events that are planned between now and the determination by the NRC whether to permit restart of the Pilgrim Plant.

(e) NRC position on Proposed federal legislation (H.R. 1570) to establish national offsite monitoring system for all licensed commercial nuclear power plants.

(f) Status of Proposed Rev. 4 of Emergency Procedure Guidelines Developed by BWR Owners Group and NRC position on whether these will be mandated before Pilgrim is allowed to restart.

(g) NRC position on BECo.'s Safety Enhancement Program, including, in particular, the Proposed Torus Vent.

(h) NRC position on state's determination to enlarge the Pilgrim EPZ.

BB09160199 BB0825
PDR FOIA
JOHNSON88-198 PDR

E114



Michael S. Dukakis
Governor

Charles V. Barry
Secretary

The Commonwealth of Massachusetts

Executive Office of Public Safety

One Ashburton Place

Boston, Massachusetts 02108 (617) 727-7773

EXECUTIVE SUMMARY OF THE PROGRESS REPORT ON EMERGENCY PREPAREDNESS FOR AN ACCIDENT AT PILGRIM NUCLEAR POWER STATION

I. EXECUTIVE SUMMARY

On December 16, 1986, I transmitted to the Governor a comprehensive report on safety at Pilgrim Nuclear Power Station. This is a progress report about the activities by state and local government, the Boston Edison Company, the U.S. Nuclear Regulatory Commission and the Federal Emergency Management Agency since that time to address the concerns we found.

In April of 1986, operation of Pilgrim Station was halted because of several mechanical problems. The U.S. Nuclear Regulatory Commission has ordered that the Boston Edison Company keep the plant shut until a variety of corrections regarding the management and operation of Pilgrim Station have been made. As of this date, Pilgrim remains closed, although Boston Edison has asked the NRC for permission to restart the facility.

In my December, 1986 report, I concluded that Radiological Emergency Response Plans for the Pilgrim facility were not adequate to protect the public health and safety. I further identified serious problems regarding the management of the power plant and the engineering safety of the reactor. In my view, these three issues -- emergency planning, plant management, and reactor safety -- were so serious and the weaknesses and deficiencies so severe that I recommended that the plant should not be allowed to restart unless and until these concerns had been satisfactorily addressed.

There has been a considerable amount of activity at all levels to address these concerns since my report was issued. In some cases substantial progress has been made. In particular, the Massachusetts Civil Defense Agency and Office of Emergency Preparedness has devoted all available staff and resources to the effort of developing the best possible emergency response plans.

MCDA/OEP has instituted a planning process at the state and local level and revisions are well under way. In addition, a new system has been installed for off-site notification in the event of an accident at Pilgrim Station. We now have the advantage of a new Nuclear Safety Emergency Preparedness Program and a professional staff which for the first time is dedicated to off-site emergency preparedness and planning. This new program and staff are the result of the Governor's initiative in the Fiscal Year 1988 budget. The Governor has requested additional funds for the new program as a supplementary appropriation for the current fiscal year.

Nonetheless, I continue to make the finding that adequate plans for response to an accident at Pilgrim Station do not exist, and I reaffirm my earlier position that the Pilgrim facility should not be allowed to restart until such plans have been fully developed and have been demonstrated to be workable and effective through a graded exercise of all plans and facilities.

This finding is based on the fact that in every critical area in which I found a deficiency to exist in my December, 1986 report substantial work remains to be done before a determination of adequacy can be made. For example, analysis of a new Evacuation Time Estimate and Traffic Management Study by state and local authorities is still underway. The ETE is one of the most critical pieces of information in the entire process and the foundation of effective emergency planning. Our preliminary review of the ETE suggests that more resources are required to successfully implement the traffic management plan. The shelter survey which was prepared by Boston Edison has been returned to the company for further study because it was found to be woefully inadequate.

Plans and implementing procedures for special needs populations remain incomplete, and it may be necessary to undertake an additional survey of people who would need assistance in emergency response or to do further statistical analysis of this matter. The development of implementing procedures and the identification of resources to care for school age populations also requires additional work. In regard to the adequacy of reception centers, the question of need for a facility to serve people in the northern portion of the EPZ remains open. We cannot make decisions on the need for or identification of a third reception center until Boston Edison has provided us with an analysis of the adequacy of the existing two reception facilities.

With regard to plant management, we have seen numerous changes in Boston Edison's personnel and organization for management of Pilgrim Station. The most notable change is the appointment of Mr. Ralph G. Bird as Senior Vice President, Nuclear, who directly reports to the company's chief executive officer. Yet despite these changes, I cannot say at this time that the management problems have been fully resolved. For example, we are concerned about recent incidents including violation of NRC regulations in the area of plant security, and allegations of excessive overtime worked by utility employees. We are also concerned by Boston Edison's action to refuel Pilgrim Station without having responded to my objections and the objections of several state legislators.

The Systematic Assessment of Licensee Performance (SALP) performed by the NRC is the most comprehensive study and report on nuclear management at Pilgrim Station. The last SALP report was issued on April 8, 1987 and it showed deterioration in several aspects of nuclear management since the last report. Until a similarly comprehensive analysis of management under the new organization has been conducted and the above concerns resolved, I cannot say that our management concerns have been addressed.

With regard to reactor safety issues, we have carefully reviewed Boston Edison's "Safety Enhancement Program" (SEP). The SEP has been undertaken since the issuance of a "Draft Generic Letter" from Mr. Robert Bernero of the NRC concerning safety at Mark I containment structures such as the Pilgrim containment. We have two major concerns in the area of reactor safety.

First, despite the fact that the NRC letter was prompted by a finding that there was a high probability of Mark I containment failure during certain severe accident scenarios, the NRC has yet to adopt an official position regarding safety enhancement. Moreover, according to NRC Region I Administrator William Russell, with whom my staff and other state officials met at NRC's regional offices in King of Prussia, Pennsylvania on October 8, 1987, enhancement of the Mark I containment at Pilgrim is not an issue that the NRC believes must be finally resolved before restart.

Our second concern is the uncertainty that continues to exist about at least one feature of the Boston Edison SEP, the direct torus vent. No consensus has been reached on whether installation of the torus vent creates unreviewed

-4-

safety issues or if the torus vent is authorized, how it will be used in the event of a severe nuclear accident.

The findings of my December, 1986 report have been strengthened by two other analyses of safety at Pilgrim Station. The Special Joint Legislative Commission to Study Pilgrim Station has issued its report which further studies and documents many of the same safety concerns. In addition, the Federal Emergency Management Agency has issued a Self-Initiated Review of plans for response to an accident at Pilgrim Station. Based on several of the issues raised in my report FEMA has changed its interim finding and now agrees that the off-site plans for an accident at Pilgrim are not adequate.

FEMA has transmitted their new finding to the Nuclear Regulatory Commission. However, the NRC has yet to indicate whether or not development of adequate off-site plans will be a condition to the restart of Pilgrim. We are not satisfied with the view recently expressed by the NRC Region I staff that emergency planning problems must be "addressed" before restart. Such problems must be satisfactorily resolved before restart. Off-site response plans are just as important as nuclear management and reactor safety in protecting the public from an accidental release of radiation.

Therefore, for these reasons -- the absence of adequate emergency response plans, lack of demonstrable assurance that management problems have been solved, and uncertainty about the safety of the Mark I containment structure -- I continue to find that Boston Edison has not met the heavy burden of showing readiness to restart the Pilgrim Nuclear Power Plant. I also continue to believe that it remains to be seen if adequate emergency response plans can be developed and if all other safety issues can be resolved to our satisfaction.

Finally, I recommend that in light of the number of outstanding issues and their complexity, and Boston Edison's evident determination to press ahead with the effort to restart, that there should be a full scale public hearing by the NRC before any decision is made regarding the restart of Pilgrim Station.

October 14, 1987

CHARLES V. BARRY
SECRETARY OF PUBLIC SAFETY

News Release

**Attorney General
James M. Shannon**

Commonwealth of Massachusetts

FOR IMMEDIATE RELEASE
THURSDAY, OCTOBER 15, 1987

SHANNON PETITIONS NRC FOR FORMAL HEARING ON PILGRIM RESTART

Attorney General James M. Shannon today filed a petition with the Nuclear Regulatory Commission (NRC) requesting an order to show cause why the Pilgrim Nuclear Power Plant should not remain closed until a full adjudicatory hearing resolves the serious safety problems posed by the plant's poor management, faulty structural design and inadequate emergency planning. Shannon said the petition forces the NRC to consider new issues underscoring the plant's serious deficiencies.

Shannon's petition, filed on behalf of his office and Governor Michael S. Dukakis, also asks the NRC to issue an immediate order barring the Boston Edison Company (B.E.Co.) from taking further actions to restart.

"The public deserves a complete hearing on the safety of this troubled nuclear facility," Shannon said. "We deserve the right to have Boston Edison meet the burden of proof in a public hearing that it can operate this plant safely -- something which it has yet to prove.

"If this petition is granted, and we hope that it will be, we

-more-

will provide expert testimony to the NRC on each of the safety issues raised by our petition. We would expect Boston Edison to do the same. While Boston Edison and the NRC continue to argue otherwise, the decision to restart the plant should not be made without meaningful public scrutiny."

Governor Dukakis said the action was "necessary because there are too many outstanding public safety issues that have not been adequately addressed by the NRC and Boston Edison. Pilgrim is just not ready to open.

"We remain concerned about the safety of the reactor, the structural integrity of the containment vessel, serious management deficiencies, and the lack of an adequate evacuation plan. Therefore, a full public hearing must be undertaken to consider these serious safety issues before any decision is made concerning whether the power station resumes operation," the governor said. "The health and safety of our citizens depend on it."

The Pilgrim power plant has been shut down since April 12, 1986 when the NRC ordered it closed after recurring operational problems. In July 1986, Shannon joined as a private citizen in an earlier petition filed with the NRC by the Massachusetts Public Interest Research Group (MassPIRG). That petition called on BECo. to show why its Pilgrim operating license shouldn't be pulled because of earlier evidence of management, structural and evacuation planning problems.

In August 1987, the NRC rejected aspects of the petition

dealing with plant safety and evacuation planning questions but has yet to rule on the issue of management deficiencies. The NRC ruling followed a report by the Federal Emergency Management Agency (FEMA) earlier in August which found major deficiencies in Pilgrim's evacuation planning. Because that report was not considered in the NRC ruling, MassPIRG and several other plaintiffs are appealing the NRC's decision in the First Circuit Court of Appeals. Attorney General Shannon has filed a petition to intervene in that case.

Shannon said that while the NRC has said it will schedule public meetings in the Plymouth area prior to approving the plant's restart, those meetings are not part of a legal process in which BECo. can be held accountable.

"What the NRC proposes is nothing more than a town meeting on Pilgrim," Shannon said. "That simply won't do. The history of this plant has been so abysmal that nothing short of a full adjudicatory hearing will suffice. We must have the opportunity to present our experts and cross-examine BECo's management to determine if the company's bravado public statements actually match the facts."

Shannon's request is based on such evidence as:

Continuing serious managerial deficiencies, including new excessive overtime and security concerns.

Questions surrounding the safety of the containment vessel itself. The Pilgrim reactor is a Mark I, a design which is

-more-

acknowledged by the NRC to be especially prone to failure in several possible accident scenarios; and

Deficiencies in the evacuation plans for the area, as cited by both FEMA, the federal agency with the recognized expertise in emergency planning, and by the state Office of Public Safety.

Stating that "Pilgrim has been identified by the NRC as one of the worst run and least safe plants in the country," the petition argues that BECo's past performance demonstrates that it lacks the managerial skills and/or commitment necessary to operate a nuclear facility.

"While the NRC's efforts to spur BECo. to a higher level of performance have, on occasion, met with some initial success," the petition argues, "a review of BECo's performance record shows that all such successes have been short lived and that BECo appears to have an ... inability to manage Pilgrim in an effective and safe manner."

Specifically, Shannon's office charges that BECo has consistently received low ratings in the NRC's Systematic Assessment of Licensee Performance (SALP) reports. In fact, every SALP report, with the exception of one for 1982-83, has found a significant weakness at Pilgrim, and recent reports reflect a declining performance. Additionally, every time Quality Assurance has been assessed separately in a SALP review, BECo. has received the lowest possible rating.

"Given that Pilgrim is a GE Mark I design reactor and that the EPZ (Emergency Planning Zone) population of the plant is among the

highest in the country," the petition concludes, "it is evident that the deficiencies in emergency planning and preparedness are significant for Pilgrim. Further, the deficiencies are so substantial and their potential ramifications are so enormous, that it is impossible to conclude that any interim compensating actions have or can be taken and that the NRC's regulations leave it any course other than issuing a shut down order."