

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

November 10, 1987

Charles V. Barry Secretary of Public Safety Commonwealth of Massachusetts One Ashberton Place Boston Massachusetts 02108

Dear Mr. Barry:

This letter transmits information that was requested during the October 8, 1987 meeting with Mr. Peter Agnes of your office, Messers. Alexander, Judge and Dean, also representing the Commonwealth of Massachusetts and Mr. William Russell, Nuclear Regulatory Commission (NRC) Region I Administration and other NRC staff. The enclosed documents supplement the information that was discussed on the following topics: allegation process, operating license amendment process, NRC policy on overtime at nuclear power facilities, and generic emergency procedures for containment venting.

If you have any additional questions, please contact me at (215) 337-5246.

Sincerely,

Marie T. Miller

Regional State Liaison Officer

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Enclosures:

Chapter NRC-0517
 "Manager of Allegations"

Federal Register Vol. 51,
 No. 44 dated 3/6/86

3. Generic Letter 82-12

4. Emergency Procedure Guidance Training Supplement, Chapter 5

## December 17, 1987 Letter

## Governor, The Commonwealth of Massachusetts, to FEMA I

## EXCERPTS

- Pilgrim should not be permitted to rescart until all (Massachusetts identified) emergency preparedness and safety related issues
  - satisfactorily addressed
  - resolved
- I continue to find adequate EP plans do not exist
- I continue to question if adequate plans can be developed
- We continue to strive to develop best possible plans
- Pending Issues Include:
  - Planning for Special Needs Population
  - Resolution of Evacuation Time Estimates and Traffic Management Study
  - Need for Additional Reception Centers
  - Resolution of Torus Vent Installation
  - Development of PRA
- Full Adjudicatory Hearing should be conducted
- Provides latest Barry Report as enclosure

## Barry Report on Pilgrim EP, Fall of 1987

## Revision of Plans

- Until <u>fully revised plans</u> have been developed and found by the state to be adequate, I must continue to make the finding that there are not presently adequate plans
- Federal regulatory guidance suggests that nuclear utilities should support the costs of off-site emergency preparedness as a responsibility of operating commercial nuclear reactors (NUREG-0654 at page 25, paragraph G).

- three phase process to completely revise emergency plans
- The first phase of the planning process was to make all obvious corrections to the plans
- Phase II is to undertake the major planning necessary to address the findings in our December, 1986 report and other reviews of the plans, and to resolve all issues raised by each community in the phase I process
- Phase III will be to train all personnel with an emergency responsibility and to hold a graded exercise of all plans and facilities
- Phase one corrections were completed by the third week in August and phase II was begun immediately
- Certain aspects of the third phase of the process are presently under way
- Draft revisions to the local plans exist in part for each of the five EPZ communities. In some cases, the draft revisions are up to 85% complete as of this writing
- our target date is to produce a new revision of the plan by the end of the calendar year -- it bears emphasis that there is no absolute deadline for this work
- In addition to the seven local radiological emergency response plans, the response plans for the State and for MCDA/DEP Area II were also found by our report to be deficient
- these revisions cannot be completed before revisions to local plans are finished.
- when officials of all communities and staff of MCDA/OEP indicate that initial drafts are complete, the drafts will be submitted to the Federal Emergency Management Agency for informal technical review

## Exercise Participation

- If we determine that adequate plans have been developed through the phase II Process and that all emergency personnel have received or will receive required training, then the possibility of holding a full-scale emergency exercise will be considered
- a <u>successful</u> graded exercise of all off-site plans and facilities must be held, and that the <u>NRC</u> must hold a full adjudicatory hearing within the Pilgrim EPZ before Pilgrim Station is authorized to restart

#### State EP Organization

- The state legislature has established and provided initial funding for a Nuclear Safety Emergency Preparedness Program
- In his fiscal Year 1988 budget, Governor Dukakis proposed development of a state program to be responsible for all planning, training, and exercises in support of emergency preparedness for an accident at any of the three nuclear power plants...The FY '88 budget authorized eleven positions for the new division. However, insufficient funds were appropriated to fill all of these jobs. The first five of these positions have been filled
- the Governor submitted a supplementary budget request of \$700,000 for the new program

#### School Emergency Planning

- the development of new and enhanced procedures for the protection of school-aged children has been a priority issue in phase II planning
- Contrary to what some teachers have maintained, it is our belief and a present operating assumption of the planning process that teachers will respond in a professional manner, remaining with and not abandoning the children who have been given to their care

## Special Needs Population

- It is the policy of state public safety officials that every individual in the EPZ be given the opportunity to identify him or herself and his or her need. However, it may not be necessary or even productive to compile exhaustive lists of special needs populations
- (the licensee's study) does not make an accurate estimate of the EPZ's special needs populations (The Boston Edison <u>survey may not</u> have reached all residents of the EPZ)
- the Commonwealth will endeavor to make these buses and all other public resources available to assist in emergency response if they are needed to supplement resources available in the more immediate vicinity of Pilgrim
- No guarantee can be given that all drivers will respond to a nuclear emergency, and written agreements offer no absolute assurance. However, we feel that adequate training will help reassure drivers of their safety in emergency response

## ETE and Traffic Management

- serious questions regarding the ETE methodology and results have surfaced
- An Evacuation Time Estimate (ETE) is essential as a planning tool and as a critical resource in evaluating protective actions should there be an actual emergency at a nuclear power plant
- The Commonwealth does not have adequate resources to implement the traffic management plan
- officers of Troop D have indicated that they would not normally have sufficient personnel available to implement all of their actions in a timely manner...Troop D may not have adequate radio frequencies and hardware to manage emergency communications
- The recommended resource requirements in the ETE include 364 cones, 389 barricades, and 203 warning lights....However, it is necessary to assure delivery times for these resources before one can be assured of adequate plan implementation.
- An examination of the details for traffic control points indicates that very few are recommended to be staffed by more than one traffic guide...It is doubtful that one guide can accomplish all of these functions
- The ETE should investigate and recommend alternative evacuation strategies in the event that any one of the major evacuation routes. such as Route 3, were blocked...it does not appear that the ETE has given consideration to the possibility of a severe Winter storm of the magnitude which can occur in Southeastern Massachusetts
- Further study by state officials is necessary and I intend to have the ETE and the model upon which it is based evaluated by an independent third party expert in evacuation modeling

## Additional Reception Center

 Replacement of Hanover Mall as a reception center for the northern portion of the EPZ remains one of the most difficult pending issues regarding off-site emergency response

- Federal guidance states only that reception and radiological monitoring service be provided for up to twenty percent of the total EPZ population and that radiological monitoring must be accomplished within twelve hours
- (licensee) study will determine what physical alterations must be made, what equipment must be provided, and what additional plans must be developed so that we can with only two reception facilities meet the needs of the EPZ population for reception, radiological monitoring, and, if necessary, decontamination of people and rehicles, either with or without a third reception center
- we will determine...if a third reception center is necessary

#### Protection of Beach Population

- Protection of beach populations during the Summer months is a principal public safety concern raised in our (earlier) Report
- In order to assure that the public can be adequately protected, it is necessary to establish two findings in regards to shelter; that, a) the highly vulnerable beach population can take adequate protective cover in the event of a rapidly escalating accident with an early release of radiation, and b) that each EPZ community can provide adequate protective shelter for the resident and transient population seeking assistance
- the survey was completed only for areas lying between one half and one mile from the coast. The survey also failed to adequately evaluate the quality of shelter available in individual structures
- Staff of MCDA/OEP have reviewed the (licensee's) shelter survey and find it deficient in several aspects
- the estimated population at the EPZ beaches and ponds is a critical issue not yet addressed to our satisfaction
- Until shelter utilization plans have been developed, it is impossible to say that shelter as a protective action has been addressed

#### EPI Brochures

- Federal regulations require that an EPI brochure be distributed annually to all residents of a nuclear power station EPZ
- no...restart until a final and complete EPI brochure has been approved by MCDA/OEP and distributed

- because certain critical planning decisions had not been made--principally whether or not a third reception center is required to replace Hanover Mall--preparation of the brochure has not been completed
- Boston Edison informs us that they will delay their annual distribution until December
- It must be emphasized that an interim Public Information Brochure will be distributed throughout the emergency planning zone, as discussed in the end of section III

#### Medical Services

- While not specifically addressed in our December, 1986 report, a recent <u>Guidance Memorandum</u> from the Federal Emergency Management Agency has focused attention on the topic of medical services for people who are contaminated by radiation and physically injured, for people who have ingested radioactive material, and individuals who are severely irradiated

#### Expanded EPZ

- State officials must still complete consultation with FEMA and the NRC regarding this expansion of the EPZ before final designation is made
- It is our feeling that <u>full attention</u> must be focused on assuring that adequate plans are developed for all areas <u>within ten miles</u> of Pilgrim Station before undertaking new planning for areas in the expanded EPZ
- State officials must still consult with federal and local authorities to determine what level of planning is appropriate and will be required for all areas added to the plume exposure EPZ

#### Torus Vent

- The torus vent introduces a vital policy question. Under what and whose authority can one plan in advance to make use of the vent?
- This proposal raises such significant safety issues that a public hearing should be required so that the Commonwealth would have an opportunity to express its opinions on the matter.
- We will continue to insist, as you and the Attorney General have done through the filing of your recent petition, that no consideration be given to restarting Pilgrim Station until a full adjudicatory hearing is conducted

#### PRA

- until a plant-specific "Probabalistic Risk Assessment" (PRA) is available for Pilgrim Station, it is impossible to determine the relative level of risk of a severe accident at Pilgrim Station and the dominant sequence of events that would lead to a severe accident
- I recommend that the plant not be allowed to restart until we have been provided with a Pilgrim-specific PRA and have had the opportunity to verify and assess its results

#### NRC Inspection Program

- on one recent weekend when there were eight problem events at Pilgrim Station, only two NRC resident inspectors were assigned to the facility and no inspections were made
- I have requested that the NRC agree to provide, at a minimum, daily random monitoring of operations at Pilgrim Station
- The NRC is issuing a status report on the facility every two weeks, and this practice should certainly continue

#### State Inspections

Vermont, New Jersey, and other states around the nation have entered into formal agreements with the Nuclear Regulatory Commission whereby they are permitted to attend and, to a limited degree, participate in safety inspections and meetings for nuclear power plants... The Commonwealth is considering making such arrangements

## Facility Restart Decision

- the NRC has yet to receive from Boston Edison a final copy of the utility's proposed restart plan...a third party expert evaluation of this plan is under consideration
- objective evidence of sustained performance at the highest level of quality, including but not limited to top grades in the next SALP report, before restart, even though...will not reflect evaluation of actual on line operation of the reactor
- . The NRC has never articulated what it means by "addressed."
  - When the rules and guidance regarding emergency planning were first issued...planning was said to be as critical to safety as engineering...The Pilgrim case will test the extent to which the NRC remains committed to this fundamental tenet.

## Additional Issues Raised by Fall 1987 Barry Report

- 1. Is the magnitude of plan and personnel changes such that a full scale graded exercise is the only mechanism capable of determining the adequacy of offsite EP prior to exceeding 5% power?
- Must we independently determine if the new EPZ ETE and traffic management plan is adequate to support protective action decision making prior to exceeding 5% power.
- 3. Must we independently determine if the EPI brochures are adequate prior to restart?
- 4. Should we consider a restart decision prior to conducting a SALP?
- 5. Can we consider a restart decision prior to confirming compliance with new FEMA GM MS-1 related to adequacy of medical services?
- 6. Can we consider a restart decision prior to determining whether Pilgrim should have the capability and the Commonwealth must authorize containment vesting druing an accident?