

THANK YOU. I WILL ADDRESS 2 DISTINCT AREAS IN MY REMARKS AND RESPONSE TO THE COMMENTS RECEIVED DURING THE FEBRUARY 18, 1988 MEETING. THESE AREAS ARE EMERGENCY PREPAREDNESS AND ENVIRONMENTAL MONITORING. I WILL ADDRESS EMERGENCY PREPAREDNESS FIRST.

EMERGENCY PREPAREDNESS

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BEFORE ADDRESSING SPECIFIC CONCERNS RAISED AT THE FEBRUARY MEETING, I'D LIKE TO PROVIDE THE REGULATORY FRAMEWORK FOR EMERGENCY PREPAREDNESS. THE NRC HAS RECOGNIZED THE IMPORTANCE OF EMERGENCY PREPAREDNESS IN PROTECTING THE HEALTH AND SAFETY OF THE PUBLIC AND HAS, OVER THE PAST SEVERAL YEARS, IMPLEMENTED SPECIFIC REGULATIONS AND REGULATORY GUIDANCE. SIGNIFICANT INTER-AGENCY COOPERATION, SPECIFICALLY WITH THE FEDERAL EMERGENCY MANAGEMENT AGENCY, HAS RESULTED IN DEFINITIVE CRITERIA BEING PUBLISHED. I WANT TO ENSURE THAT YOU ARE AWARE OF THESE REGULATIONS AND CRITERIA, AND HOW THE NRC WILL USE THIS PUBLISHED GUIDANCE IN RESTART DELIBERATIONS FOR THE PILGRIM STATION.

TITLE 10 OF THE CODE OF FEDERAL REGULATIONS CONTAINS APPENDIX E, ENTITLED "EMERGENCY PLANNING AND PREPAREDNESS FOR PRODUCTION AND UTILIZATION FACILITIES." THIS APPENDIX ESTABLISHES MINIMUM REQUIREMENTS FOR EMERGENCY PLANS FOR USE IN ATTAINING AN ACCEPTABLE STATE OF EMERGENCY PREPAREDNESS. SPECIFIC REFERENCE IS MADE TO A DOCUMENT DEVELOPED JOINTLY BY THE NRC AND FEDERAL EMERGENCY MANAGEMENT AGENCY, KNOWN AS NUREG-0654, "CRITERIA FOR PREPARATION AND EVALUATION OF RADIOLOGICAL EMERGENCY RESPONSE PLANS AND

PREPAREDNESS IN SUPPORT OF NUCLEAR POWER PLANTS." THE PLANNING STANDARDS IN NUREG-0654, AS SPECIFICALLY REFERENCED IN THE REGULATIONS, ARE REQUIRED TO BE ADDRESSED IN THE EMERGENCY PLANS. THESE 16 PLANNING STANDARDS ARE:

- A. ASSIGNMENT OF RESPONSIBILITY (ORGANIZATION CONTROL)
- B. ONSITE EMERGENCY ORGANIZATION
- C. EMERGENCY RESPONSE SUPPORT AND RESOURCES
- D. EMERGENCY CLASSIFICATION SYSTEM
- E. NOTIFICATION METHODS AND PROCEDURES
- F. EMERGENCY COMMUNICATIONS
- G. PUBLIC EDUCATION AND INFORMATION
- H. EMERGENCY FACILITY AND EQUIPMENT
- I. ACCIDENT ASSESSMENT
- J. PROTECTIVE RESPONSE

- K. RADIOLOGICAL EXPOSURE CONTROL
- L. MEDICAL AND PUBLIC HEALTH SUPPORT
- M. RECOVERY AND REENTRY PLANNING AND POST-ACCIDENT OPERATIONS
- N. EXERCISES AND DRILLS
- O. RADIOLOGICAL EMERGENCY RESPONSE TRAINING; AND FINALLY
- P. RESPONSIBILITY FOR THE PLANNING EFFORT: DEVELOPMENT, PERIODIC REVIEW AND DISTRIBUTION OF EMERGENCY PLANS

IT IS IMPORTANT TO REALIZE THAT THE GOAL OF EMERGENCY PREPAREDNESS IS TO PREPARE ONSITE AND OFFSITE PERSONNEL, AND THE PUBLIC, FOR A VARIETY OF WAYS OF DEALING WITH NUCLEAR EMERGENCIES. IT IS NECESSARY TO BE PREPARED FOR A RANGE OF PROTECTIVE ACTIONS. IT IS NOT APPROPRIATE TO DEVELOP SPECIFIC PLANS FOR EVERY CONCEIVABLE ACCIDENT, BUT TO ADDRESS A SPECTRUM OF ACCIDENTS, TO GIVE FORETHOUGHT TO THE ACTIONS REQUIRED, AND TO KEEP IN MIND THE OVERALL OBJECTIVE OF PROVIDING EMERGENCY PLANS, PROCEDURES, AND TRAINING TO ACHIEVE DOSE SAVINGS FOR A SPECTRUM OF ACCIDENTS.

ANOTHER SPECIFIC PART OF 10 CFR PART 50 IS ENTITLED "EMERGENCY PLANS," AND THIS IS 10 CFR 50.47. THIS REGULATION IDENTIFIES THE NRC AS THE REGULATORY AUTHORITY THAT IS REQUIRED TO MAKE A FINDING ON EMERGENCY PREPAREDNESS PRIOR TO THE ISSUANCE OF AN OPERATING LICENSE FOR A NUCLEAR POWER REACTOR. THE

REQUIRED FINDING IS THAT "THERE IS REASONABLE ASSURANCE THAT ADEQUATE PROTECTIVE MEASURES CAN AND WILL BE TAKEN IN THE EVENT OF A RADIOLOGICAL EMERGENCY." THE NRC, HOWEVER, DOES NOT OBTAIN INFORMATION TO MAKE THIS CONCLUSION IN A VACUUM. WE CONSIDER, FIRST, THE REVIEW OF FEDERAL EMERGENCY MANAGEMENT AGENCY, AND THAT AGENCY'S FINDINGS AS TO WHETHER STATE AND LOCAL PLANS ARE ADEQUATE, SECOND, WHETHER THERE IS A REASONABLE ASSURANCE THAT THEY CAN BE IMPLEMENTED, AND THIRD, THE NRC ASSESSMENT AS TO WHETHER THE APPLICANT'S ONSITE EMERGENCY PLANS ARE ADEQUATE AND WHETHER THEY CAN BE IMPLEMENTED. THE ULTIMATE DECISION AS TO WHETHER THE STATE OF EMERGENCY PREPAREDNESS IS ADEQUATE TO PROTECT PUBLIC HEALTH AND SAFETY RESTS WITH THE NRC.

AT THE PUBLIC MEETING HELD FEBRUARY 18, 1988, THERE WAS A CONCERN WITH THE NRC REVIEW PROCESS, AND ITS BASES, FOR EMERGENCY PREPAREDNESS. I HAVE ADDRESSED GENERALLY THE CRITERIA FOR THIS REVIEW. ONE SPECIFIC CONCERN DEALT WITH THE EMERGENCY ACTION LEVELS. NUREG-0654 SPECIFIES THESE EMERGENCY ACTION LEVELS IN INCREASING LEVEL OF SIGNIFICANCY AND REQUIRED ACTIONS, AS

1. NOTIFICATION OF UNUSUAL EVENT
2. ALERT
3. SITE AREA EMERGENCY
4. GENERAL EMERGENCY

A GRADATION IS PROVIDED TO ASSURE FULLER RESPONSE PREPARATIONS FOR MORE SERIOUS INDICATORS.

TO GIVE YOU A BETTER UNDERSTANDING OF THESE CLASSES:

1. FOR A NOTIFICATION OF UNUSUAL EVENT THE LOWEST OF THE EVENT CLASSIFICATION, UNUSUAL EVENTS ARE IN PROCESS OR HAVE OCCURRED WHICH INDICATE A POTENTIAL DEGRADATION OF THE LEVEL OF SAFETY OF THE PLANT. NO RELEASES OF RADIOACTIVE MATERIAL REQUIRING OFFSITE RESPONSE OR MONITORING ARE EXPECTED UNLESS FURTHER DEGRADATION OF SAFETY SYSTEMS OCCURS.

PERSONNEL ARE BROUGHT TO A STATE OF READINESS, PREPARED FOR ANY FURTHER RESPONSE. RELATIVELY MINOR EVENTS CAUSE THE DECLARATION OF AN UNUSUAL EVENT, SUCH AS THE TRANSPORTATION OF A CONTAMINATED INJURED INDIVIDUAL FROM THE SITE TO AN OFFSITE HOSPITAL, OR REACTOR COOLANT TEMPERATURES OR PRESSURE OUTSIDE EXPECTED VALUES.

2. FOR AN ALERT, EVENTS ARE IN PROCESS OR HAVE OCCURRED WHICH INVOLVE AN ACTUAL OR POTENTIAL SUBSTANTIAL DEGRADATION OF THE LEVEL OF SAFETY OF THE PLANT. ANY RELEASES ARE EXPECTED TO BE LIMITED TO SMALL FRACTIONS OF THE EPA PROTECTIVE ACTION GUIDELINES. THIS SECOND STAGE EMERGENCY ACTION LEVEL WOULD BE DECLARED IF HURRICANE WINDS WERE PRESENT NEAR THE SITE, OR RADIOLOGICAL EFFLUENTS WERE 10 TIMES GREATER THAN ALLOWABLE INSTANTANEOUS LIMITS.

3. FOR A SITE AREA EMERGENCY, EVENTS ARE IN PROCESS OR HAVE OCCURRED WHICH INVOLVE ACTUAL OR LIKELY MAJOR FAILURES OF SYSTEMS OR EQUIPMENT NEEDED FOR PROTECTION OF THE PUBLIC. ANY RELEASES ARE NOT EXPECTED TO EXCEED EPA PROTECTIVE ACTION GUIDELINES EXCEPT NEAR THE SITE BOUNDARY. A STEAM LINE BREAK OUTSIDE CONTAINMENT, WITHOUT BEING ISOLATED, OR SEVERE DAMAGE TO SAFE SHUTDOWN EQUIPMENT FROM MISSILES OR EXPLOSIONS ARE EXAMPLES OF SITE AREA EMERGENCIES.
  
4. FOR A GENERAL EMERGENCY, EVENTS ARE IN PROCESS OR HAVE OCCURRED WHICH INVOLVE ACTUAL OR IMMINENT SUBSTANTIAL CORE DEGRADATION OR MELTING WITH POTENTIAL FOR LOSS OF CONTAINMENT INTEGRITY. RELEASES CAN BE REASONABLY EXPECTED TO EXCEED EPA PROTECTIVE ACTION GUIDELINES OFFSITE FOR MORE THAN THE IMMEDIATE SITE AREA. A GENERAL EMERGENCY WOULD BE DECLARED IF A LOSS OF OFFSITE POWER OCCURS PLUS FAILURE OF REACTOR SHUTDOWN SYSTEMS, OR EFFLUENT MONITOR DETECT SIGNIFICANT RADIATION LEVELS AT THE SITE BOUNDARY UNDER ACTUAL METEOROLOGICAL CONDITIONS.

BOSTON EDISON IS REQUIRED TO, AND HAS BEEN CONDUCTING TRAINING, ON HOW VARIOUS PLANT EVENTS LEAD TO THE DECLARATION OF THESE EMERGENCY ACTION LEVELS. THE NRC WILL INSPECT THIS AREA, AND ENSURE THAT PLANT OPERATION CAN APPROPRIATELY CATEGORIZE PLANT EVENTS.

A SECOND SPECIFIC CONCERN RAISED DURING THE EARLIER PUBLIC MEETING DEALT WITH ALERT AND NOTIFICATION OF THE PUBLIC. APPENDIX E, REFERENCED EARLIER, STATES THAT PUBLIC EMERGENCY PREPAREDNESS PLANNING INFORMATION SHALL BE GIVEN TO THE

PUBLIC WITHIN THE 10 MILE ON AN ANNUAL BASIS. THIS INFORMATION SHALL INCLUDE METHODS AND TIMES REQUIRED FOR PUBLIC NOTIFICATION AND THE PROTECTIVE ACTIONS PLANNED IF AN ACCIDENT OCCURS, GENERAL INFORMATION AS TO THE NATURE AND EFFECTS OF RADIATION, AND A LISTING OF LOCAL BROADCAST STATIONS THAT WILL BE USED FOR DISSEMINATION OF INFORMATION DURING AN EMERGENCY. WE ARE AWARE THAT THIS INFORMATION HAS NOT BEEN DISTRIBUTED FOR THE PILGRIM STATION FOR 1987 OR DURING 1988, AND THAT THE COMMONWEALTH OF MASSACHUSETTS HAS DETERMINED IT IS NOT APPROPRIATE TO DISTRIBUTE EMERGENCY PREPAREDNESS INFORMATION UNTIL CHANGES TO THE APPROPRIATE EMERGENCY PLANS ARE COMPLETED. THE NRC WILL VERIFY THAT THIS PUBLIC INFORMATION IS AVAILABLE PRIOR TO RESTART OF THE PILGRIM STATION.

ADDITIONALLY, A PROMPT PUBLIC NOTIFICATION SYSTEM SHALL HAVE A DESIGN OBJECTIVE OF BEING CAPABLE OF ESSENTIALLY COMPLETING THE INITIAL NOTIFICATION OF THE PUBLIC WITHIN THE 10 MILE EPZ WITHIN ABOUT 15 MINUTES. THE USE OF THIS NOTIFICATION CAPABILITY WILL RANGE FROM IMMEDIATE NOTIFICATION OF THE PUBLIC (WITHIN 15 MINUTES OF THE TIME THAT STATE AND LOCAL OFFICIALS ARE NOTIFIED THAT A SITUATION EXISTS REQUIRING URGENT ACTION) TO THE MORE LIKELY EVENTS WHERE THERE IS SUBSTANTIAL TIME AVAILABLE FOR THE STATE AND LOCAL GOVERNMENTAL OFFICIALS TO MAKE A JUDGEMENT WHETHER OR NOT TO ACTIVATE THE PUBLIC NOTIFICATION SYSTEM. WHERE THERE IS A DECISION TO ACTIVATE THE NOTIFICATION SYSTEM, THE STATE AND LOCAL OFFICIALS WILL DETERMINE WHETHER TO ACTIVATE THE ENTIRE NOTIFICATION SYSTEM SIMULTANEOUSLY OR IN A GRADUATED OR STAGED MANNER. THE RESPONSIBILITY FOR ACTIVATING SUCH A PUBLIC NOTIFICATION SYSTEM SHALL REMAIN WITH THE APPROPRIATE GOVERNMENTAL AUTHORITIES. NUREG-0654 INDICATES THAT THE DESIGN

OBJECTIVE DISCUSSED ABOVE REASONABLE ASSURANCE THAT EARLY NOTIFICATION CAN BE PROVIDED. PERIODIC TESTING OF SIRENS IDENTIFIES DEFICIENCIES IN THE SYSTEM, AND LOCALITIES WHERE IMPROVEMENTS ARE NECESSARY.

EMERGENCY PLANS ARE DOCUMENTS THAT ARE CONSTANTLY UNDERGOING CHANGES AND REVISION. THE OFFSITE EMERGENCY PREPAREDNESS PLANS FOR PILGRIM STATION WERE SUBMITTED BY THE MASSACHUSETTS CIVIL DEFENSE AGENCY TO FEMA IN 1981. NUMEROUS DRILLS AND FULL-SCALE EXERCISES WERE HELD AS REQUIRED, WITH APPROPRIATE STATE AND LOCAL PARTICIPATION. HOWEVER, DUE TO DEFICIENCIES IDENTIFIED DURING THESE DRILLS AND EXERCISES, AND A LACK OF PROGRESS BY OFF-SITE ORGANIZATIONS (STATE AND LOCAL COMMUNITIES) IN CORRECTION OF LONG-STANDING PLAN DEFICIENCIES, FEDERAL EMERGENCY MANAGEMENT AGENCY CONDUCTED A SELF-INITIATED REVIEW OF PILGRIM, AND PUBLISHED THEIR REPORT ON AUGUST 4, 1987. FEMA REVIEW INCLUDED THE REPORT ISSUED BY MASSACHUSETTS SECRETARY OF PUBLIC SAFETY, CHARLES BARRY, IN DECEMBER 1986. FEMA IDENTIFIED SIX ISSUES. THESE ARE

LACK OF EVACUATION PLANS FOR SOME PUBLIC AND PRIVATE SCHOOLS AND DAY CARE CENTERS.

LACK OF A RECEPTION CENTER FOR PEOPLE EVACUATING TO THE NORTH.

LACK OF IDENTIFIABLE PUBLIC SHELTERS FOR THE BEACH POPULATION.

INADEQUATE PLANNING FOR SPECIAL NEEDS POPULATION.



INADEQUATE PLANNING FOR THE EVACUATION OF THE TRANSPORTATION DEPENDENT POPULATION.

OVERALL LACK OF PROGRESS IN PLANNING AND APPARENT DIMINUTION OF EMERGENCY PREPAREDNESS.

THE NRC TRANSMITTED THE REPORT AND THESE FINDINGS TO THE BOSTON EDISON COMPANY IN AUGUST 1987 ENCOURAGING BOSTON EDISON TO WORK WITH, AND SUPPORT, THE COMMONWEALTH OF MASSACHUSETTS AND LOCAL ORGANIZATIONS TO CORRECT THE DEFICIENCIES. WE ARE AWARE OF SOME OF THE WORK TO DATE IN IMPROVING THE OFFSITE EMERGENCY PREPAREDNESS PROGRAMS AT PILGRIM AND CORRECTING THE EMERGENCY PLANNING DEFICIENCIES IDENTIFIED BY FEDERAL EMERGENCY MANAGEMENT AGENCY. WE ARE AWARE THAT DRAFTS OF THE LOCAL EMERGENCY PLANS HAVE BEEN COMPLETED AND THAT THESE PLANS HAVE BEEN FORWARDED BY THE COMMONWEALTH TO FEDERAL EMERGENCY MANAGEMENT AGENCY FOR TECHNICAL REVIEW. THIS INITIAL TECHNICAL REVIEW HAS BEEN COMPLETED, AND FEDERAL EMERGENCY MANAGEMENT AGENCY HAS TRANSMITTED COMMENTS BACK TO THE COMMONWEALTH, IDENTIFYING AREAS WHERE FURTHER WORK IS REQUIRED. WE ARE AWARE THAT THE DRAFT MASSACHUSETTS CIVIL DEFENSE AGENCY AREA 11 PLAN IS ESSENTIALLY COMPLETE AND IS BEING REVIEWED BY THE COMMONWEALTH, AND THE DRAFT OF THE COMMONWEALTH PLAN FOR PILGRIM IS NEARING COMPLETION.

NRC HAS STATED AT SEVERAL PUBLIC MEETINGS THAT IT WILL NOT PERMIT THE PILGRIM FACILITY TO RESUME OPERATION UNTIL CORRECTIVE ACTION SATISFACTORY TO NRC HAVE BEEN TAKEN TO ADDRESS THE EMERGENCY PLANNING DEFICIENCIES IDENTIFIED BY

FEDERAL EMERGENCY MANAGEMENT AGENCY. THE NRC WILL GIVE SPECIAL ATTENTION TO THE SCHOOLS AND DAY-CARE CENTERS, AS WELL AS FOR SPECIAL NEEDS AND TRANSPORT-DEPENDENT POPULATIONS IN THE PLUME EXPOSURE PATHWAY EPZ. BEFORE ALLOWING PILGRIM TO RESTART, THE NRC WILL REQUIRE SOME DEMONSTRATION THAT CRITICAL ASPECTS OF THE EMERGENCY PLAN CAN BE ADEQUATELY IMPLEMENTED.

THE NRC MAY AUTHORIZE RESTART WITH SOME PLANNING ISSUES NOT FULLY RESOLVED, AS LONG AS THE NRC CAN STILL MAKE A FINDING THAT THERE IS REASONABLE ASSURANCE THAT THE PUBLIC HEALTH AND SAFETY CAN BE PROTECTED. IN REACHING THIS DECISION, THE NRC WILL EXAMINE EACH PLANNING DEFICIENCY AND WEIGH THE SIGNIFICANCE OF THE DEFICIENCY, THE NATURE OF ANY COMPENSATORY ACTIONS, AND THE PROGRESS BEING MADE BY THE COMMONWEALTH, LOCAL GOVERNMENTS AND THE LICENSEE TOWARD CORRECTION OF THE DEFICIENCY. EMERGENCY PLANNING IS A DYNAMIC PROCESS AT OPERATING NUCLEAR PLANT SITES IN THE UNITED STATES. IN PRACTICE, WE EXPECT THAT EMERGENCY RESPONSE PLANS WILL BE REVISED AND IMPROVED ON A CONTINUAL BASIS. DEFICIENCIES IDENTIFIED DURING THE ONGOING REVIEW PROCESS AND IN BIENNIAL EXERCISES AT EACH OF THESE SITES ARE ASSESSED FOR SIGNIFICANCE AND THE REGULATION PERMIT THAT PLANTS MAY BE ALLOWED TO OPERATE WHILE THE DEFICIENCIES ARE BEING CORRECTED. GIVEN THE PROGRESS TO DATE AT PILGRIM, IT IS PREMATURE AT THIS TIME TO ATTEMPT TO DETERMINE WHICH, IF ANY, DEFICIENCIES MAY REMAIN WHEN RESTART DECISIONS ARE TO BE MADE.

IN CONCLUSION, THE NRC IS AWARE OF THE IDENTIFIED DEFICIENCIES IS OFFSITE EMERGENCY PLANNING AROUND PILGRIM, AND THE CORRECTIVE ACTION UNDERWAY. THE NRC WILL NOT PERMIT PILGRIM TO RESUME OPERATIONS UNTIL CORRECTIVE ACTION SATISFACTORY TO THE NRC HAS BEEN TAKEN TO ADDRESS THESE EMERGENCY PLANNING DEFICIENCIES.