



ENTERGY

Entergy Operations, Inc.

R. F. Burski

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QA

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U.S. Nuclear Regulatory Commission
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Washington, D.C. 20555

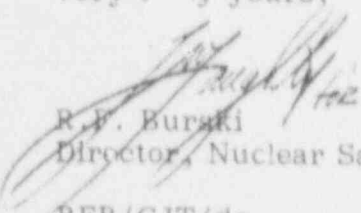
Subject: Waterford 3 SES
Docket No. 50-382
License No. NPF-38
NRC Inspection Report 92-07

Gentlemen:

Entergy Operations, Inc. hereby submits the response to the emergency preparedness weakness identified during walkthroughs of simulated accident scenarios with control room operating crews and documented in the subject Inspection Report. This response is attached and includes an analysis of the weakness, a description of corrective measures and a schedule for completion of these actions as requested.

If you have any questions concerning this response, please contact F.J. Englebracht, Emergency Planning & Administration Manager, at (504) 739-6607.

Very truly yours,


R. F. Burski
Director, Nuclear Safety

RFB/CJT/dc
Attachment

cc: R.D. Martin, NRC Region IV
D.B. Spitzberg, NRC Region IV
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ATTACHMENT

ENTERGY OPERATIONS, ILLINOIS, RESPONSE TO THE EMERGENCY EXERCISE

WEAKNESS DOCUMENTED IN INSPECTION REPORT 92-07

WEAKNESS NO. 9207-01:

The inspectors conducted a series of evaluations on the plant-specific control room simulator to evaluate the current knowledge and ability of personnel assigned emergency response duties in the control room. The scenario used in the evaluation was developed by the inspectors to determine if control room teams were able to classify events accurately, to perform the required notifications in a timely manner, to perform offsite dose assessment, and to make adequate protective action recommendations. During the walkthroughs, several problems in the crews abilities to formulate protective actions and to assess the offsite consequences of the emergency were noted as follows:

- One crew sheltered onsite personnel during a toxic gas release instead of evacuating these personnel as specified in Emergency Plan Implementing Procedure EP-004-010 for the specific conditions posed by the scenario.
- One crew made an error in estimating the release rate and subsequently communicated the erroneous estimate to offsite authorities. The erroneous estimate was 1000 curies per second (Ci/s) or over 3 times the actual release rate of about 300 Ci/s. Errors such as this could lead to confusion by offsite decision makers in attempting to correlate the offsite dose projections to the release rate estimate and in independently assessing the release using licensee provided release rate estimates.
- One crew made an error in transcribing the correct meteorological data onto the Alert notification form and, as a result, communicated the incorrect data and erroneous affected geographical sectors to offsite agencies.
- One crew made a protective action recommendation to the state of evacuation of all sectors out to 5 miles. Such a protective action recommendation could not be arrived at using EP-2-052, "Protective Action Guidelines." This protective action recommendation, if implemented, would have caused the evacuation of populations located in the upwind direction between 2-5 miles.
- One crew made a baseline protective action recommendation at the general emergency of shelter the 2-mile radius and the downwind sectors out to 5 miles. Although the protective action recommendation was valid for the classification, the crew did not consider dose projections calculated before the protective action recommendation was made which showed offsite doses exceeding protective action guidelines and, thereby, suggesting evacuation of these sectors.

RESPONSE

(1)

Analysis of the Weakness

Entergy Operations, Inc. performed an analysis of this weakness by separating it into five single problems. Each problem was analyzed separately to facilitate the identification of probable root causes and effective corrective measures. The analysis revealed the following:

The first problem involves the failure of one crew to make the proper protective action recommendations for site personnel during a toxic gas release. This failure is attributed to human error. Emergency Plan Implementing Procedure (EPIP) EP-004-010 clearly recommends personnel evacuate during this type of emergency. This error appears to have occurred because the plume was about to arrive onsite.

The second problem involves an error by one crew in estimating the release rate. This error is attributed to human error and the failure of the Control Room Dose Assessment Computer to provide assistance in this area.

The third problem involves an error by one crew in transcribing the correct meteorological data onto the Alert notification form. This error is attributed to the failure to utilize the information provided in the Control Room Dose Assessment Computer program.

Finally, the last two problems involve the offsite protective action recommendation decision making process. These problems are attributed to two things. First, EPIP EP-002-052 is somewhat cumbersome and difficult to use. Second, the Control Room Dose Assessment Computer program does not provide offsite protective action decision methodologies.

(2)

Corrective Measures

Four specific actions are planned to prevent recurrence. These actions are as follows:

1.

Lesson plans for Control Room emergency response personnel will be revised to include a discussion of this weakness as a lesson learned. This discussion will emphasize the importance of using available resources (i.e., procedural aids, computer program) to ensure that initial protective action recommendations are made (given time restraints) with the best information available.

2.

Special training seminars will be conducted by Emergency Planning for each Operations shift. A portion of these seminars will be devoted to a discussion of this weakness as a lesson learned. During the seminars, emphasis will be placed on the importance of using available resources (i.e., procedural aids, computer program) to ensure that initial protective action recommendations are made (given time restraints) with the best information available. In addition, the seminars will include exercises that require protective

RESPONSE

(1) Analysis of the Weakness

Entergy Operations, Inc. performed an analysis of this weakness by separating it into five single problems. Each problem was analyzed separately to facilitate the identification of probable root causes and effective corrective measures. The analysis revealed the following:

The first problem involves the failure of one crew to make the proper protective action recommendations for site personnel during a toxic gas release. This failure is attributed to human error. Emergency Plan Implementing Procedure (EPIP) EP-004-010 clearly recommends personnel evacuation during this type of emergency. In fact, later during the scenario the shift supervisor recognized the error and made a conscious decision to stand by the recommendation. This decision appears to have been appropriate because the plume was about to arrive onsite.

The second problem involves an error by one crew in estimating the release rate. This error is attributed to human error and the failure of the Control Room Dose Assessment Computer to provide assistance in this area.

The third problem involves an error by one crew in transcribing the correct meteorological data onto the Alert notification form. This error is attributed to the failure to utilize the information provided in the EPIPs and on the Control Room Dose Assessment Computer program.

Finally, the last two problems involve the offsite protective action recommendation decision making process. These problems are attributed to two things. First, EPIP EP-002-052 is somewhat cumbersome and difficult to use. Second, the Control Room Dose Assessment Computer program does not provide offsite protective action decision methodologies.

(2) Corrective Measures

Four specific actions are planned to prevent recurrence. These actions are as follows:

1. Lesson plans for Control Room emergency response personnel will be revised to include a discussion of this weakness as a lessons learned. This discussion will emphasize the importance of using available resources (i.e., procedural aids, computer program) to ensure that initial protective action recommendations are made (given time restraints) with the best information available.
2. Special training seminars will be conducted by Emergency Planning for each Operations shift. A portion of these seminars will be devoted to a discussion of this weakness as a lessons learned. During the seminars, emphasis will be placed on the importance of using available resources (i.e., procedural aids, computer program) to ensure that initial protective action recommendations are made (given time restraints) with the best information available. In addition, the seminars will include exercises that require protective

action recommendations to be generated during toxic chemical and radiological scenarios.

3. The computerized Control Room Dose Assessment program will be revised to provide a calculation and display of the release source term (Ci/sec release rate) and offsite protective action recommendations when a dose calculation is run.
4. An evaluation of the offsite protective actions procedure, EP-002-052, will be conducted. This evaluation will include consultations with control room personnel and other users to identify ways in which the procedure could be enhanced and made more user friendly.

(3) Schedules for Completion

Corrective measures 1 through 4 will be completed by October 1, 1992.