



FINAL EXERCISE REPORT

RIVER BEND STATION

Licensee: Entergy Operations, Inc.

Exercise Date: June 7, 2000

Report Date: November 2, 2000

**FEDERAL EMERGENCY MANAGEMENT AGENCY
REGION VI**

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I. EXECUTIVE SUMMARY

On June 7, 2000, a biennial Plume Exposure Pathway, 10-mile Emergency Planning Zone (EPZ) Radiological Emergency Preparedness (REP) exercise was conducted around the River Bend Station. The Federal Emergency Management Agency (FEMA) Region VI evaluated the exercise. The purpose was to assess the level of preparedness of the State and local responders to react to a simulated radiological emergency at the River Bend Station. It was held in accordance with FEMA's policies and guidance concerning the implementation of State and local radiological emergency preparedness plans and procedures.

The qualifying exercise to satisfy FEMA Rule 44 CFR 350 requirements for NRC licensing to operate the facility was conducted on January 16, 1985. Including the exercise on June 7, 2000, there have been 10 FEMA evaluated exercises plus several drills conducted since that time.

FEMA Region VI wishes to acknowledge the dedicated participation of many individuals in the State of Louisiana and West Feliciana, East Feliciana, Pointe Coupee, West Baton Rouge and East Baton Rouge Parishes. Many of these participants are paid civil servants whose full-time job is to protect the health and safety of the public within the jurisdictions they serve. There are many more who are volunteers that make themselves available to perform a service to the community in which they live.

This report contains the final written assessment of the biennial exercise including the identification of any exercise issues and recommendations for corrective action where appropriate.

All State and local organizations, except where noted in this report, demonstrated an adequate knowledge of the emergency plans and procedures and properly implemented them. There were no Deficiencies and four (4) Areas Requiring Corrective Action (ARCAs) identified during this exercise.

II. INTRODUCTION

On December 7, 1979, the President directed FEMA to assume the lead responsibility for all off-site nuclear power facility planning and response. The FEMA activities are conducted pursuant to 44 Code of Federal Regulations (CFR) 350, 351 and 352. These regulations are a key element in the REP Program that was established following the Three Mile Island Nuclear Station accident in March 1979.

FEMA Rule 44 CFR 350 establishes the policies and procedures for FEMA's initial and continued approval of State and local government radiological emergency planning and preparedness for commercial nuclear power plants. This approval is contingent, in part, on State and local governments' participation in joint exercises with licensees.

FEMA's responsibilities in Fixed Nuclear Facility Radiological Emergency Response Planning include:

- Taking the lead in offsite emergency response planning and in the review and evaluation of State and local government emergency plans, ensuring that the plans meet the Federal criteria set forth in NUREG-0654/FEMA REP-1, Rev.1 (November 1980).
- Determining whether the State and local emergency response plans can be implemented on the basis of observation and evaluation of an exercise conducted by the appropriate emergency response jurisdictions.
- Responding to requests by the U.S. Nuclear Regulatory Commission (NRC) pursuant to the Memorandum of Understanding between the NRC and FEMA dated June 17, 1993 (Federal Register, Vol. 58, No. 176, September 14, 1993); and
- Coordinating the activities of volunteer organizations and other involved Federal agencies. Representatives of these agencies, listed below, serve as members of the Regional Assistance Committee (RAC), which is chaired by FEMA.
 - U.S. Nuclear Regulatory Commission (NRC)
 - U.S. Environmental Protection Agency (EPA)
 - U.S. Department of Energy (DOE)
 - U.S. Department of Health and Human Services (DHHS)
 - U.S. Department of Transportation (DOT)
 - U.S. Department of Agriculture (USDA)
 - U.S. Department of Interior (DOI)
 - U.S. Food and Drug Administration (FDA)

The findings presented in this report are based on the Federal evaluation team's assessment of the participants' response to a simulated radiological incident at River Bend Station that affected the off-site populace. The Region VI RAC Chairman made the final classification of any issues identified and the Regional Director approved the report.

The criteria used in the evaluation process are contained in:

- NUREG-0654, FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (November 1980);
- FEMA-REP-14, "Radiological Emergency Preparedness Exercise Manual" (September 1991); and
- FEMA-REP-15, "Radiological Emergency Preparedness Exercise Evaluation Methodology (EEM)" (September 1991).

Section III of this report, entitled "Exercise Overview," presents basic information and data relevant to the exercise. This section contains a description of the Emergency Planning Zone, a listing of all participating jurisdictions, which were evaluated, and a tabular presentation of the times of actual occurrence of key exercise events and activities.

Section IV of this report, entitled "Exercise Evaluation and Results," presents basic information on the demonstration of applicable exercise objectives at each jurisdiction or functional entity evaluation in a jurisdiction-based format. This section also contains descriptions of all Deficiencies and ARCAs assessed during the exercise and recommended corrective actions, as well as descriptions of ARCAs assessed during previous exercises and the current status of each.

III. EXERCISE OVERVIEW

This section contains data and basic information relevant to the June 7, 2000, exercise to test the off-site response capabilities in the area surrounding the River Bend Station (RBS). This section of the report includes a description of the EPZ, a listing of all participating jurisdictions, which were evaluated, and a tabular presentation of the times of actual occurrence of key exercise events and activities.

A. Plume Emergency Planning Zone Description

The area within 10 miles of RBS is located entirely in the State of Louisiana. The RBS 10-mile EPZ involves five parishes, namely East Baton Rouge, West Baton Rouge, East Feliciana, West Feliciana, and Pointe Coupee. Within the EPZ, there are four incorporated cities. They are Zachary in East Baton Rouge Parish, Jackson in East Feliciana Parish, St. Francisville in West Feliciana Parish, and New Roads in Pointe Coupee Parish. The Mississippi River runs through the southwestern portion of the EPZ.

The total population of the EPZ is 36,245 (combined resident and transient populations). Besides schools and churches, there are a few other special facilities. There are three hospitals within the 10-mile EPZ including the West Feliciana Parish Hospital (an MS-1 hospital). There are also four incarceration facilities. There are two paper mills, James River in West Feliciana and Georgia-Pacific in East Baton Rouge. In Pointe Coupee Parish, there are two coal-fired electricity-generating plants, Big Cajun No. 1 and No. 2. Located approximately 5 miles south-southeast of RBS is the Port Hudson State Commemorative Area. Located approximately 5 miles north of RBS is the Locust Grove State Commemorative Area, and located approximately 2 miles north is the Audubon Commemorative Park.

There are four major railway lines running through the RBS EPZ. They are Illinois Central Gulf, Illinois Central, Kansas City Southern, and Missouri Pacific Railroads. U.S. Highway 61, Louisiana State Highways 1, 10, 68, and 415 are the major roads within the EPZ.

The EPZ is divided into 18 Protective Action Sections (PAS) defined by geographical boundaries for the purpose of emergency response planning and the implementation of protective actions.

B. Exercise Participants

Agencies and organizations of the following jurisdictions participated in the River Bend Station plume exercise:

State of Louisiana

Louisiana Office of Emergency Preparedness
Louisiana Department of Environmental Quality
Louisiana Department of Health and Hospitals
Louisiana State Police
State Public Affairs Office
Louisiana Department of Transportation and Development
Louisiana National Guard
Department of Social Services
Department of Wildlife and Fisheries
Department of Agriculture and Forestry
Louisiana State University Extension Service

Risk Jurisdictions

West Feliciana Parish
East Feliciana Parish
Pointe Coupee Parish
West Baton Rouge Parish
East Baton Rouge Parish

Support Jurisdictions and Organizations

LSU Reception Center
Baton Rouge Fire Department
American Red Cross
Jackson Fire Department
Pecan Grove Volunteer Fire Department
Woodland Volunteer Fire Department

C. Exercise Timeline

Table 1 on the following page presents the times at which key events and activities occurred during the River Bend Station plume exercise held on June 7, 2000.

[illegible]

IV. EXERCISE EVALUATION AND RESULTS

Contained in this section are the results and findings of the evaluation of all jurisdictions and functional entities, which participated in the June 7, 2000, exercise to test the off-site emergency response capabilities of State and local governments in the 10-mile EPZ surrounding River Bend Station. Each jurisdiction and functional entity was evaluated on its demonstration of criteria contained in exercise objectives delineated in FEMA-REP-14, "Radiological Emergency Preparedness Exercise Manual," dated September 1991. Detailed information on the exercise objectives and the extent-of-play agreement for this exercise is found in Appendix 3 of this report.

A. Summary of Exercise Results

The matrix presented in Table 2, on the following page, presents the status of all exercise objectives from FEMA-REP-14, which were scheduled for demonstration during this exercise at all participating jurisdictions and functional entities. Exercise objectives are listed by number and the demonstration status of those objectives is indicated by the use of the following letters:

- M - Met (No Deficiency or ARCAs assessed and no unresolved ARCAs from prior exercise)
- D - Deficiency assessed
- A - ARCAs assessed or unresolved ARCAs from previous exercises
- N - Not Demonstrated (Reason explained in subsection B)

[illegible]

B. Status of Jurisdictions Evaluated

This section provides information on the evaluation of each participating jurisdiction and functional entity in a jurisdiction-based format. Presented below is a definition of the terms used in this subsection relative to objective demonstration status.

- **Met** - Listing of the demonstrated exercise objectives under which no Deficiencies or ARCAs were assessed during this exercise and under which no ARCAs assessed during prior exercises remain unresolved.
- **Deficiency** - Listing of the demonstrated exercise objectives under which a Deficiency was assessed during this exercise. Included is a description of each Deficiency and recommended corrective actions.
- **Areas Requiring Corrective Action** - Listing of the demonstrated exercise objectives under which one or more ARCAs were assessed during the current exercise or ARCAs assessed during prior exercises that remain unresolved. Included is a description of the ARCAs assessed during this exercise and the recommended corrective action to be demonstrated before or during the next biennial exercise.
- **Not Demonstrated** - Listing of the exercise objectives which were not demonstrated as scheduled during this exercise and the reason they were not demonstrated.
- **Prior Issues - Resolved** - Description of ARCAs assessed during previous exercises, which were resolved in this exercise, and the corrective actions demonstrated.
- **Prior Issues - Unresolved** - Description of ARCAs assessed during prior exercises, which were not resolved during this exercise. Included is the reason the ARCAs remain unresolved and recommended corrective action to be demonstrated before or during the next biennial exercise.

The following are definitions of exercise issues, which are discussed in this report.

- A **Deficiency** is defined in FEMA-REP-14 as "an observed or identified inadequacy of organizational performance in an exercise that could cause a finding that off-site emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a nuclear power plant."
- An **ARCA** is defined in FEMA-REP-14 as "an observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health and safety."

FEMA has developed a standardized system for numbering exercise issues (Deficiencies and ARCAs). This system is used to achieve consistency in numbering exercise issues among FEMA Regions and site-specific exercise issues on a nationwide basis.

The identifying number for Deficiencies and ARCAs includes the following elements, with each element separated by a hyphen (-).

- **Plant Site Identifier** - A two-digit number corresponding to the Utility Billable Plant Site Codes.
- **Exercise Year** - The last two digits of the year the exercise was conducted.
- **Objective Number** - A two-digit number corresponding to the objective numbers in FEMA-REP-14.
- **Issue Classification Identifier** - (D = Deficiency, A = ARCA). Only Deficiencies and ARCAs are included in exercise reports.
- **Exercise Issue Identification Number** - A separate two (or three) digit indexing number assigned to each issue identified in the exercise.

1. STATE OF LOUISIANA

1.1 STATE EMERGENCY OPERATIONS CENTER (EOC)

The State EOC is located at 625 North Fourth Street, in the basement of the Land and Natural Resources Building in Baton Rouge, Louisiana and is operated under the direction of the Louisiana Office of Emergency Preparedness (LOEP).

The first message pertaining to the simulated event at River Bend Station (RBS) was the **UNUSUAL EVENT (NOUE)** that was received in the communications center on the dedicated printer from RBS at 8:32 a.m. on June 7, 2000. The **UNUSUAL EVENT** notification was followed by a verbal confirmation over the 800 MHz radio system. The Assistant Director, Operations Chief, Assistant Operations Chief and Technological Hazards Division Chief were immediately contacted by the communications staff and put on alert. The Nuclear Facility Event Checklist was initiated for Level IV. The LOEP Staff were already on duty in the EOC performing normal LOEP job assignments.

An **ALERT** message was received at the EOC at 8:43 a.m. This message was verified by RBS via 800 MHz radio at 8:45 a.m. The LOEP activated their EOC at Level III at 8:50 a.m. in accordance with the Checklist for Alert Operations. Other state agencies were notified to report and a security desk was established at the entrance to the EOC.

The notification for **SITE AREA EMERGENCY (SAE)** was received at 10:13 a.m. The EOC's activation level was changed to Level II and activities performed as outlined in the Checklist for SAE Operations.

The State simulated that the Governor's proclamation had been signed at 10:36 a.m.

The notification for **GENERAL EMERGENCY (GE)** was received at 10:37 a.m. The EOC initiated Level I operations in accordance with the Checklist for GE Operations. The State received Protective Action Recommendation (PAR) #7 from RBS with the GE notification. The Assistant Director for LOEP and Acting Administrator for the Department of Environmental Quality (DEQ) consulted on the PAR and agreed it was the appropriate action. Upon concurrence from the affected parishes, the Assistant Director for LOEP concurred with the PAR at 10:56 a.m. and directed the sirens to be sounded at 11:06 a.m. The first Emergency Alert Station (EAS) message with scenario #7 was sent from the EOC to WJBO at 11:00 a.m.

PAR #6 was received at the EOC at 12:23 p.m. The Assistant Director of LOEP, representative from the Department of Health and Hospitals and the Acting Administrator for DEQ concurred with the PAR. The roll call with the affected parishes was completed at 12:38 p.m. and the Assistant Director for LOEP directed the sirens to be sounded at 12:48 p.m. The second EAS message with scenario #6 was sent from the EOC to WJBO at 12:40 p.m.

Facilities and equipment were adequate to support emergency operations on a continuous 24-hour basis for extended lengths of time. All displays and status boards were visible to the entire staff and were promptly updated as required. The State used RISKMAP software to provide automated geographic information displays of the EPZ. The operations room has positions for 25 State and Federal agency representatives. Each work area is equipped with a digital telephone and a notebook computer connected to a network allowing access to Emergency Management 2000 software and

electronic mail. The Emergency Management 2000 software allowed the users to view and respond to the following activities:

- Report preparation such as press releases, situation reports and declarations of emergency conditions
- Resource inventory of State, local and Federal jurisdictions and agencies
- Tasking of EOC agencies as well as deployment of resources
- Tracking of incoming and outgoing message traffic

Copiers, fax machines, restrooms, kitchen and backup power capability were available to provide 24-hour continuous operations. An executive oversight area is located behind the operations area and is separated by a glass wall. This allows executive management to monitor activities and view displays in the operations room. Several offices used for daily operations by the LOEP have been designated for emergency use by state agencies. A copy of the EOC floor plan was provided.

Communications consisted of a dedicated printer and hotline telephone that link the utility and parishes to the LOEP. The EOC also maintains commercial telephone lines, cellular telephones, high frequency radio systems, amateur radio systems, a 800 MHz radio system, satellite communications, computer networks and facsimile machines adequate to provide primary communications with multiple backup options.

Direction and control was adequately demonstrated under the authority of the Assistant Director and Operations Chief. Formal briefings were held on a frequent basis, all ECLs were displayed promptly and informal discussions of critical issues took place between the appropriate parties as necessary. All incoming and outgoing messages were logged, copied and distributed as appropriate.

The Acting Administrator for DEQ, the Assistant Director of LOEP, Technological Hazards Division Chief and the representative from the Department of Health and Hospitals discussed the distribution of potassium iodide (KI) to emergency workers. It was decided that this was not necessary and that the best recommendation was for emergency workers to stay out of the affected area unless a life saving response was required.

The Assistant Director of LOEP, the representative for Social Services and the representative from the Department of Health and Hospitals discussed the requirements for special needs shelters. It was determined that based on the limited number of special needs evacuees that had been identified (2), that the existing State and local facilities were adequately equipped to respond to this need. If the 10 mile EPZ had been evacuated or the number of special needs evacuees exceeded the capability of existing resources the EOC staff would have decided to open a special needs shelter.

The exercise termination message was received 1:51 p.m. A brief hot wash was held and all exercise players were dismissed.

In summary, the status of FEMA exercise objectives for this location is as follows:

- a. **MET:** Objectives 1, 2, 3, 4, 9, 10, and 11
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES - RESOLVED:** NONE
- f. **PRIOR ISSUES - UNRESOLVED:** NONE

1.2 LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ) OPERATIONS AT HEADQUARTERS AND RIVER BEND EOF

The Louisiana Department of Environmental Quality (LDEQ) Headquarters located in Baton Rouge was notified at 8:30 a.m. that an **UNUSUAL EVENT** had been declared at the River Bend Station (RBS) at 8:24 a.m. This notification was initiated by the RBS via a computer network with a printer located in the LDEQ offices. At 8:35 a.m., the notification was verified by a telephone call to LDEQ from RBS. Following notification of the **UNUSUAL EVENT**, appropriate LDEQ staff members were notified by personal pagers to report to room 352 in LDEQ Headquarters.

Beginning at 8:38 a.m., the LDEQ management began a briefing of the LDEQ staff as to the **UNUSUAL EVENT**, plant status, and current meteorology. During this briefing, at 8:43 a.m., RBS notified LDEQ via the computer system printer that an **ALERT** had been declared at the RBS at 8:34 a.m. LDEQ management completed the briefing, assigned responsibilities, dispatched representatives to the Joint Information Center, prepared to deploy Field Radiological Monitoring Teams (FRMTs), and prepared to deploy LDEQ staff to the RBS Emergency Operations Facility (EOF). The LDEQ staff deploying to the EOF consisted of the Senior EOF Liaison, Accident Assessment Coordinator, Dose Assessment Coordinator, Technical Logistics Coordinator, Field Monitoring Coordinator, and the Logistics Coordinator.

LDEQ staff preparing to deploy to the EOF were assigned two vehicles, personal dosimetry, communications equipment, and a radiation survey instrument for each vehicle. While en route, LDEQ staff maintained contact with LDEQ Headquarters via cellular telephone. Contact was maintained between the two LDEQ vehicles and the field monitoring vehicles via an 800 MHz two-way radio network and cellular telephones. Also, while en route, at 10:13 a.m., deploying LDEQ staff were notified by a cellular telephone call from the LDEQ Headquarters that a **SITE AREA EMERGENCY (SAE)** had been declared at 10:07 a.m.

LDEQ staff arrived at the EOF parking lot at 10:26 a.m. Upon arrival inside the EOF at 10:36 a.m., the Technical Logistics Coordinator checked the EOF status board and learned that a **GENERAL EMERGENCY (GE)** had been declared at 10:31 a.m. In addition, there was a hard copy of the declaration in the LDEQ dose assessment area. At 10:40 a.m., the Senior EOF Liaison and the Accident Assessment Coordinator learned of the **GE** declaration during an EOF briefing. The LDEQ function at the EOF was fully operational at 10:42 a.m.

Personnel from LDEQ had sufficient space in the EOF and all equipment, status boards, maps, telephones and supplies necessary to support their emergency response effort. Exercise participants were able to keep noise level to a minimum. The status boards were visible to all LDEQ staff members and they were updated promptly either by LDEQ or RBS staff as pertinent information became available. The RBS ERO controlled access to the EOF.

The LDEQ Senior EOF Liaison demonstrated good direction and control procedures throughout the exercise and kept the LDEQ staff at the State Emergency Operations Center (SEOC) and the EOF informed of all pertinent information, as it became available. He had meetings with the Recovery Manager throughout the exercise, and he coordinated LDEQ protective action recommendations (PARs) with the LDEQ Secretary in the SEOC before providing concurrence on the PARs to the Recovery Manager. He utilized his staff in the PAR development process. Copies of their plans and procedures were available and used.

Commercial telephone, cellular telephone, 800 MHZ radio and fax were utilized for communications with the SEOC, field monitoring teams and the LDEQ Laboratory. Primary communications to the SEOC were by commercial telephone (cellular telephone while in transit), while the 800 MHZ radio system served as the primary communications link to the (simulated) Field Radiological Monitoring Teams (FRMTs). The EOF has a dedicated telephone system for communicating with Parish and SEOC representatives. In addition to the dedicated telephone system, the EOF has a computer link with printers located in the State and Parish EOCs and Dispatch Points, for receiving copies of notification forms. All systems operated properly except for the printer in the Pointe Coupee Parish EOC. This problem was resolved by transmitting the notification forms by fax. The Parish did receive all notifications through the equipment at the Dispatch Point/911 Center. This information was then either faxed or sent by messenger to the EOC.

LDEQ Headquarters is located in Baton Rouge. During the **ALERT** Emergency Classification Level declared by RBS, the LDEQ staff prepared to deploy to the RBS EOF. All deploying LDEQ personnel had in their possession their normal occupational thermoluminescent dosimeter (TLD). Prior to deploying from the LDEQ Headquarters to the EOF, the LDEQ staff obtained two direct reading dosimeters (DRDs). Their names and the DRD identification numbers were recorded. The assigned DRDs were:

- CDV-730, with a range of 0-20 R
- CDV-742, with a range of 0-200 R

The calibration date on all DRDs was September 30, 1999, with calibration due on September 30, 2000. Dosimeter chargers were available and, when necessary, they were used to zero the DRDs prior to deploying.

Two vehicles were used to transport the LDEQ staff to the EOF. Each vehicle was assigned a CDV-715 radiation survey meter. The CDV-715 has a maximum range of 500 R/h. The instruments were calibrated on September 17, 1999, and calibration is due on September 17, 2000. These instruments were used to monitor ambient radiation levels and warn the LDEQ staff if they entered into an unacceptably high radiation field while traveling to the EOF.

Upon arrival at the EOF, RBS assigned each LDEQ staff member a TLD and a Dosimetry Corporation Model 883 DRD with a range of 0-500 mR. The individual's name, TLD number, and DRD number were recorded. These DRDs were calibrated in February 2000 with calibration due in August of 2000.

The DRDs were read at 30-minute intervals and positive readings would be documented on exposure record forms provided with the LDEQ DRDs. In addition, RBS monitored the EOF for possible radiation contamination. If an LDEQ staff member's DRD read 1 R, the LDEQ's Senior EOF Liaison would be notified and a decision to continue the mission or to exit the area would be made. If their DRD read 5 R or greater, the Senior EOF Liaison would be notified and the area would be immediately vacated. In addition, for habitability of the EOF, RBS procedures state a maximum exposure rate of 200 mR/h and a maximum concentration of airborne radioiodines of 0.000005 microcuries per cubic centimeter.

At the end of their shift and when exiting the EOF, each LDEQ staff turned in their RBS DRD and TLD. Their occupational TLDs would be turned in at the end of the month. Upon arrival at the LDEQ Headquarters, LDEQ staff would turn in their LDEQ DRDs and their exposure record forms.

The LDEQ emergency response staff, co-located in the RBS EOF, successfully demonstrated the capability to develop dose projections and Protective Action Recommendations (PARs) for the evacuation and sheltering of the public. Within the LDEQ staff, the Dose Assessment Coordinator (DAC) had the responsibility to develop LDEQ's dose projections.

In the EOF, the DAC was co-located with the RBS dose assessor. The DAC and the RBS Dose Assessor functioned as an integrated team. Data, dose projections, and technical discussions were easily exchanged between the two. The LDEQ Field Monitoring Coordinator and the Technical Logistics Coordinator were also located in this area. During deployment from LDEQ Headquarters to the EOF and while operational at the EOF, the Field Team Coordinator promptly kept the field monitoring teams informed of plant status updates, the escalation of ECLs, meteorological conditions, radioactive release in progress, and protective actions for the public. This satisfies the previous ARCA (70-99-07-A-01).

The initial protective action recommendation (PAR) was an automatic PAR based on plant conditions resulting in a **GENERAL EMERGENCY (GE)** classification declared at 10:31 a.m. The PAR was to evacuate 360 degrees for a distance of two miles, evacuate downwind sectors J, K, and L for a distance of five miles, and shelter the remainder of the 10-mile Emergency Planning Zone (EPZ). The areas recommended for evacuation translated into Protective Action Zones (PAZs) 1, 4, and 16. The LDEQ Senior EOF Liaison quickly agreed upon this PAR. Following this agreement, the RBS Recovery Manager employed a dedicated telephone line to the SEOC and the parishes to obtain concurrence with the PAR. The last parish concurred at 10:56 a.m. In the EOF, the PAR was documented on a wall mounted status board and displayed on an electronic map. Because of a change in wind direction, a second PAR was issued to also evacuate PAZ 9. This PAR was transmitted to the SEOC and the parishes for concurrence at 12:23 p.m.

The Accident Assessment Coordinator consulted with the Senior EOF Liaison concerning the potential need to authorize the use of potassium iodide (KI) for emergency workers. The Accident Assessment Coordinator briefed the Senior EOF Liaison on the current thyroid dose projection of 9.6 rem at a distance of 2-miles, which approached the 10 to 15 rem criteria for consideration of KI use. During the briefing, the Senior EOF Liaison asked the Accident Assessment Coordinator what exposure time interval was used that produced the 9.6 rem dose. The Accident Assessment Coordinator replied that the time interval was one hour, however, the dose projection was actually based on a three-hour dose projection. The Senior EOF Liaison considered the potential locations of the emergency workers and concluded that none of the emergency workers would be in proximity of the 2-mile distance, where the projected thyroid dose was 9.6 rem. The decision was made not to authorize KI for emergency workers until such time that the thyroid dose projection exceeded 10 rem at a distance of 5-miles.

Based on a source term estimate and meteorological data provided by the RBS, the DAC calculated dose projections in the off-site areas for Total Effective Dose Equivalent (TEDE) and Committed Dose Equivalent (CDE) to the thyroid using the LDEQ Radiological Emergency Dose Assessment Model (REDAM) computer program. This program was executed on a desktop computer. The DAC had a laptop computer for backup. Whenever the RBS dose assessor calculated new dose

projections, a copy of the results was immediately provided to the DAC. Using REDAM, the DAC would then calculate dose projections using the same source term, release duration, and meteorological parameters. All LDEQ dose projections were within a factor of two of those calculated by the RBS. All dose projections were consistent with existing PARs. The DAC calculated a new turn-back factor, based on dose projections each time new data became available. This factor when multiplied by the emergency worker turn-back levels of one and five rem TEDE, provides the gamma radiation exposure readings that a DRD would display that would result in a dose of one or five rem TEDE.

In accordance with the extent-of-play agreement, no LDEQ field monitoring teams participated in this exercise. By controller inject, the DAC was provided off-site field monitoring data relative to the plume's radioiodine concentration and the corresponding gamma exposure rate measurements for one location. The DAC successfully back-calculated from the field monitoring data to an estimate of the source term release rate. The DAC calculated a release rate of 1.809 Ci/sec and the RBS estimate was 1.43 Ci/sec. Also, based on the controller-injected data, the DAC calculated as a function of distance, the plume centerline thyroid dose rate projections and TEDE dose rate projections.

In summary, the status of FEMA exercise objectives for these locations is as follows:

- a. **MET:** Objectives 1, 2, 3, 4, and 5
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION:** Objective 7

Issue Number: 53-00-07-A-01

Description: The Accident Assessment Coordinator briefed the Senior EOF Liaison on the thyroid dose projection of 9.6 rem at a distance of 2-miles, which approached the 10 to 15 rem criteria for consideration of KI use. During the briefing, the Senior EOF Liaison asked the Accident Assessment Coordinator what exposure time interval was used that produced the 9.6 rem dose. The Accident Assessment Coordinator replied that the time interval was one hour, however, the dose projection was actually based on a three-hour dose projection. This misinformation could have biased the Senior EOF Liaison's decision on the KI recommendation.

Recommendation: Provide additional training to the Accident Assessment Coordinator on how to correctly interpret the dose projection printouts. Training should cover the input parameters as well as the dose projection output.

- d. **NOT DEMONSTRATED:** NONE

e. PRIOR ISSUES – RESOLVED:

Issue No.: 70-99-07-A-01

Description: The LDEQ field monitoring teams were not informed that a radioactive release was in progress nor were they informed when the Emergency Classification Level of **SAE** was escalated to a **GE**.

Corrective Action Demonstrated: During deployment from LDEQ Headquarters to the EOF and while operational at the EOF, the Field Team Coordinator promptly kept the field monitoring teams informed of plant status updates, ECLs, meteorological conditions, a radioactive release information, and protective actions for the public.

f. PRIOR ISSUES – UNRESOLVED: NONE

1.3 JOINT INFORMATION CENTER (JIC)

The JIC is located at the Entergy River Bend training facility. Press briefings were conducted in the facility auditorium. Four classrooms were used for other JIC functions: one for off-site spokespersons, one for Entergy public information personnel, one for rumor control, and one for logistics support personnel. The front entrance to the facility was designated for media access and a sign-in desk was set up there. The sign-in staff person had badges, TLDs and about a dozen media kits available to hand out to reporters. There were eight telephones available for media use in the lobby.

The auditorium had seating for 55 reporters. It had an overhead projector, a screen and projection booth for slides and computerized presentations, and easel-sized hard copy displays including EPZ maps and diagrams of the power station. An EPZ map and power station diagram were used during briefings. A video camera was set up in the auditorium and linked to the building network so that press briefings could be monitored in the various staff rooms.

Each staff room was equipped with telephones, status board, a word processing workstation (computer and printer), and a video monitor for monitoring the press briefings taking place in the auditorium.

The off-site staff room had place settings for representatives from each plume EPZ parish, the LOEP, Louisiana Governor's Office, State of Mississippi, FEMA and the NRC. Each setting had a working telephone, an inbox for copies of news releases, and a well-designed desk-book with emergency plan excerpts, maps, guidance on developing news releases, and other information.

The Entergy staff room had a radio and a bank of three televisions for monitoring news coverage of the emergency. The radio was unable to get AM reception and probably would need an external (outside) antenna to do so. The Entergy room also had two fax machines, one for incoming traffic and one for outgoing, plus a dedicated hotline printer for receiving notifications from the plant (EOF). Key Entergy staff (the Director, Rumor Control Coordinator, Logistics Supervisor, Media Liaison, and News Release Team Coordinator) used wireless headsets to communicate with one another when they were in different rooms.

The Rumor Control staff room had eight phone lines for public inquiries and eight for media inquiries. It had place settings similar to the off-site staff room with reference books and in-boxes. It also had separate status boards for posting news releases, ECLs, and requests for assistance.

In general the facility was well suited for JIC use in terms of space, furnishings, lighting, and equipment. Equipment for JIC use is stored in cabinets and can be set up in a few minutes. Access to the facility can be controlled. If the building were to lose both the primary and secondary sources of power it would have to evacuate. The facility's location in close proximity to the power plant means that any emergency involving protective actions off-site will likely require that operations be transferred to the alternate JIC facility.

Communications systems were adequate to support operations during the exercise. However, they are heavily dependent on use of commercial telephones for both voice and hard copy traffic. The facility owner may want to consider adding some alternate or backup capabilities such as an e-mail

based system to supplement the faxes, and radio or cellular telephone systems to supplement voice communications.

Immediately following the receipt of the **ALERT** ECL at 8:45 a.m., full setup of the JIC was begun. Numerous utility personnel participated in this effort and the JIC was declared operational at 9:35 a.m. The JIC was brought to operational status in "real time" with no pre-staging or early setup. State and local spokespersons are notified of emergency conditions and mobilized through their respective EOCs. The first off-site spokesperson, from West Feliciana Parish, arrived at 9:11 a.m.; all off-site spokespersons were in place by 10:28 a.m.

Parish news releases were drafted at the JIC by the parish spokespersons. Each spokesperson collaborated with their respective EOC to generate releases and obtain approval. East and West Baton Rouge each issued three news releases; West Feliciana issued two; and East Feliciana and Pointe Coupee issued one a piece. A JIC staff person was available to type news releases. Parish news releases were copied and distributed throughout the JIC.

Entergy Operations, Incorporated (EOI) generated numerous news releases, which were read aloud to the off-site spokespersons for coordination, and distributed in hard copy throughout the JIC. However, the parish news releases were not read aloud for coordination. This commendable practice, proven effective previously, was not utilized during this demonstration.

LOEP produced four news releases. These were drafted and approved at the State EOC and faxed to the JIC for distribution. However, the LOEP spokesperson in the JIC did not properly distribute the news releases to the JIC (including the media). In addition, the Governor's Proclamation of a State of Emergency, received at 10:56 a.m., was never distributed throughout the JIC.

There were five media briefings conducted during the exercise. The initial briefing occurred at 9:50 a.m. prior to the arrival of some of the off-site spokespersons. Only the utility spokesperson addressed the media during this briefing, describing plant conditions and technical information. The four other briefings included representatives from the utility and the LOEP. The JIC Director moderated the briefings and coordinated media inquiries. Media briefings were telecast on monitors in the news release room and the off-site spokesperson room.

The media was provided hard copies of current emergency information including EOI and Parish News Releases and EAS messages (State News Releases were not distributed.) Oral presentation of information to the media could have been delivered in a more planned and integrated manner. Each spokesperson was given the opportunity to individually address the media during the briefings. There was very limited coordination between the spokespersons prior to each briefing. A short meeting of all spokespersons should be held to rehearse and discuss the upcoming briefing. In particular, the presentation of critical emergency information should be carefully planned and strategized.

At the third media briefing, the spokespersons discussed ongoing response efforts and the fact that there had been a wind shift. However, the change in protective actions (evacuation of Sector 9) caused by the wind shift was not clearly presented. After the briefing was concluded the spokespersons quickly realized their omission and promptly scheduled another media briefing to clarify and describe the events.

Some technical information was presented in a confusing manner. For example, during the second briefing there was a statement that two of the three barriers to a release had been breached. One of the media role players asked for clarification as to the nature of the barriers and which two had been breached. This question was not answered in a clear manner and the reporter had to repeat it. Subsequent briefings (after the release had started) did not contain clear information on the nature of the radioactive material being released; whether it was limited to noble gases or contained iodine or particulates, or even whether it was gaseous or liquid.

More information should have been presented by the spokespersons on the details of the off-site responses and actions taken by the State and parishes. The media role players asked some questions of the utility and State spokespersons but did not challenge the local spokespersons to provide details about protective actions or danger to the public. The exercise would have more training value for the parish spokespersons if the media role players asked them more and sharper questions. One way to achieve this might be to obtain participation of local media staff or journalism students.

The rumor control function consisted of six phone operators (three for media calls and three for public calls) and one manager. Sufficient room was available to double the number of phone operators if required in an emergency. Rumor control was staffed and operational at 9:20 a.m., before the JIC itself was declared operational. Employees of Entergy staffed rumor control. During the approximately four-hour exercise, rumor control received 154 phone calls (41 media and 113 public). This figure (154) equaled approximately 38 calls per hour. Each operator recorded calls on a three part carbonless form, which was given to one of the managers if a follow-up was required. A number of calls did require follow-up. The follow-up procedure entailed having the rumor control manager bring one part of the three-part form to one of the Parish spokespersons, who would then track down the required information or assistance.

Open issues were posted on erasable boards mounted on the walls and updated as more information was received. Rumor control numbers were listed on the second news release by EOI and repeated thereafter. Additionally, Point Coupee Parish, East Feliciana Parish, West Feliciana Parish, West Baton Rouge Parish, and East Baton Rouge Parish all listed the rumor control numbers in their first news releases. However, the numbers were not included in the EAS messages or in news releases from the State of Louisiana. Monitoring of three television stations and radio stations was accomplished in the News Release staff room. Monitoring of three television stations and radio stations was accomplished in the News Release staff room.

In summary, the status of FEMA exercise objectives for this location is as follows:

- a. **MET:** Objectives 1, 2, 4, 12, and 13
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES – RESOLVED:** NONE
- f. **PRIOR ISSUES – UNRESOLVED:** NONE

2. RISK JURISDICTIONS

2.1 WEST FELICIANA PARISH

2.1.1 EMERGENCY OPERATIONS CENTER

The West Feliciana Parish EOC is located in the Volunteer Fire Department Station House in St. Francisville, Louisiana. The EOC is within the 10-mile EPZ; the alternate EOC is in Jackson, Louisiana outside the 10-mile EPZ. The EOC is adequately equipped with maps, displays, lighting, ventilation, rest rooms, kitchen facilities, and communications equipment for emergency response operations, but is very small for the number of staff that would report for duty in an emergency.

Unannounced/Off-hours Drill

The West Feliciana Parish Office of Emergency Preparedness demonstrated the capability to carry out emergency response functions in an unannounced and off-hours drill. The West Feliciana Sheriff's Dispatcher, who is responsible for emergency response notification, received a radio and facsimile emergency notification message from the River Bend Nuclear Power Station at 9:37 p.m. declaring a **SITE AREA EMERGENCY**. The dispatcher immediately contacted the Director, Office of Emergency Preparedness (DOEP) at 9:37 p.m.; the DOEP was already at the West Feliciana Emergency Operations Center located at the Fire Station on other business. Upon receiving the notification, the DOEP immediately started notifying the primary staff via telephone. He asked each staff member how long it would take for him or her to report. These estimated times of arrivals indicated that the EOC would be fully staffed no later than 10:15 p.m. The drill was terminated at 10:20 p.m.

Plume Phase EPZ Exercise

The initial message received on the hotline telephone at the warning point was an **NOUE** at 8:37 a.m., and the Sheriff's dispatcher notified the parish emergency response organization of the message immediately. The **ALERT** was received at the EOC via dedicated radio system (800 MHz) at 8:45 a.m. Notification of staff following the Alert was prompt (using a current roster), and staff mobilized to the EOC quickly. The EOC was operational by 9:05 a.m. (20 minutes), and access control to the facility was instituted. Parish agency representatives present included the Director, Office of Emergency Preparedness (DOEP), the Operations Officer, the Public Information Officer, the Communications personnel, the Radiological Officer, the Office of Public Health, Police, Fire, Sheriff, Transportation, the School Board, the Roads Department, and the Police Jury President. A representative from the River Bend Station also participated.

The DOEP briefed the staff on the status of the incident, and gave instructions on the use of their procedures and the displays in the EOC. The DOEP indicated immediately that the special facilities in the parish should be notified of the incident and put on standby for possible protective actions. Direction and control of emergency operations was good throughout the exercise; the DOEP kept the staff informed and they reported their activities to him as well. Consultations among the staff on actions that needed to be taken were frequent and concern for school children, who were in school at the time of the exercise, and other special populations was evident.

Communications within the parish and with neighboring parishes, the State and the plant were adequately demonstrated. The dedicated radio system used for emergency information during an incident at River Bend Station (RBS) does have certain conferencing capabilities. For example, each parish is able to talk with the other parishes and the State at one time. River Bend Station can talk with all the 24-hour warning points, parish EOCs, and the State at one time. There are different talk groups set up for the system. Additional communications include the fire, police, and civil defense radios and telephones. All systems used, both primary and backup, functioned without delay or breakdown. Hard copy messages were received via fax.

The Radiological Officer (RO), having completed his equipment checks, placed dosimeters strategically in the EOC to monitor possible contamination. A request for additional kits for emergency workers was sent to LOEP; however, the West Feliciana Parish EOC had a good supply of dosimetry kits that had been tested in April 2000. The kits included two direct-reading dosimeters (0-20R and 0-200R), a (simulated) TLD, KI tablets (simulated), an instruction sheet and record keeping cards. The dosimeters that were posted in the EOC were checked every 30 minutes and the results recorded on a board visible to all.

At the **SITE AREA EMERGENCY**, received at 10:17 a.m. via radio, the Transportation Coordinator indicated that buses would be put into place for possible evacuation, and the Police Jury President signed the Emergency Action Authorization Form, in accordance with Parish procedures. It was decided by the parish to begin a precautionary evacuation of some of the special facilities and also to consider evacuating the schools. Notification of special populations was begun using a current roster maintained at the parish EOC. The Transportation Coordinator requested and obtained the transportation resources needed to perform the evacuations.

A school bus driver arrived at the EOC by 10:30 a.m. and was given her dosimetry kit and a briefing on its use. This portion of the demonstration was adequate. However, when the bus driver returned from the field, the Radiological Monitor (RM) at the EOC did not monitor the bus driver properly. He did not request that the driver stand in the correct position for monitoring; he went too fast; he touched the bus driver with the probe (continuously); and he neglected to monitor the driver's back, soles of the feet, and other critical areas.

An upgrade of the accident to a **GENERAL EMERGENCY** was received at 10:38 a.m. based on deteriorating conditions at the plant, but a release was not yet occurring. The PAR was to consider Scenario 7, which is to evacuate 2 miles radius and 5 miles downwind (sector K), to shelter to 10 miles radius, but to evacuate schools, institutions, and recreation areas to 5 miles radius. This PAR affected all Protective Action Sectors (PASs) in West Feliciana Parish. The Police Jury President and the DOEP concurred on the PAR and indicated their agreement on the hotline at 10:51 a.m. The DEM proceeded to contact other parishes for discussion and to ensure that the reception center had been activated in Baton Rouge. He also checked on the status of the setup of the decontamination station.

Coordination with the other jurisdictions on the hotline occurred at 11:03 a.m. The sirens were sounded starting at 11:06 a.m. from the control panel in the EOC communications room, which was to be followed by an EAS message provided by the State EOC to the EAS station for broadcast at 11:12 a.m. While this was occurring, a message was received from RBS at 11:07 a.m. stating that a release had begun.

Although Scenario 7 does not have any mandatory T/ACPs, the DOEP decided to establish one at the intersection of Highway 61 and Road 965 (Bell Lane). In accordance with the extent-of-play agreement, the T/ACP demonstration was by discussion only. Officers were dispatched (simulated) to the T/ACP. The need for T/ACPs was reevaluated several times during the exercise, and the parish erred on the side of caution in providing traffic and access control. Proper equipment and procedures were described to the evaluators.

At 11:35 a.m. the parish responded to a request from the State on the number of special populations and others being evacuated to the reception center. It was determined that the number of evacuees with special needs was too low to warrant opening an additional shelter just for those with special needs.

At 12:25 p.m. a message was received indicating a wind shift had occurred. The new PAR was Scenario 6. This meant that West Feliciana Parish would also need to evacuate Sector J to 5 miles as well as Sector K. The parish indicated their concurrence on the hotline call at 12:35 p.m. It was agreed that the sirens would be sounded at 12:48 p.m. The DOEP continued to follow the actions of his staff and agency representatives to ensure that the protective actions were being carried out.

The EOC received notification that the exercise was terminated at 1:50 p.m.

Relocation, Re-entry and Return Discussion

Following the plume phase of the exercise, the West Feliciana Parish held a discussion on relocation, reentry and recovery. The discussion was led by controller/facilitators who described the scenario and general situation (which was different from the scenario that had been used for the plume exercise) and handed out maps to the EOC staff and agency representatives showing where there was significant deposition. Days 1, 2, 3, and 30 following the accident were described and discussed.

On Day 1 a significant release from the plant affected sectors Q, R, A, B, C, D, and E. Contamination was expected up to ten miles. PAS's 1, 2, 3, and 8 have been evacuated. There was deposition in certain areas and field teams were currently collecting soil samples for analysis.

The EOC staff discussed traffic and access control for the parish and agreed that access to the entire parish would have to be controlled. Once the area was secured, they reviewed whether anyone was left in the parish that should also be evacuated. It was determined that all those at risk had been evacuated. Consideration was given to those who would need to reenter temporarily to care for their livestock. It was agreed that this could happen but that those workers would need dosimetry and escorts. Concern was expressed about the water supply but the DOEP pointed out that most of the parish water is covered; very little is in above ground storage. Additional decontamination stations would be set up by the Louisiana Department of Environmental Quality (LDEQ) for use by State personnel and the EOC staff decided they would ask if their emergency workers could also use these stations. Contaminated responder gear would have to be discarded and additional gear would be obtained by mutual aid. Information to the public would be ongoing by radio and by announcements to the evacuees at the Reception Center and other reception/congregate care centers.

On Day 2, the Governor declared a State of Emergency. The number of people sheltering and being cared for in congregate care centers was the same. Field results were available for some areas and

surveillance of all areas beyond five miles in sectors F, G, H, J, K, L, M, N, and P show background only. Fly-over results would be available on Day 3. State assistance has arrived in the parish.

The EOC staff agreed that it was clear that no one could be allowed to return to their homes yet. They said they would generate more information for the public and especially for the evacuees and those sheltering in place for dissemination by radio, television and in person. Because the Governor declared a State of Emergency, resources were now available for needed activities.

On Day 3, the scenario/situation was the same. Fly-over results were in and maps of the contaminated areas were now available. Most of the contamination was from iodine and noble gases, which have short half-lives. The areas of contamination were shown on a map distributed to the EOC staff.

The EOC staff agreed that they would try to open the major arteries (Highways 61 and 10 would probably need to be decontaminated) so assistance could get in and out of the area, as needed. The three population centers in the parish most affected are Wakefield, Independence and Star Hill (as shown on the map). The public would need to be kept out of the contaminated areas for at least 30 days and possibly more. The uncertainty of how many people would be affected and for how long was a challenge. It was agreed that those who cannot return now would need alternate housing arrangements for some time since they could not stay in congregate care shelters for an extended period. How to provide interim housing was discussed and alternatives included motels and possibly imported trailer homes. Information sheets with guidance on what people should do with their homes and belongings once they are able to reenter would need to be generated and distributed. The parish would need outside help with that. Although the Governor's Declaration of a State of Emergency would help with financial and other resources, and the utility would clearly provide assistance, it was agreed that a Federal declaration of a disaster would be necessary in order to obtain sufficient financial help for relocation of those unable to return to their homes and businesses. The State EOP would make this request.

Farm products would have to be embargoed and hunting and fishing would have to be banned for the time being. Enforcement for this would be needed and would be requested from the State Police and the National Guard. KI for the public was discussed but it was agreed that it was not needed since the contamination was not airborne at this stage.

On Day 30, the contamination has reduced significantly, although there was still one small hot spot as shown on an updated map. Milk, water and food products in previously restricted areas could now be consumed safely. Full disclosure of the contamination situation was recommended, even though there was no public health hazard except in the hot spot.

It was agreed that key structures in the previously contaminated areas would be thoroughly decontaminated first, with outside help (i.e., by firms that do decontamination and abatement professionally). Gradually people would be allowed to return (although some may not wish to). A time line for recovery and reentry would need to be worked out with the utility and the nuclear insurers. There was much discussion on various sources of advice, assistance and support.

The West Feliciana Parish emergency organization demonstrated the capability to develop and implement decisions on relocation, re-entry and return to the area following an accident at the River Bend Station.

In summary, the status of FEMA exercise objectives for this location is as follows:

- a. **MET:** Objectives 1, 2, 3, 4, 9, 10, 15, 16, 17, 28, 29, 32, and 33
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION:** Objective 5

Issue Number: 53-00-05-A-02

Description: When the school bus driver returned from the field, the radiological monitor at the West Feliciana Parish EOC did not monitor the bus driver properly. He did not request that the driver stand in the correct position for monitoring; he went too fast; he touched the bus driver with the probe (continuously); and he neglected to monitor the driver's back, soles of the feet, and other critical areas.

Recommendation: The radiological monitor at the West Feliciana Parish EOC should receive additional training in correct monitoring techniques.

- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES – RESOLVED:** NONE
- f. **PRIOR ISSUES – UNRESOLVED:** NONE

2.1.2 WEST FELICIANA PARISH SCHOOL EVACUATION DRILL

School personnel adequately demonstrated the capability and resources necessary to implement protective actions for school children within the plume pathway EPZ of the River Bend Station. The School Board Official at the parish EOC notified the West Feliciana High School by telephone (although an RBS radio is located in the Principal's office as well) to begin evacuation procedures at 10:07 a.m. during the **SITE AREA EMERGENCY**. The School Principal is responsible for directing and organizing an evacuation; there are three additional people at the school trained to perform this function. The School Transportation Coordinator implemented the procedures to begin an evacuation of the school children to the LSU Reception Center. Enough buses were available to evacuate all the children without needing to ask for additional resources.

When the school received the protective action decision, they would announce it over the school speaker system. Attendance would be recorded in each classroom before evacuation. Medical needs of the children (medication, etc.) would be transported with the children, and there is a staff member assigned to each of the students with special needs. There would be a walk-through of the school to ensure everyone had gotten on the buses. Students who drive to school would also go on the buses. Parents have been informed of the evacuation process and where the children would be taken.

The bus driver participating in the demonstration reported to the parish EOC at 10:30 a.m. to receive a dosimetry kit, a cell phone and briefing on the use of dosimetry in accordance with procedures. The gas tank of the bus was full. The driver arrived at the school and received an evacuation map. She performed her functions in a timely manner, and returned to the parish EOC to be monitored and to return her dosimetry and cell phone. The cell phone was used for all communications with the school and the EOC.

No students were actually transported during the exercise. All activities were carried out in accordance with the plans and procedures.

In summary, the status of FEMA exercise objectives for this location is as follows:

- a. MET: Objectives 1, 4, 5 and 16**
- b. DEFICIENCY: NONE**
- c. AREAS REQUIRING CORRECTIVE ACTION: NONE**
- d. NOT DEMONSTRATED: NONE**
- e. PRIOR ISSUES - RESOLVED: NONE**
- f. PRIOR ISSUES - UNRESOLVED: NONE**

2.2 EAST FELICIANA PARISH

2.2.1 EMERGENCY OPERATIONS CENTER

The East Feliciana Parish EOC was located on the second floor of the Jackson Town Hall at 1610 Charter (LA 10). The alternate EOC was located at the 24-hour dispatch center, East Feliciana Parish Sheriff's Office, in the city of Clinton.

Unannounced/Off-hours Drill

A unannounced/off-hours drill was conducted on Monday evening, June 5, 2000. The East Feliciana Parish Warning Point Dispatcher is located in Clinton, Louisiana, at the East Feliciana Parish Prison. The initial exercise message was received at the Warning Point via digital printer at 9:30 p.m. followed by an "all station" call over the 800 MHz radio at 9:35 p.m. Both of the Dispatchers were knowledgeable of their procedures and immediately acknowledged receipt of the message. In accordance with their plans and procedures, they notified the Director, Office of Emergency Preparedness (DOEP) in Jackson, which is 13 miles from the Warning Point, of a **SITE AREA EMERGENCY (SAE)** at the River Bend plant. Both Dispatchers performed professionally and without error and should be commended.

By 9:35 p.m., the DOEP had received the call at home from the Warning Point Dispatcher and reported to the EOC. The DOEP began the call-down of staff at 9:37 p.m., which was completed at 9:42 p.m. Five calls were placed in 5 minutes. Estimated time of arrival (ETA) for the key staff was from 5 – 35 minutes.

Plume Phase EPZ Exercise

On Wednesday, June 7, 2000, the East Feliciana Parish Warning Point Dispatcher received message #1, a **NOTICE OF UNUSUAL EVENT (NOUE)** at 8:30 a.m. over the dedicated digital printer from River Bend Station. An **ALERT** telephone call was received in the EOC at 8:40 a.m. from the Warning Point Dispatcher in Clinton. There was a verbal error in the transmission of the **NOUE ECL**. The DOEP instructed the Dispatcher to continue the call-down for mobilization until notified otherwise. At 8:43 a.m. the **ALERT** message #2 was received at the EOC and setup was begun. Activation was completed at 9:40 a.m. The EOC Communicator demonstrated the staff call-down for the EOC. She began at 9:10 a.m., contacted 10 people, and completed the list within 17 minutes at 9:27 a.m.

The East Feliciana Parish Emergency Operation Center (EOC) is located in a clean, well-lighted and well-equipped two-story structure. The facility had adequate space and amenities to accommodate extended continuous use. It had sufficient space, lighting, furnishings, a restroom, and equipment for emergency operations. Backup power available was a 5 KW generator and alternate diesel generator. A test is run every Monday morning for one hour. Equipment available included computers, copier, and facsimile machines. Displays included: two Emergency Action Logs, an Emergency Information board, a board for Exposure Limits for Emergency Workers, and a section map of the 10-mile EPZ. The Emergency Operations Plan was available in the EOC.

Communication included six commercial telephone lines plus one dedicated line to the River Bend digital printer. The new, dedicated digital printer was a real plus as all messages were legible and

easy to read. There were two cell phones, a portable satellite phone, two desk top computers, a portable computer, an 800 MHz radio system, and a paging system with encoder/tone alert for special facilities. Communications were established with Louisiana Office of Emergency Preparedness, West Feliciana Parish EOC, River Bend Station, and the Joint Information Center. No communication delays or breakdowns were experienced during the exercise.

Access control was established at the main entrance with a sign-in sheet with badges issued to each emergency worker. The only other exit would be locked. The EOC was staffed by the following emergency workers: EOC Director, EOC Communicator, Status Board Recorder, two Radiological Officers (RO), Mayor of Jackson, Police Jury President, two from Jackson Fire Department, Superintendent of Education, East Feliciana Parish Transportation, Public Information Officer (PIO), Dispatcher, and River Bend Parish Liaison. A JIC spokesperson was dispatched at 9:11 a.m. There was a delay in the arrival of the Police Jury President at 9:26 a.m.; therefore, the EOC could not be declared fully staffed and operational until 9:40 a.m.

Direction and Control demonstrated by the EOC Director was excellent. There was good involvement by the Police Jury President and other staff members. The EOC staff was experienced and knowledgeable of individual duties and responsibilities. The EOC Director provided frequent briefings to the staff allowing good discussion. Status boards were updated in a timely manner and were in clear view for all staff to see. The Parish EOC staff worked well together as a team and followed their plans and procedures.

The RO successfully demonstrated the setup of emergency kits for emergency personnel. Each kit contained two direct-reading dosimeters, one CDV-742 (0-200R) and one CDV-730 (0-20R), a simulated TLD badge, simulated KI tablets, instructions for use, a record control form, and an inventory record form. After dosimeters were zeroed, the RO gave a briefing. Kits were issued to all emergency workers at 10:30 a.m. He requested an additional 180 dosimeters from LOEP at 9:45 a.m. The maximum authorized mission exposure turn-back limit was 1R.

ARCA 53-98-05-A-02 concerned KI information that was not communicated to the workers in the field. Although the exercise scenario did not recommend KI for EWs, the ARCA was cleared by a discussion at the appropriate time to notify the workers in the field. The supply of KI at the EOC had an expiration date of 12/2003.

ARCA 53-98-05-A-03 was successfully cleared by discussion with a Deputy Sheriff at East Feliciana Parish Emergency Operation Center (EOC). The T/ACP was not actually set up per the extent-of-play agreement. The Deputy had received radiological monitoring training and was knowledgeable of his duties and responsibilities. Upon arrival at the EOC he was briefed by a RO and was issued the following items: a simulated TLD; 2 direct reading dosimeters (0-20R, 0-200R); 2 simulated Potassium Iodide (KI) tablets; an information sheet; exposure control card; exposure control form; a protective action section map; and a pencil. On receipt of monitoring equipment, the deputy received detailed instructions from the RO on dosimeter usage and forms completion, as well as the turn back levels. The deputy performed initial equipment checks and recorded the readings. His knowledge on the use of KI, side effects, dosage and interval was accurate. He was familiar with the turn back limits and what actions were to be taken if those limits were exceeded as well as who to contact. The KI was not to be taken unless directed by the State Health Officer. He took additional dosimeter readings every 5 minutes and logged them on his individual log sheets.

A **SITE AREA EMERGENCY (SAE)** Message #4 was received at 10:13 a.m. Although no protective actions were recommended by the plant, based on plant status, a precautionary Protective Action Decision (PAD) was signed by the Police Jury President at 10:16 a.m. to evacuate schools and close parks. The special facilities were alerted at 10:19 a.m. The EOC Communicator was requested to simulate pushing the “All Call” button for special facilities to call in for a recorded message. There is a roster of the special facilities and who to call in the EOC. Alternate routes were also discussed. One of the special facilities is the prison with 1,700 inmates. The State determines the appropriate protective actions for the prison and other State facilities in the parish.

The **GENERAL EMERGENCY (GE)**, Message #5, was received at 10:36 a.m. Reference PAR Scenario #7 was recommended. Schools had already been evacuated, so sheltering up to 10 miles was recommended and the EOC concurred. At 10:56 a.m., the State coordinated with all five parishes their concurrence of the Protective Action Decision (PAD) on evacuation/shelter sectors and sounding of sirens at an agreed-upon time, which was 11:06 a.m. The primary method to alert the public is through the use of a siren system. This system was actually activated at 10:00 a.m. for a routine test, which was heard in the EOC. The State has the responsibility to release the EAS messages to the WJBO radio station. At 11:10 a.m., the EOC PIO monitored (simulated) listening to the EAS message broadcast for accuracy. The primary method to alert the public is through the use of a siren system. Information was faxed to the JIC at River Bend from the parish EOC to keep them informed. However, no fax messages or news releases came into the EOC from the JIC throughout the exercise. Also, no fax messages were received from LOEP.

At 10:45 a.m., the RO requested that the monitoring station for emergency workers be set up at the fire station across the street. This was demonstrated out-of-sequence on Tuesday evening.

The East Feliciana Parish Declared a State of Emergency at 10:46 a.m. signed by the EOC Director and the Policy Jury President.

Message #6 was received at 11:05 a.m. stating a release had begun at 10:45 a.m. The RO reminded the staff to check their dosimeters at 11:35 a.m. Message #7 was received at 12:23 p.m. and indicated a wind change. Scenario #6 was recommended, but this did not change the PAD that was in place for East Feliciana Parish.

At 1:08 p.m., Message #8 conveyed the release had stopped. Message #9 terminated the exercise at 1:50 p.m.

Relocation, Re-entry and Return Discussion

Day 1: Sectors 1, 2, 3, and 8 evacuated. East Feliciana Parish is sector 8. The affected sectors were Q, R, A, B, C, D, and E. There was discussion on the evacuated and sheltered people, no change in status was recommended. Dairies were discussed. LDEQ was in constant contact and FRMTs were taking soil samples. They were waiting for DOE FRMAC flyover of the 10-mile area.

Day 2: Sectors 9 and 12 were not in initial area of evacuation. No one was allowed to return in Sector 8. Maintain shelter. In Sector 11, establish roadblocks to keep people from Sector 11. Would allow return as soon as it was safe.

Day 3: Shelter protection was lifted in Jackson. Maps showing the green zones, red zones, and buffer zones were studied. In the green areas, the relocation PAGs were not exceeded. Dose rates and relocation PAGs were discussed. A buffer zone was established for at least ½-mile around the contaminated area. The buffer zone on the north side would affect the prison. Discussion covered prison personnel and that guards must be allowed access for shift changes. A monitoring station would need to be set up there. The water well at the prison would need testing for contamination. LDEQ would be working with Agriculture and other agencies for sampling. The difference between embargo and impound were explained by LDEQ. Good discussions on traffic flow, beef cattle and dairies, and that there were no food crops. The staff agreed needs would include State assistance for field monitoring, multi-parish police force, and maybe the National Guard.

Day 30: Evacuees were allowed to return to their homes. Farmers should use caution after working in the fields by removal of clothing and showering as there could be contamination. In East Feliciana Parish, only seven or eight families would now be affected. They would be informed as to the risks and receive counseling. LDEQ stated food in green areas is okay. No EPA PAGs were exceeded, no health effects, but green areas were contaminated so it could be more a political issue rather than a health issue. Since contamination was a bit more than background, LDEQ cannot state it was safe. The contamination in green areas will decrease, but red areas have a 30-year half-life for cesium. The State could arrange for Federal Assistance.

The staff progressed through the 30 days with good discussion and exchange of ideas. Their main concern was always the health and safety of the people.

In summary, the status of FEMA exercise objectives for this location is as follows:

- a. **MET:** Objectives 1, 2, 3, 4, 5, 9, 10, 15, 17, 28, 29, 32, and 33
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES – RESOLVED:** Objective 5

Issue Number: ARCA 53-98-05-A-02

Description: At 11:52 a.m., the Director announced that the State Health Officer had made the decision at 11:15 a.m. to have KI administered to emergency workers in the 10-mile EPZ. Even though the EOC staff received the KI information, this information was not communicated to the workers out in the field at the time (i.e., the school bus driver). Therefore, the school bus driver never received the KI ingestion recommendation. (NUREG-0654, K.3, 4.)

Corrective Action Demonstrated: Although the exercise scenario did not recommend that EWs take KI, the ARCA was cleared by a discussion at the appropriate time to notify the workers in the field.

Issue Number: ARCA 53-98-05-A-03

Description: The Deputy Sheriff demonstrated only a limited knowledge of KI and its intended use, side effects and dosage. In addition, the Deputy was not issued a complete dosimetry kit including instructions on the use of the direct reading dosimeters and KI. (NUREG-0654, K.3, 4.)

Corrective Action Demonstrated: The ARCA was cleared by an extensive interview with the Deputy on his knowledge of KI, its use, dosage, and side effects.

f. **PRIOR ISSUES – RESOLVED:** NONE

2.3 POINTE COUPEE PARISH

2.3.1 EMERGENCY OPERATIONS CENTER

Unannounced/Off-hours Drill

Pointe Coupee Parish demonstrated the ability to carry out emergency response functions in an unannounced/off-hours drill conducted June 5, 2000. At 9:31 p.m. a notice of **SITE AREA EMERGENCY (SAE)** message was received by the Pointe Coupee 911 Center over the RBS dedicated printer. This was followed by verbal notification from RBS over the RBS hot line. The 911 Center Dispatcher immediately began call down notifications using commercial telephone. The first notification was made at 9:31 p.m. to the Director, Office of Emergency Preparedness (DOEP). The DOEP arrived at 9:38 p.m. and assumed responsibility for making notifications to other staff. In accordance with the Extent-of-Play Agreement, the Director was the only staff person that had to mobilize for the drill. Other staff members were to indicate their estimated time of arrival, but not actually report to the EOC.

The DOEP used a staff roster to make the notification calls using commercial telephone. The roster listed a primary and at least one alternate for all positions. The DOEP was able to reach the following individuals and agency representatives: Police Jury President, Mayor of New Roads, EOC Communicator, Radiological Officer (RO), Public Information Officer (PIO), Parish Spokesperson for the JIC, Transportation Coordinator, Sheriff's Department, New Roads Police Department, New Roads Volunteer Fire Department, Parish Department of Roads, Council on Aging, Office of Family Support, Office of Public Health, County Agent, Acadian Ambulance and Parish Attorney. The JIC spokesperson indicated an ETA of one hour to reach the JIC. All other staff indicated ETAs of 20 minutes or less to reach the Pointe Coupee EOC. Contact could not be made with the School Superintendent or the alternate. However the DOEP indicated that the Transportation Coordinator could cover these responsibilities.

The drill ended at 10:01 p.m. after the last notification was made.

Plume Phase EPZ Exercise

Pointe Coupee Parish demonstrated the capability to alert and fully mobilize personnel to staff the Parish EOC in New Roads. At 8:32 a.m., upon receipt of the **NOTICE OF UNSUSAL EVENT (NOUE)** ECL in the 911 Center, the Communications Officer began notification of key personnel. Notifications were completed within four minutes. Staff was contacted using a commercial telephone. Upon receipt of the **ALERT** ECL, the EOC was activated and mobilization began. Calls were again initiated by the Communications Officer beginning at 8:47 a.m. and were completed at 8:50 a.m. The EOC facility was mobilized in a timely manner and declared fully operational at 9:50 a.m.

Pointe Coupee Parish demonstrated the adequacy of facilities, equipment, displays and other material to support emergency operations. The Parish EOC is currently located in the Courthouse at 215 E. Main St., New Roads, LA. The operations room is quite small for the number of personnel present and would be quite tight in a real event. Due to the small space, movement in the room and access to the maps, displays, and status boards that lined the walls was difficult at times. However, plans are in place to erect a new facility in the near future. There was a word processor, fax machine and

copier located in the communications room immediately adjacent to the operations room. There were five telephones in the EOC, but this could be an insufficient number if the EOC was fully staffed and full response operations were being conducted. There was a 10-mile EPZ map and 2 status boards located in the facility. Emergency classification levels, plant conditions, and weather information were updated and promptly posted to these status boards following receipt of new information. This closes ARCA 53-98-02-A-04. Access to the facility was controlled. A security desk was located at the main doorway to the facility. Persons wishing to gain access were asked to sign in and were given badges.

The capability to direct and control emergency operations was demonstrated by the Pointe Coupee Police Jury President's representative. This individual, assisted by the DOEP and Assistant DOEP, issued instructions to staff, conducted EOC briefings, issued a proclamation of local disaster, directed coordination with other jurisdictions and authorized notification to the public and special facilities and implementation of protective action recommendations.

The Pointe Coupee Parish EOC demonstrated the ability to communicate with all appropriate emergency personnel at facilities and at the T/ACP established for the exercise. Communications systems include telephone, multiple radio channels, fax, pagers and cellular phones. The EOC communicated effectively with the State EOC, River Bend EOF, West Feliciana Parish EOC and Avoyelles and Iberville Parishes.

The River Bend printer link in the EOC failed on a few occasions. This was the means for receiving hard copies of ECL notifications and plant status updates. However, there was also a RBS printer link in the 911 Center, located immediately behind the courthouse. Copies of all messages were received at this location and promptly sent over to the EOC by fax or messenger. All other communications systems functioned satisfactorily.

The Pointe Coupee Parish response organization utilized appropriate dosimetry for the River Bend Station emergency response. The RO and his assistant conducted an inventory of the radiation equipment stored in the EOC. They also zeroed all of the direct-reading dosimeters stored there. Two CDV 700 radiation monitoring instruments were checked for calibration and response with a small check source located on the side of the meter. Both of these meters were used as local area monitors, and to monitor personnel returning to the EOC after being deployed from the EOC to various areas within the EPZ.

The Louisiana Office of Emergency Preparedness (LOEP) calibrates and checks, at regular intervals, all of the instrumentation utilized by Pointe Coupee Parish. The CDV 700 meters had current calibration dates and are on a two-year rotation. The direct-reading dosimetry is checked every four years for leakage.

The Emergency Operations Plan calls for at least one responder in the EOC to utilize dosimetry while in the EOC. This allows radiation control for the personnel located in the EOC, which is within the ten-mile EPZ.

Each dosimetry kit consisted of one TLD (simulated), two direct-reading dosimeters with ranges of 0-20R and 0-200R and a bottle of KI for thyroid protection. The kit also contained an exposure control form that was left with the RO to record readings reported from the field over the radio at 30-minute intervals. A set of instructions for use of the items in the kit was also included. Additionally,

the RO briefed each individual deployed from the EOC. The RO was quite knowledgeable of his assigned duties and responsibilities.

Emergency workers read and recorded their dosimeter readings on the exposure control card contained in each dosimetry kit. These readings were also reported via radio to the RO in the EOC. Procedures were strictly followed to manage radiological exposure to emergency workers and personnel located in the EOC.

The RO was also in contact with the Scott Civic Center, which was the staging area for field personnel. Although there was an Assistant RO in the staging area, the EOC RO was the ultimate decision-maker regarding the monitoring of emergency workers.

The Police Jury President's representative demonstrated the capability to make timely and appropriate protective action decisions. The primary factor considered in making decisions was the recommendations received from RBS. Consideration was also given to the availability of shelter facilities, weather conditions, coordination with other jurisdictions and risk from evacuating. Scenario 7 (PAD) was implemented at 10:57 a.m. For Pointe Coupee Parish, this involved evacuation for PAS 16 and shelter for PAS 17 and 18. The evacuation decision applied to the approximately 500 people in PAS 16, as well as to the Cajun Electric Power Coop, Big Cajun No. 2 and the Parish Detention Center. At 12:36 p.m., the Police Jury President's representative concurred with the implementation of scenario 6, although this involved no further protective actions within Pointe Coupee Parish.

Pointe Coupee Parish successfully demonstrated the ability to alert the public within the 10-mile EPZ. The parish is responsible for public alerting only. Public notification (e.g. EAS) messages are the State's responsibility. Sounding sirens on a parish-wide basis accomplished public alerting. Pagers and telephone calls would be used to alert and notify special facilities. The siren sounding times for the two protective action decisions were coordinated among the parishes over the RBS hotline. The Pointe Coupee DOEP sounded the sirens at 11:06 a.m. and 12:48 p.m. in accordance with RBS hotline agreement and parish procedures.

The capability and resources necessary to implement protective actions for special populations was demonstrated. The protective actions implemented required the evacuation of the Pointe Coupee Parish Detention Center (simulated). Two busses were required to accomplish this. These were available from within the parish. Inmates were relocated to a detention facility in Avoyelles Parish. Big Cajun No. 2 power plant was notified to evacuate. This facility did not require transportation assistance. There were no schools to be evacuated. The transportation coordinator called West Baton Rouge Parish to ask them to standby in case additional transportation resources were needed in Pointe Coupee Parish. At 10:33 a.m., the Police Jury President's representative and the DOEP conferred and determined that the tone alert (pager) system should be activated to notify special facilities of the emergency and place them on standby. The DOEP simulated this activity at 10:38 a.m. The Emergency Resources Data book indicated that there were two people in PAS 16 that required transportation assistance. These people were contacted (simulated) and simulated transportation was dispatched to assist them.

Relocation, Re-entry and Return Discussion

The capability to develop decisions on relocation, re-entry and return was demonstrated by Pointe Coupee Parish EOC staff during a tabletop discussion following completion of the plume-phase exercise. Two controllers from LDEQ presented the players with the scenario assumptions for Day 1, 2, 3 and 30. In Pointe Coupee, PAS 16 had been evacuated, and PAS 17 and 18 were sheltered. Initially, the only other information provided was that areas of contamination were expected up to ten miles in the affected sectors. The EOC staff noted three action items: 1.) Maintain sheltering PAS 17 and 18, and evacuation of PAS 16; 2.) Call on American Red Cross for food supplies and request the local volunteer fire department to assist in the distribution of the food supplies; 3.) Put out an advisory to conserve water (staff noted that all water supplies were from deep wells or elevated tanks, so the safety of the water supply was not a concern).

On Day 2, the scenario information provided was that field monitoring showed that areas outside of the affected areas were reading background. The parish staff indicated they would continue the same action items noted above.

Day 3 information indicated that the same protective actions were in effect. Results of soil samples were now available. These indicated the areas that exceeded the 1-year relocation PAG (red zone) as well as the areas that were contaminated but did not exceed the 1-year relocation PAG (green zone). Based on this information, the parish staff decided to allow return to PAS 16. The red zone area in PAS 17 did not have any residents. It was decided that this area would be cordoned off, and the green zone surrounding the red zone would be used as a buffer zone. Protective actions the staff would request/implement were: an embargo of foods from the red zone; an advisory to wash or peel, as appropriate, produce before consumption; and the establishment of barricades to prevent entry into the red zone from the adjoining portion of West Baton Rouge Parish. It was also noted that if there were heavy rains, the potential existed for run-off to contaminate False River. The parish requested that the state monitor these effluents. They also put in a request to the State to monitor migrating game and fish that were in the area.

Day 30 scenario information revealed that the red zone was no longer present in PAS 17. This indicated the major component of the contamination was iodine and that there was no Cs137 or other long-life fission products released. Although areas of contamination were still present, none showed readings higher than twice background. On the basis of this, the parish decided that all milk, water and food were fit for consumption, and the recovery phase was terminated.

In summary, the status of FEMA exercise objectives for this location is as follows:

- a. **MET:** Objectives 1, 2, 3, 4, 5, 9, 10, 15, 17, 28, 29, 32, and 33
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE
- d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ISSUES - RESOLVED:** Objective 2

Issue Number: 53-98-02-A-04

Description: The Pointe Coupee Parish EOC status board for event classification, PADs, and radiological information was not posted with accurate information in a timely manner. When PADs were made at 10:30 a.m., the board depicted no PADs had been made. Other sections of the board were accurate. The PAD section of the board remained inaccurate until 10:52 a.m., when the RO updated the board with information from a follow-up notification. Additionally, the status board did not ever show the KI recommendation for emergency workers issued by the State. (NUREG-0654, H)

Corrective Action Demonstrated: There was a 10-mile EPZ map and 2 status boards located in the facility. Emergency classification levels, plant conditions, and weather information were updated and promptly posted to these status boards following receipt of new information.

f. **PRIOR ISSUES - UNRESOLVED:** NONE

2.3.2 POINTE COUPEE TRAFFIC/ACCESS CONTROL POINT

Pointe Coupee Parish EOC demonstrated the organizational capability and resources to control evacuation traffic flow and to control access to evacuated and sheltered areas. A deputy from the Pointe Coupee Sheriff's Office was deployed to the assigned Traffic/ Access Control Point (T/ACP) at the intersection of LA415 and LA413. The location of this TA/CP was consistent with the scenario events and exercise play. At this location, an interview concerning this objective was conducted with the deployed officer.

The RO brief the T/ACP Officer and issued a dosimetry kit. He was instructed to read, record and report his readings on the DRDs every 30 minutes. Communications with the EOC was via police or OEP radio with cell phone backup. The Officer was very knowledgeable of his assigned duties and responsibilities.

In a real event, the officer would have been deployed with additional Sheriff's Deputies and, by placing their patrol vehicles in the roadway, would have directed traffic in the appropriate pre-determined direction to leave the effected area. Instructions would also have been given to evacuees as to the location of the appropriate reception center. Incoming traffic would have been diverted out of the evacuated area. Impediments to evacuation would have been identified and promptly removed using available parish resources.

Upon return to the EOC, the DOEP indicated that full T/ACP barricades would have been established at the exterior of the parish's area of responsibility and the actual point selected for this demonstration was an interior point. The Director confirmed that traffic control would have been accomplished in the method described by the deployed officer.

In summary, the status of FEMA exercise objectives for this location is as follows:

- a. **MET:** Objectives 1, 4, 5, and 17
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES - RESOLVED:** NONE
- f. **PRIOR ISSUES - UNRESOLVED:** NONE

2.4 WEST BATON ROUGE PARISH

2.4.1 EMERGENCY OPERATIONS CENTER

Unannounced/Off-hours Drill

On Monday, June 5, 2000, evaluators arrived at 9:15 p.m. to evaluate an unannounced, off-hours drill at West Baton Rouge Parish. Notifications from the utility are faxed over the dedicated line to the Sheriff's Department 911 Dispatch Center, located in the Court House Building in Port Allen, Louisiana. **SITE AREA EMERGENCY (SAE)** notification was received at 9:30 p.m. The dispatcher confirmed receipt of the message over the RBS radio at 9:32 p.m.

The dispatcher began a call down of appropriate EOC response personnel at 9:37 p.m. He was able to contact the DOEP at 9:39 p.m. The DOEP estimated his arrival would take 10 minutes. The DOEP instructed the dispatcher to continue the telephone call down per SAE procedures and ascertain ETAs for contacted personnel.

The DOEP arrived at the courthouse at 9:50 p.m. and received a status briefing from the dispatcher. At this time, the DOEP determined that all decision-makers required to open and operate the EOC had been notified with ETAs noted. The drill was terminated at 10:00 p.m. with a successful completion of the objectives.

Plume Phase EPZ Exercise

The West Baton Rouge Parish EOC is located on the second floor of the courthouse. Also located in the building is the Sheriff's Department 911 Dispatch Center, which is a 24-hour, 7-days per week operation. The EOC facility has adequate space with excellent lighting, air conditioning, ventilation and backup power. There were an adequate number of telephones, facsimile machines, copiers, and computers to support the EOC. Access to the EOC was controlled by a member of the Sheriff's Department and included a sign in/sign out procedure, with badges issued. The EOC contained maps, including the 10-mile EPZ with evacuation routes, and status boards, including emergency information, emergency action log, weather data, and erasable marker boards. Also, the utility provided general public information booklets. All appropriate State and local plans and procedures were on hand.

Communications systems were available and used including: telephones, both hard-wired and cell; fax machines; State radio systems; marine radio system; Parish Sheriff's Department radio system (hi and low band); and amateur radios, both voice and data. The staff communicated with the State (LOEP and LDEQ), RBS, the JIC, the EOF, and other local jurisdictions. Additionally, a 200-line call down system was available to notify selected public segments.

Alert, mobilization, and staffing of the EOC was completed in a timely manner. The EOC was activated from its normal status. The **NOUE** was received over the dedicated fax in the 911 Dispatch Center at 8:30 a.m. and in the EOC at 8:35 a.m. The **ALERT** was received at 8:43 a.m., the **SAE** at 10:08 a.m., and the **GE** at 10:36 a.m. Staff call down was completed by 9:05 a.m. A Parish Emergency Declaration was sent to the State offices at 10:04 a.m. The Parish Spokesperson reported to the JIC at 10:27 a.m. The facility was declared fully activated at 10:32 a.m. Thirteen staff members reported for duty at the EOC following activation using the telephone and up-to-date

personnel rosters, per parish procedures. The EOC communicated with all other organizations without delay. Of particular note was the performance of the Communications Officer who executed his duties in a most professional manner.

The Parish President was assisted by the DOEP. They carried out the direction and control responsibilities effectively and efficiently. Frequent briefings, updates and staff discussions were used to keep the entire EOC staff involved and informed on the developing situation. The utility liaison provided technical knowledge that was key to the EOC staff understanding the situation at the plant. All essential functions were performed professionally.

The Radiological Officer (RO) proficiently handled emergency worker exposure control. The RO promptly reported for duty at 9:30 a.m. and began assembling and preparing the dosimetry kits. The kits were pre-packaged and stored at the EOC. Each kit included a pencil, instructions, an EPZ map, an exposure control card and form, a simulated TLD, and simulated KI, dated March 2005. The actual KI stored in the EOC has an expiration date of December 2003. The RO zeroed the DRDs (CDV 730, 0-20R, and CDV 742, 0-200R), recorded the initial readings, and added them to the kits for issuance to workers. All dosimeters would be turned into the RO at the EOC or the Monitoring/Decontamination Center. The turn back value for this exercise was 1 R. CDV 700 and CDV 715 survey meters, calibrated May 2000, were available. A Sheriff's Deputy would monitor any personnel entering the EOC following **SAE** notification by RBS.

Parish officials experienced no delays or problems with protective action decision-making. The Parish President possesses the ultimate authority for decision-making; however, he worked closely with and relied on the DOEP and the EOC staff. When the licensee issued the PARs, the DOEP conferred by telephone with State officials, the utility, and the other four parish representatives. There were no changes made to the PARs. Sheltering in Sector 15 was the only recommended action for West Baton Rouge Parish citizens as directed by scenario #7, **GE** notification message 5, and by scenario #6, **GE** notification message 7.

Alert and notification of the public was promptly and efficiently demonstrated. There is one siren in the parish that notifies approximately 80 Sector 15 citizens. As with the PADs, siren sounding was coordinated and agreed to during the two conference calls between the State, the utility, and the four other parishes. Siren sounding was simulated twice: at 11:06 a.m. and 12:48 a.m. The EAS messages were issued by the State with primary broadcast by WJBO radio. If required, Sheriff's Department personnel would perform route alerting.

There are no special populations in Sector 15 of the parish. The DOEP called the Council on Aging to verify if any recent changes had occurred to this information.

LDEQ personnel terminated the exercise at 1:30 p.m.

Relocation, Re-entry and Return Discussion

Nine EOC staff members were able to participate in these problem-solving discussions. LDEQ staff members presented scenarios for the parish based on 1-30 days following the release. For the first two days, parish authorities decided to continue the sheltering of residents, pending further contamination information from the State. Discussions centered on the issue of re-entry for citizens who might have left Sector 15, even though no evacuation was ordered, and now wanted to return to

their homes. Staffers reemphasized the fact that only 80 citizens live in the area and that the activities of these citizens would be well known to the authorities assisting with traffic/access control. Further discussion involved concern over the waterways, monitoring, and the natural North to South runoff. The staff displayed a comprehensive understanding of the knowledge required for re-entry/recovery operations. As discussions began based on the Day 3 scenario, the EOC received a real event call concerning a pipeline explosion and fire. LDEQ personnel, after consulting with the evaluators, terminated the exercise at this point so that the EOC staff were free to manage the real event.

Two areas of strength were particularly noted at the EOC during the exercise. The Communicator and the Radiological Officer were conscientious and worked diligently throughout the event. Their roles are integral to the success of the exercise, and they completed their assignments professionally and with great care. The Communicator was eager to share the planned computer upgrades and the improvements these will bring to the EOC operation. In addition, the experienced dedication, care, and concern of the staff for the citizens of the parish were reflected in the cooperative effort exhibited by all, and in particular, by the DOEP, Parish President, PIO, and administrative staff, during the exercise. This experience and attitude served them well when the EOC operation immediately converted to a real situation.

In summary, the status of FEMA exercise objectives for this location is as follows:

- a. **MET:** Objectives 1, 2, 3, 4, 5, 9, 10, 14, 15, 17, 28, 29, 32, and 33
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES - RESOLVED:** NONE
- f. **PRIOR ISSUES - UNRESOLVED:** NONE

2.4.2 WEST BATON ROUGE PARISH TRAFFIC/ACCESS CONTROL POINT

At 10:40 a.m., an out-of-sequence traffic control demonstration was initiated at the parish EOC. The Sheriff's Department Law Enforcement Coordinator and Radiological Officer dispatched a deputy to the traffic/access control point (T/ACP), at the intersection of Highways 415 and 190. Prior to dispatch, the deputy received a radiological detection kit, containing TLD, dosimetry (CDV-730, 0-20R, and CDV-742, 0-200R), exposure control card, map, and a complete briefing on usage, record keeping, and turn-back value (1 R). The Deputy read his dosimeters and recorded the readings at 30-minute intervals. Dosimeters would be turned into the RO at the EOC or the Monitoring/Decontamination Center.

The deputy used the Sheriff's Department radio for primary communications, and he had a cell phone for backup. There were no problems communicating with the EOC. The deputy demonstrated the knowledge and capability to construct barriers and to control traffic and access to the area. He was knowledgeable in how to have impediments removed. He was also aware of the location of the reception center for parish citizens.

At the EOC, decisions were made for applicable notifications to control traffic on the water, on rails, and in the air.

In summary, the status of FEMA exercise objectives for this location is as follows:

- a. MET: Objectives 1, 4, 5, and 17**
- b. DEFICIENCY: NONE**
- c. AREAS REQUIRING CORRECTIVE ACTION: NONE**
- d. NOT DEMONSTRATED: NONE**
- e. PRIOR ISSUES - RESOLVED: NONE**
- f. PRIOR ISSUES - UNRESOLVED: NONE**

2.5 EAST BATON ROUGE PARISH

2.5.1 EMERGENCY OPERATIONS CENTER

Unannounced/Off-hours Drill

The capability to carry out emergency response functions related to an unannounced, off-hours, drill was demonstrated by the emergency response staff at the East Baton Rouge Parish EOC. This drill was conducted on the evening of Monday, June 5, 2000, beginning at 9:30 p.m. The initial notification form was received on a printer via a radio system at the EMS Communications Center, which is also the 911 Communications Center. The EMS Shift Supervisor immediately opened the River Bend Procedures and selected Attachment 4, which contained the names and phone numbers of primary and alternate responders for the East Baton Rouge Parish Emergency Operations Center (EOC).

The Deputy Director of the Office of Emergency Preparedness (DOEP) was contacted at 9:32 p.m. and gave an estimated time of arrival of 12 minutes. Both telephone and pager were used to contact the East Baton Rouge Parish EOC staff. Two members of the EMS communications staff continued the callout process until the East Baton Rouge Parish Communicator arrived to take over this function. The DDEOP actually arrived first, at 10:04 p.m., and assumed the callout responsibilities from EMS. The East Baton Rouge Parish EOC Communicator arrived at 10:14 p.m. and took over the final callout. All calls and pager notification were made and acknowledged by 10:23 p.m. Either primary or alternates for all EOC positions, except the Parish Attorney, were contacted in accordance with the procedures. In accordance with the extent-of-play agreement, only the Director and the Communicator actually mobilized to the EOC. All other responders provided estimated times of arrival.

Plume Phase EPZ Exercise

The East Baton Rouge Parish (EBRP) EOC staff was notified by River Bend Station via hotline and radio. The EBRP EOC staff was informed of an **UNUSUAL EVENT** at 8:35 a.m., an **ALERT** at 8:43 a.m., a **SITE AREA EMERGENCY (SAE)** at 10:13 a.m., and a **GENERAL EMERGENCY (GE)** at 10:36 a.m. Notifications of Emergency Classification Levels (ECLs) from the EOF were received over the hotline/dedicated computer-linked printer and subsequent communications on plant conditions and protective action recommendations were received via radio.

Using a personnel roster, the EOC Communications Officer began to notify emergency personnel by telephone at the **ALERT** ECL. Her call down began at 8:48 a.m. and was completed by 9:15 a.m. Mobilization of emergency personnel began at 8:48 a.m. and the EOC was declared operational at 10:15 a.m.

The EBRP EOC is located adjacent to the Office of Emergency Preparedness in the basement of the Parish Governmental Building. The adequacy of facilities, equipment, displays, and other materials were sufficient to support emergency operations. The EOC has adequate space, furnishings, lighting, ventilation, and backup power. Women and men's restrooms are available. It is equipped with telephones, computers, word processors, copiers, and fax machines.

Informational displays containing plume pathway emergency planning zones (EPZ), ingestion pathway EPZ, evacuation routes, reception and congregate care centers, population by evacuation area, emergency classification levels, special facilities, and traffic and access control points were all available at the EBRP EOC. The EOC was equipped with a status board, which was routinely updated as events unfolded during the exercise. A copy of the EBRP EOP was available at the facility. During the exercise, access to the facility was controlled through the use of a locked door with an outside buzzer for staff entrance.

The Director and Deputy Director of the EBRP OEP, in consultation with the Mayor/President, demonstrated the capability to direct and control emergency operations at the EOC. Both the Director and her Deputy were knowledgeable regarding the parish plan and provided thorough instructions to staff throughout the exercise. Several EOC briefings were conducted during the exercise using a round-robin method. This allowed the Director/Deputy to get sufficient updates and feedback from all of the agencies participating in the exercise. The Director/Deputy involved their staff in decisionmaking and provided leadership in implementing protective action decisions. Staff were instructed by the Director/Deputy to use their position-specific procedures and procedures that were provided in the EOC. Overall, the parish checklists and procedures were implemented.

The EBRP EOC had three primary communication systems: a dedicated hotline, commercial telephones, and a radio system. The dedicated hotline was used to receive the initial call from the facility. The commercial telephones were used to notify emergency responders, and were also used by emergency responders to communicate with emergency personnel at other facilities. The radio system was used to communicate with the River Bend EOF during the exercise. An amateur radio system, RACES, was used as backup. Police and fire radios, cellular phones and fax machines were also available as communication backups. During the exercise, the EBRP EOC effectively communicated with the River Bend EOF and field operations personnel including, police, fire and medical personnel.

Two Radiological Officers (ROs) were present in the EOC and were aware of their responsibilities to monitor the status of emergency workers who were in the field. Emergency radiological equipment was available in the EOC and was stored in personal dosimetry kits. These kits contained two direct-reading dosimeters (0-20R and 0-200R), two tablets of simulated KI, exposure control cards and instructions, a KI information sheet, and a River Bend Station EPZ map. Personal dosimetry kits would be issued to emergency workers who would be dispatched to the field. No personal dosimetry kits would be issued to EOC staff since the EOC is located outside the 10-mile EPZ. Actual KI, with an expiration date of 12/03, was also stored at the EOC. Radiological equipment was sent with staff to the Reception Center (RC) at the Louisiana State University field house. The RO directed the delivery of this equipment that included personal dosimetry kits and CDV 700 monitoring instruments. The kits were to be used by radiological monitors at the reception center.

The DOEP staff was involved in protective action decision making with the other EPZ jurisdictions. Two Protective Action Decisions (PADs) were made during the exercise. The first PAD (Scenario #7), which called for EPZ sections of East Baton Rouge Parish to shelter-in-place, was agreed upon in a conference call with other jurisdictions at approximately 10:50 a.m. Sirens were sounded at 11:06 a.m. The siren sounding was followed by an EAS message broadcast from the radio stations. The second PAD involved Scenario #6 which also required shelter-in-place actions for all East Baton Rouge EPZ section residents. The second PAD was agreed upon by all jurisdictions at approximately 12:36 p.m. The sirens sounded at 12:48 p.m. and an EAS message followed. The

parish staff notified two special facilities identified in Scenario #6, the Georgia Pacific Paper Mill and Amoco Production. Port Hudson Head Start was also mentioned in Scenario #6 but was not notified because they were not in session. The EBR Parish EOC also makes additional notifications to residents via their Community Alert System (CAL). CAL has a geographic information system component and can be programmed to auto-dial and deliver taped messages to individual households in the parish, including specific geographic areas/zones.

The EBR Parish EOC staff was aware of individuals with special needs in the EPZ. This corrects previous issue 53-98-15-A-05. A listing of these individuals was available in the EOC. Four individuals who require transportation reside in Protective Action Section (PAS) 13. In the event of an actual emergency, these individuals would be contacted via commercial telephone, tone-alert radio or through a human network. Transportation for these individuals was arranged through the EBRP Transportation Coordinator. There are no sight/hearing/mobility impaired or institutionalized individuals in the EPZ sections of the parish.

The EBR Parish EOC demonstrated the organizational capability to control evacuation traffic flow and to control access to evacuated and sheltered areas. In accordance with the extent of play, this capability was not actually demonstrated. This capability was demonstrated by interview. The responders demonstrated knowledge of their responsibilities as set out in their plans and procedures. The location of traffic and access control points was provided in their procedures. During the exercise, as called for in their procedures, the Sheriff's Department simulated establishing a traffic control point at the intersection of Highway 964 and Port Hudson-Pride Rd.

A small part of the East Baton Rouge Parish is located within the 10-mile EPZ and is located outside the city limits of Baton Rouge. Consequently, the EBRP Sheriff's Department and Louisiana State Police have primary responsibility for traffic and access control. EBRP Police Department is available for backup.

Relocation, Re-entry and Return Discussion

A Relocation, Re-entry and Return discussion occurred immediately following the plume exercise activities at EBRP EOC. Louisiana Department of Environmental Quality (LDEQ) presented scenarios for Day 1, Day 2, Day 3 and Day 30 following the emergency at River Bend. Following the presentation of each scenario, the EBR Parish EOC staff had a discussion about actions they would implement. The Deputy Director facilitated the discussion and each county agency participated.

The Day 1 scenario was a recap of the plume phase, including details of the release times, wind direction data, DEQ lab analysis data (deposition of radioactive particulates), protective actions (evacuation up to 5 miles involving sections 1, 4, 9, and 16, all others sheltered), and field monitoring team status (continued surveillance of the EPZ). An EOC staff discussion followed. The EBRP EOC staff stated that they would enforce the shelter-in-place protective action for sections 13 and 14 within the parish. Roadblocks would be manned to limit access to the area. The parish school representative stated that buses would be available waiting for reentry into the affected area. Parish police stated that they would limit access to the area and be present for security purposes. Also the parish police would be available for an aerial survey of the affected area. The Public Information Officer stated that a phone bank would be set up to answer resident inquiries.

The Day 2 scenario included updated information: The Governor of Louisiana declared a State of Emergency; the number of evacuated and sheltered persons in the parish was provided; state governments have technical liaisons at the parish EOCs; and LDEQ, agricultural agents, and sanitarians are present in the parish EOCs. An EOC staff discussion followed. The EBRP EOC staff stated that they would continue to implement shelter-in-place protective action. The agricultural agent stated that measures would be taken to provide shelter for all animals and contain foodstuffs. Water and milk samples would be collected. Parish transportation and schools would be on standby. The EOI technical representative stated that the utility would provide the parish with a list of plant workers who would need access to River Bend Station. The American Red Cross representative stated that shelter operations would remain steady and that they may consider mobile feeding operations. The Public Information Officer stated that an update would be provided to the sheltering population so they would not think they had been forgotten. There was also a discussion about whether or not an evacuation should be ordered for residents still being sheltered. The staff decided not to order an evacuation but merely provide resources to residents if they wished to evacuate. There was also a discussion about possibly setting up a monitoring/decontamination station for those residents who decided to evacuate.

The Day 3 scenario included updated information — East Baton Rouge Parish has some areas that exceed the one-year relocation Protective Action Guide (PAG) and some contaminated areas that do not exceed the one-year PAG. DEQ recommended a one-half mile buffer around the contaminated areas. Evacuation status number is still the same, remaining are sheltered; State government has established technical liaisons with parish governments; and DEQ, agricultural agents, and sanitarians are present in the parish EOCs. An EOC staff discussion followed. The EOC staff stated that they would work with State representatives and other parishes to notify the remaining population. The EOC staff stated that they would use CAL and EAS to notify the population. The EOC staff also discussed the economics of relocation, the evacuation of the remaining population, impact on agricultural areas, possible affect on area wildlife, status of plant operations, and assistance to elderly individuals.

The Day 30 scenario included the following updated information: East Baton Rouge Parish had no area exceeding the one-year PAG. The area is being monitored to make sure that the population can return. The EOC staff discussed their preparations for return to the area. The EOC staff stated that they would take down traffic barricades to allow population back into the area. They would transport the population back into the area to pick up their vehicles. The ARC staff discussed the issue of the shelter problem including how to handle companion animals. The Public Information Officer stated that they would coordinate with area media and the parish spokesperson to get accurate information to the population. The agricultural agent stated that the agency would issue statements about washing vegetables, animals, and pets.

In summary, the status of FEMA exercise objectives for this location is as follows:

- a. **MET:** Objectives 1, 2, 3, 4, 5, 9, 10, 15, 17, 28, 29, 32 and 33
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION:** NONE
- d. **NOT DEMONSTRATED:** NONE

e. PRIOR ISSUE - RESOLVED: Objective 15

Issue Number: 53-98-15-A-05

Description: The East Baton Rouge Parish EOC personnel were unaware of individuals with special needs in the EPZ. The Scenario Summary #16 indicates that there are four individuals with special needs residing in PAS-13, which was to be evacuated. (NUREG-0654, J.10.c., d., e., g.)

Corrective Action Demonstrated: The EBR Parish EOC staff were aware of individuals with special needs in the EPZ. A listing of these individuals was available in the EOC. Four individuals who require transportation reside in Protective Action Section (PAS) 13. In the event of an actual emergency, these individuals would be contacted via commercial telephone, tone-alert radio or through a human network. Transportation for these individuals was arranged through the EBR Parish Transportation coordinator. There are no sight/hearing/mobility impaired or institutionalized individuals in the EPZ sections of the parish.

f. PRIOR ISSUES - UNRESOLVED: NONE

3. SUPPORT ORGANIZATIONS

3.1 LOUISIANA STATE UNIVERSITY RECEPTION CENTER

The capability to activate and mobilize emergency personnel was demonstrated at the Louisiana State University (LSU) Field House Reception Center (RC) on June 7, 2000 as a part of the exercise at River Bend Station. The facility manager was notified at 9:01 a.m. of a problem at the River Bend Station. Key personnel from agencies having responsibilities at the RC including the Baton Rouge Fire Department, American Red Cross (ARC), Louisiana Department of Social Services, Louisiana Department of Health and Hospitals, the Council on Aging, Office of Family Support (OFS), East Baton Rouge Parish Department of Human Resources (HR), Emergency Medical Services (EMS), and Capital Transportation Corporation were notified to respond at 10:15 a.m. at the Site Area Emergency (SAE) declaration. The facility was fully operational at 11:15 a.m. There was sufficient space to adequately perform the necessary functions.

East Baton Rouge Parish Human Resources provided the Reception Center Manager (RCM) for this exercise. The agency responsible for the RCM is not delineated in the East Baton Rouge Parish Emergency Operations Plan (EBRP EOP) which should be revised to include a designated agency for this position.

The capability to communicate with appropriate emergency personnel was demonstrated at the RC. Radio was the primary means of communication during the exercise with the Louisiana Office of Emergency Preparedness, Baton Rouge Fire Department, East Baton Rouge Emergency Operations Center, and the ARC. Cell phones were used as back up. Volunteer RACES operators responded to the RC and were set up in two locations in the field house. There were no communications breakdowns.

Each radiological monitoring team member (for personnel and vehicles) from the East Baton Rouge Fire Department was provided with one CDV-730 (0-20 R) and one CDV-742 (0-200 R) direct reading dosimeters (DRDs). By interview, it was determined that the DRDs are inspected for electrical leakage and the records are maintained by the state. A record was made of the dosimeters assigned to each monitoring team member. DRD chargers were available and, prior to assigning the DRDs, each team member recorded the initial reading on designated forms. The respective form was provided to all staff that were instructed to read their DRDs and record the readings every 30 minutes. All team members were knowledgeable of their exposure limits of 1R. This corrects ARCA 53-98-05-A-06.

Emergency workers utilized CDV-700 instruments to monitor vehicles and personnel. Vehicle decontamination was simulated per the extent-of-play. A discussion with the fire department supervisor indicated that contaminated vehicles would be placed into a separate area and decontaminated after the emergency had been terminated, as stated in the EOP. Emergency workers wore gloves and booties, as per their procedures, to preclude individual contamination. The emergency worker at the vehicle monitoring station was observed surveying the air cleaner on the vehicle. This closes ARCA 53-98-18-A-07.

It was noted that the second shift had not posted a background reading in the vehicle monitoring area. The worker was asked what the background reading was. The worker placed the open probe on the source check area and reported that the background reading was "1 ¾." He then wrote this

value on his procedure in the blank for his initials. He realized that he needed to post the value on the card and wrote the same value on the card. This emergency worker did not understand and was not familiar with the operation of the CDV-700.

Three workers were available to monitor personnel upon entry to the reception center. The workers demonstrated that it would take 3-5 minutes to monitor each person. Three workers were also available to monitor personnel after decontamination. All personnel (or teams) were in possession of procedures for the operation of their positions. Personnel were aware of the contamination values. A supervisor stated that when vehicles or personnel could not be decontaminated that they would contact EOC personnel for further direction.

If the evacuees were clean, they were instructed to proceed to the Registration Desk to fill out the necessary paperwork and receive further instructions. If the evacuees were contaminated, they were instructed to proceed to the decontaminated area of the RC (men's and women's locker rooms) to be decontaminated. Brown paper covered the floors from the monitoring area to the locker rooms. All individuals were instructed to stay on the paper and no one crossed over from the clean side onto the contaminated side. This closes ARCA 53-98-18-A-08.

Another issue concerning the operation of the CDV-700 was noted in the personnel decontamination area. An emergency worker was asked to perform a source check of a CDV-700. He placed the open probe facing away from the instrument on the source check area and got a reading of .06 mR/hour. He was asked what the normal value was that he would expect. He stated that he did not know but would ask his supervisor. He was asked if he contacted his supervisor when the check was originally completed; he stated that he had not. There was no indication that the worker had consulted a supervisor concerning the expected values.

The registration positions, manned by the Baton Rouge Office of Family Service, were appropriately located in the RC, but the staff needs some additional training on completing the Registration Forms. For example, the staff was indicating on the form "No Medication" when the evacuee did not have his medication with him and when the evacuees were taking no prescribed medications. Also, two of the evacuees had simulated and real-life medical problems that were not properly annotated on the registration forms. These types of annotations later added to confusion at the other positions and caused a few of the evacuees to be routed to the wrong stations.

Another functional area needs to be added to the RC with the responsibility to address crisis management and childcare issues. NUREG 0654, J.10.h., requires that these functions are to be available in a RC and/or Congregate Care Center (CCC). This functional area would require someone who is specially trained and possibly has a degree in social work.

The ARC, OFS Locator, EMS First Aid, Council on Aging, and Capitol Transportation Services representatives were knowledgeable of their requirements and were able to provide food, assign shelters, offer family locating services, first aid, special needs services and ambulance, and transportation services without any problems. The LSU Field Houses can accommodate approximately 1,400 persons. The EBRP EOP does have layouts of each of the facilities; but it would be helpful if the capacity were annotated on the diagram so that the RCM does not have to call back to the EOC.

Initially, the EBRPOEP did not give the RCM the number of evacuees to expect. This information only became available after the evaluators and controllers questioned the RCM and he called back to the EOC. The 1,300 evacuees the RCM was told to expect were within the facility capacity and would not have required an overflow facility.

The ability to maintain 24-hour staffing was demonstrated by a shift change at all stations in the M/D Center. The second shift reported at 11:30 a.m. and were sent to a staging area. First shift personnel sufficiently briefed the second shift prior to terminating their activities. Rosters of emergency personnel were available. There was no loss in continuity and both shifts performed equally.

In summary, the status of FEMA exercise objectives for this location is as follows:

- a. **MET:** Objectives 1, 4, 19 and 30
- b. **DEFICIENCY:** NONE
- c. **AREAS REQUIRING CORRECTIVE ACTION:** Objectives 5 and 18

Issue Number: 53-00-05-A-03

Description: The emergency workers did not have an understanding of and were not familiar with the operation of the CDV-700.

Recommendation: Personnel assigned to monitoring and decontamination activities receive additional training on the use and understanding of the survey instruments and readings.

Issue Number: 53-00-18-A-04

Description: The procedures and checklists are not detailed enough to guide the staff manning the Registration positions through the process. The entire Reception Center (RC) staff needs to be trained together on RC operations, not just their specific functions. This type approach would lead to a better understanding of needs and a better flow of evacuees. *For example*, the staff indicated on the forms “No Medication” when the evacuee did not have his medication with him and when the evacuees were taking no prescribed medications. Also, two of the evacuees had simulated and real-life medical problems that were not properly annotated on the registration forms. These types of annotations later added to confusion at the other positions and caused a few of the evacuees to be routed to the wrong stations.

Recommendation: Additional training is needed on the registration forms and Reception Center procedures. Once a manning roster is developed, train the team as a group on completing the registration forms, the flow of evacuees, familiarization of the facility, and the mission and operation of the entire Reception Center.

- d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ISSUES - RESOLVED:** Objectives 5 and 18

Issue Number: 53-98-05-A-06

Description: Several Baton Rouge Fire Department members performing evacuee monitoring and decontamination at the Centroplex Reception Center were not familiar with their exposure limit of 1R. (NUREG-0654, K., 3., 4.)

Corrective Action Demonstrated: All team members were knowledgeable of the exposure limit of 1R.

Issue Number: 53-98-18-A-07

Description: Personnel conducting vehicle monitoring at the Centroplex Reception Center did not survey air cleaners on the vehicles as specified in the procedures. (NUREG-0654, N.1.a)

Corrective Action Demonstrated: Personnel were observed surveying vehicle air cleaners.

Issue Number: 53-98-18-A-08

Description: An evacuee at the Centroplex Reception Center that was monitored and determined to be radiologically clean was incorrectly instructed to follow the protective paper on the floor to the decontamination area. Also, a monitored evacuee was instructed to cross over the protective paper on her way to the registration area. In both cases, the individuals were directed to cross-areas that were designated as "hot" areas thereby increasing the possibility to pick up and spread contamination. (NUREG-0654, J.9)

Corrective Action Demonstrated: If the evacuees were clean, they were instructed to proceed to the Registration Desk to fill out the necessary paperwork and receive further instructions. If the evacuees were contaminated, they were instructed to proceed to the decontamination area of the RC (men's and women's locker rooms) to be decontaminated. Brown paper covered the floors from the monitoring area to the locker rooms. All individuals were instructed to stay on the paper and no one crossed over from the clean side onto the contaminated side.

f. **PRIOR ISSUES - UNRESOLVED:** NONE

3.2 JACKSON EMERGENCY WORKER MONITORING/DECON STATION

An out-of-sequence drill was held at the Jackson Monitoring/Decontamination Center (M/D) on Tuesday, June 6, 2000. At 6:00 p.m., the East Feliciana Parish Director of the Office of Emergency Preparedness (DEOP) received a simulated call (by controller inject) from the State advising them to set up and man the Monitoring and Decontamination Center (MD) located at the Jackson Volunteer Fire Department. The East Feliciana Parish DEOP notified the Jackson Volunteer Fire Department by pager requesting activation of the M/D Center. Volunteer firefighters responded to the pages within 10 minutes and began to setup the facility. By 6:35 p.m., the M/D Center was operational.

The Jackson Volunteer Fire Department possessed adequate communication equipment to serve the M/D Center. The fire department has two commercial telephone lines as their primary means of communication with the East Feliciana Parish EOC. In addition, hand-held radios and cellular phones were available for back up communications.

A volunteer firefighter from the Jackson Volunteer Fire Department was in charge of exposure control. Batteries were installed in the CDV-700s and operational checks were completed using the x1 scale setting with the beta shield open. Last calibration of the instruments was completed in April 2000. Instrument probes were covered with plastic for protection from external contamination. Background readings were determined to be 0.03 mR/hr and were posted on signs in the indoor monitoring area.

Dosimeter kits were issued to each emergency worker which contained a simulated TLD, one CDV-742 (0-200R) and one CDV-730 (0-20R) direct reading dosimeters, instructions, exposure control form, exposure control card, a map of the 10-mile EPZ, and a pencil. Two chargers are available in the box containing the kits. The supervisor ensured that each worker checked his dosimetry and recorded initial values and dosimeter numbers on the appropriate documentation. Emergency workers utilized procedures and were aware of their exposure limit. The supervisor ensured that dosimeters were read every 30 minutes.

One vehicle and one emergency worker were monitored during each of two shifts. Records were completed for each. CDV-700 instruments, calibrated in April 2000, with earphones and plastic-covered probes were used for all monitoring with the beta shield open. Operational checks were performed using the check sources on the side of each instrument. The simulated decontamination of one vehicle and one worker was demonstrated in accordance with the extent-of-play agreement. The contamination limit was 0.1 mR/hour or more above background. An open area adjacent to the fire hall was used for the monitoring and decontamination of vehicles. A separate area was set aside for parking vehicles that could not be decontaminated.

One bay of the fire hall was set up with a step-off pad and a double Kraft paper runner to the shower area. One shower was available to accommodate male or female emergency workers. Other anti-contamination procedures included bagging contaminated clothing, equipment and waste and providing of a change of clothing, if required. All monitors wore latex gloves and booties. Emergency workers put on plastic booties before they left their vehicle.

The decontamination team was able to decontaminate the vehicle tire area and the hands of the emergency worker in accordance with written procedures. Vehicle areas monitored included tires, wheel wells, bumpers, grills and air intake filter. The area inside the vehicle, on the driver's side,

was also monitored. If an emergency worker could not be decontaminated at this facility, the East Feliciana Parish EOC would be contacted for further instructions.

The ability to maintain 24-hour staffing was demonstrated by a shift change at all stations in the M/D Center. First shift personnel sufficiently briefed the second shift prior to terminating their activities. Rosters of emergency personnel were available. There was no loss in continuity of operations and both shifts performed equally well.

In summary, the status of FEMA objectives for this location is as follows:

- a. MET:** Objectives 1, 4, 5, 22, and 30
- b. DEFICIENCY:** NONE
- c. AREAS REQUIRING CORRECTIVE ACTION:** NONE
- d. NOT DEMONSTRATED:** NONE
- e. PRIOR ISSUES RESOLVED:** NONE
- f. PRIOR ISSUES UNRESOLVED:** NONE

APPENDIX 1

ACRONYMS AND ABBREVIATIONS

ALARA	As Low As Reasonably Achievable
ANL	Argonne National Laboratory
ARC	American Red Cross
ARCA	Area Requiring Corrective Action
CAL	Community Alert System
CFR	Code of Federal Regulations
DDOEP	Deputy Director, Office of Emergency Preparedness
DHH	Department of Health and Hospitals
DHHS	U.S. Department of Health and Human Services
DOE	U.S. Department of Energy
DOEP	Director, Office of Emergency Preparedness
DOI	U.S. Department of Interior
DOT	U.S. Department of Transportation
DRD	Direct-Reading Dosimeter
DRL	Derived Response Level
EAS	Emergency Alerting System
ECL	Emergency Classification Level
EEM	Exercise Evaluation Methodology
EMS	Emergency Medical Service
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EOV	Emergency Operations Vehicle

EPA	U.S. Environmental Protection Agency
EPZ	Emergency Planning Zone
ETA	Estimated Arrival Time
EW	Emergency Worker
FDA	U.S. Food and Drug Administration
FEMA	Federal Emergency Management Agency
FRMT	Field Radiological Monitoring Team
FTC	Field Team Coordinator
GE	General Emergency
GIS	Geographic Information System
HP	Health Physicist/Health Physics Technician
HQ	Headquarters
IPZ	Ingestion Planning Zone
JIC	Joint Information Center
KI	Potassium Iodide
LDEQ	Louisiana Department of Environmental Quality
LDHH	Louisiana Department of Health and Hospitals
LOEP	Louisiana Office of Emergency Preparedness
LSU	Louisiana State University
M/D	Monitoring/Decontamination
MHz	Megahertz
NOUE/NUE	Notification of Unusual Event
NRC	U.S. Nuclear Regulatory Commission
OEP	Office of Emergency Preparedness

PA	Public Address
PAD	Protective Action Decision
PAG	Protective Action Guide
PAR	Protective Action Recommendation
PAS	Protective Action Section
PAZ	Protective Action Zone
PIO	Public Information Officer
R	Roentgen
R/hr	Roentgen per Hour
RAC	Regional Assistance Committee
RACES	Radio Amateur Civil Emergency System
RBS	River Bend Station
REA	Radiological Emergency Area
REDAM	Radiological Emergency Dose Assessment Model
REP	Radiological Emergency Preparedness
RM	Radiological Monitor
RO	Radiological Officer
SAE	Site Area Emergency
SEOC	State Emergency Operations Center
SEOF	State Emergency Operations Facility
SLO	Senior Liaison Officer
SMRAP	Southern Mutual Radiological Assistance Plan
SOP	Standard Operating Plan/Procedure
T/ACP	Traffic/Access Control Point

TEDE	Total Effective Dose Equivalent
TLD	Thermoluminescent Dosimeter
USDA	U.S. Department of Agriculture

APPENDIX 2

EXERCISE EVALUATORS

The following is a list of the personnel who evaluated the River Bend Station exercise on June 7, 2000.

FEMA – Federal Emergency Management Agency

ANL – Argonne National Laboratory

DOT – U.S. Department of Transportation

USDA – U.S. Department of Agriculture

INEEL – Idaho Environmental and Engineering Laboratory

BIENNIAL EXERCISE – June 7, 2000

<u>EVALUATION SITE</u>	<u>EVALUATOR</u>	<u>ORGANIZATION</u>
Overall Coordination	Larry Earp RAC Chairman	FEMA
Exercise Coordinator	Willie Malone	FEMA
STATE OF LOUISIANA		
State Emergency Operations Center	Tony Robinson	FEMA
	Frank Wilson	ANL
LDEQ Operations @ RBS EOF	Brad Salmonson	INEEL
	Daryl Thome'	ANL
Joint Information Center	Bill Gasper	ANL
	Ken Lerner	ANL
	Bruce Young	ANL
WEST FELICIANA PARISH		
West Feliciana Parish EOC School Evacuation Drill	Rebecca Thomson	ANL
	Jim LeGrotte	FEMA
EAST FELICIANA PARISH		
East Feliciana Parish EOC	Brenda Mosley	FEMA
	Don Cornell	FEMA
POINTE COUPEE PARISH		
Pointe Coupee Parish EOC Traffic/Access Control Point	Richard Converse	ANL
	Holly Berry	ANL

EVALUATION SITE**EVALUATOR****ORGANIZATION****WEST BATON ROUGE PARISH**

West Baton Rouge Parish EOC
Traffic/Access Control Point

Marilyn Boots
Henry Christiansen

FEMA
DOT

EAST BATON ROUGE PARISH

East Baton Rouge Parish EOC

Julie Muzzarelli
Dave Poyer

ANL
ANL

SUPPORT ORGANIZATIONS

LSU Reception Center

George Brozowski
Ron Graham
Frank Jaggar
Gerald Jacobson

EPA
USDA
INEEL
ANL

Jackson Mon/Decon Station

Gerald Jacobson
Frank Jaggar
George Brozowski

ANL
INEEL
EPA

WFME/WJBO Radio

John Flynn

ANL

APPENDIX 3

EXERCISE OBJECTIVES AND EXTENT-OF-PLAY

OBJECTIVE 1: MOBILIZATION OF EMERGENCY PERSONNEL

Demonstrate the capability to alert and fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.

Locations: Louisiana State EOC (Baton Rouge), LDEQ Operations at Headquarters and at RBS EOF, Media Center (St. Francisville), West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Jackson Mon/Decon Center, Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge), LSU Reception/Care Center (Baton Rouge)

Extent-of-Play: Emergency personnel will be alerted and mobilized through the use of equipment and procedures as they would in an actual emergency. All activities will be carried out as specified in the plan. Only the Core State Agencies will be called to participate at the State EOC.

Jackson Monitor/Decon Center will be demonstrated out-of-sequence at 6:00 p.m. on June 6, 2000, at the Jackson, LA, Fire Station.

ARCA: None

OBJECTIVE 2: FACILITIES – EQUIPMENT, DISPLAYS, AND WORK ENVIRONMENT

Demonstrate the adequacy of facilities, equipment, displays, and other materials to support emergency operations.

Locations: Louisiana State EOC (Baton Rouge), LDEQ Operations at Headquarters and at RBS EOF, Media Center (St. Francisville), West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge)

Extent-of-Play: Facilities, equipment and displays will be setup as they would in an actual emergency and all activities will be carried out as specified in the plan

ARCA: 53-98-02-A-04 Pointe Coupee Parish EOC

OBJECTIVE 3: DIRECTION AND CONTROL

Demonstrate the capability to direct and control emergency operations.

Locations: Louisiana State EOC (Baton Rouge), LDEQ Operations at Headquarters and at RBS EOF, West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge)

Extent-of-Play: Direction and control will be demonstrated as they would in an actual emergency. All activities will be carried out as specified in the plan.

ARCA: None

OBJECTIVE 4: COMMUNICATIONS

Demonstrate the capability to communicate with all appropriate emergency personnel at facilities and in the field.

Locations: Louisiana State EOC (Baton Rouge), LDEQ Operations at Headquarters and at RBS EOF, Media Center (St. Francisville), West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Jackson Mon/Decon Center, Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge), LSU Reception/Care Center (Baton Rouge)

Extent-of-Play: Communications equipment and procedures will be demonstrated, as it would be in an actual emergency.

Jackson Monitoring and Decon communications will be demonstrated out of sequence at 6:00 p.m. on June 6, 2000, at the Jackson, LA, Fire Station.

ARCA: None

OBJECTIVE 5: EMERGENCY WORKER EXPOSURE CONTROL

Demonstrate the capability to continuously monitor and control radiation exposure to emergency workers.

Locations: LDEQ Operations at Headquarters, RBS EOF and in the field (if applicable), West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Jackson Mon/Decon Center, Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge), LSU Reception/Care Center (Baton Rouge)

Extent-of-Play: Emergency worker exposure control measures will be demonstrated at appropriate locations as would be carried out in an actual emergency. **Check notes for the limits to be used.**

ARCA: 53-98-05-A-02 East Feliciana Parish EOC
53-98-05-A-03 East Feliciana Parish Traffic/Access Control
53-98-05-A-06 LSU Reception/Care Center

OBJECTIVE 7: PLUME DOSE PROJECTION

Demonstrate the capability to develop dose projections and protective action recommendations regarding evacuation and sheltering.

Locations: LDEQ Operations at RBS EOF

Extent-of-Play: The EOF controller will interject data for the back calculations from the field measurements. ARCA from W-3 exercise will be corrected by LDEQ posting a reminder at the EOF with the information that needs to be communicated to the Field Monitoring Teams (FMTs). It will be demonstrated through communication between the FMT Coordinator and a person at HQ or around the RBS 10-Mile EPZ since FMTs are not participating in this exercise.

ARCA: 70-99-07-A-01 LDEQ

OBJECTIVE 9: PLUME PROTECTIVE ACTION DECISION MAKING

Demonstrate the capability to make timely and appropriate protective action decisions (PAD).

Locations: Louisiana State EOC (Baton Rouge), West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge)

Extent-of-Play: Protective action decision-making will be demonstrated at the Parish EOC as it would in an actual emergency. At the State EOC a decision on whether to administer KI or not will fulfill this objective.

ARCA: None

OBJECTIVE 10: ALERT AND NOTIFICATION

Demonstrate the capability to promptly alert and notify the public within the 10-mile plume pathway emergency planning zone (EPZ) and disseminate instructional messages to the public on the basis of decisions by appropriate State or local officials.

Locations: Louisiana State EOC (Baton Rouge), West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge)

Extent-of-Play: The State and local officials will agree upon evacuation sectors and alert system (siren) activation time. Activation of the sirens will be simulated at the EOC. Notification messages for the public will be disseminated by the State EOC and will use WJBO radio as their primary notification outlet. The State EOC will communicate the message content to the radio station. Provisions will be made to provide the text of the notification messages to the JIC and rumor control staff.

***** Since the exercise date coincides with the monthly sounding of the sirens, the sounding of the sirens should not affect the exercise sequence of events or activities. It should be ignored. See details in the Notes' section.**

ARCA: None

OBJECTIVE 11: PUBLIC INSTRUCTIONS AND EMERGENCY INFORMATION

Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.

Locations: Louisiana State EOC (Baton Rouge), WJBO

Extent-of-Play: As the public will not be involved in the exercise, there will not be an actual broadcast of emergency information to the public. WJBO personnel will demonstrate the ability to receive information from the State EOC and to broadcast appropriate protective action messages to the public within 15 minutes of the decision. The messages will not, however, be broadcast.

ARCA: None

OBJECTIVE 12: EMERGENCY INFORMATION – MEDIA

Demonstrate the capability to coordinate the development and dissemination of clear, accurate, and timely information to the news media.

Locations: Media Center (RBS training Center Building, St. Francisville)

Extent-of-Play: All activities will be completed as specified in the plan and procedures as they would in a real emergency. The interaction with reporters will be demonstrated using designated EOI personnel to simulate the role of reporters asking questions during briefings.

ARCA: None

OBJECTIVE 13: EMERGENCY INFORMATION – RUMOR CONTROL

Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.

Locations: Media Center (RBS training Center Building, St. Francisville)

Extent-of-Play: All activities should be carried out as specified in the plan and procedures as they would in a real emergency.

ARCA: None

OBJECTIVE 15: IMPLEMENTATION OF PROTECTIVE ACTIONS – SPECIAL POPULATIONS

Demonstrate the capability and resources necessary to implement appropriate protective actions for special populations.

Locations: West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge)

Extent-of-Play: This objective will be demonstrated through discussion in the Parish EOC and through communications as necessary and appropriate for the scenario. ARCA at East Baton Rouge, if not scenario driven, will be controller interjected. They will follow parish procedures in responding.

ARCA: 53-98-15-A-05 East Baton Rouge Parish

OBJECTIVE 16: IMPLEMENTATION OF PROTECTIVE ACTIONS – SCHOOLS
Demonstrate the capability and resources necessary to implement protective actions for school children within the plume pathway emergency planning zone (EPZ).

Locations: West Feliciana Parish, St. Francisville High School

Extent-of-Play: All activities will be carried out as specified in the plan and procedures. All decision-making activities associated with protective actions for schools should be completed as in an actual emergency. The school officials will demonstrate the implementation of protective actions at the school by describing to evaluators the procedures that would be followed. Teacher or student activity will not be interrupted by exercise activity and protective actions will be simulated. One bus from the parish will be mobilized for demonstration. A school bus driver will be dispatched to the participating school, West Feliciana High School, to demonstrate mobilization, communications, and radiological exposure control methods. The bus driver will be able to identify the route to the assigned reception center, but travel to the reception center will not be demonstrated.

ARCA: None

OBJECTIVE 17: TRAFFIC AND ACCESS CONTROL
Demonstrate the organizational capability and resources necessary to control evacuation traffic and to control access to evacuated and sheltered areas.

Locations: West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge)

Extent-of-Play: Out-of-Sequence Demonstration: West Baton Rouge Parish and Pointe Coupee Parish will demonstrate this objective fully. If the scenario drives this objective, the other parishes will talk it through at the EOC without sending officers to the field even if they are directly affected by the direction of the plume.

Those demonstrating fully, will demonstrate per the following description: One traffic control point will be established. The location for the demonstration will be determined in accordance with the procedure. Activities at this location will include set-up, traffic flow control and access control, establishment of barricades and emergency worker radiation exposure control. No actual interference with traffic will take place. Activity at this location will be terminated when the evaluation has been completed and contact with the parish EOC has been established.

ARCA: 53-98-05-A-03 East Feliciana Parish T/ACP

OBJECTIVE 18: RECEPTION CENTER – MONITORING, DECONTAMINATION, AND REGISTRATION
Demonstrate the adequacy of procedures, facilities, equipment, and personnel for the radiological monitoring, decontamination, and registration of evacuees.

Locations: LSU Reception/Care Center (Baton Rouge)

Extent-of-Play: One monitoring station on the male side will be set up in accordance with procedures. Six individuals will be registered and monitored, but only one will be found contaminated. All decontamination procedures will be simulated by walkthrough of the procedure and facility.

One of the two vehicle monitoring stations will be set up and two vehicles will be monitored, one of which will be found contaminated. The vehicle monitoring station will be set up in the available parking area near the designated Primary Monitoring Station. The designated space for the monitoring station will not be used to avoid interference with traffic flow and personnel safety. All decontamination procedures will be simulated by walkthrough of the procedure.

ARCA: 53-98-18-A-07
53-98-18-A-08
(ARCAs During 98 exercise at the Centroplex)

OBJECTIVE 19: CONGREGATE CARE
Demonstrate the adequacy of facilities, equipment, supplies, personnel, and procedures for congregate care of evacuees.

Locations: LSU Reception/Care Center, (Baton Rouge)

Extent-of-Play: This objective will be met by walkthrough of the congregate care facility.

ARCA: None

OBJECTIVE 22: EMERGENCY WORKERS, EQUIPMENT, AND VEHICLES – MONITORING AND DECONTAMINATION
Demonstrate the adequacy of procedures for the monitoring and decontamination of emergency workers, equipment, and vehicles.

Locations: Jackson Mon/Decon Center

Extent-of-Play:	<u><i>Out-of-Sequence Demonstration: June 6, 2000 at 6:00 p.m.</i></u> The facility set up, equipment and procedure use will be demonstrated, as it would be in an actual emergency. An individual assigned by River Bend will simulate an emergency worker returning from a field assignment and will arrive in a vehicle simulated to have come from a contaminated area. Decontamination of the individual and vehicle will be simulated by walk-through of the facility and procedure. Commercial telephone and radios are available for communications.
ARCA:	None
OBJECTIVE 28:	RELOCATION, RE-ENTRY, AND RETURN – DECISION MAKING Demonstrate the capability to develop decisions on relocation, re-entry, and return.
Locations:	West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge)
Extent-of-Play:	This objective will be demonstrated at the parish EOC after the River Bend scenario is terminated. An LDEQ representative/controller will interject to provide cue card information to the EOC Director of Emergency Management (or designee) to assist in determining recovery/re-entry conditions. Using the interjected data, this objective will be demonstrated by a tabletop presentation.
ARCA:	None
OBJECTIVE 29:	RELOCATION, RE-ENTRY, AND RETURN – IMPLEMENTATION Demonstrate the capability to implement appropriate measures for relocation, re-entry, and return.
Locations:	West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge)
Extent-of-Play:	This objective will be demonstrated at the parish EOC after the River Bend scenario is terminated. An LDEQ representative/controller will interject to provide cue card information to the EOC Director of Emergency Management (or designee) to assist in establishing relocation/re-entry/return conditions. Using the interjected data, this objective will be demonstrated by a tabletop presentation.
ARCA:	None

OBJECTIVE 30: CONTINUOUS, 24-HOUR STAFFING

Demonstrate the capability to maintain staffing on a continuous, 24-hour basis through an actual shift change.

Locations: Jackson Mon/Decon Center, LSU Reception/Care Center (Baton Rouge)

Extent-of-Play: Jackson Mon/Decon out of sequence demonstration: June 6, 2000 at 6:00 p.m.
The shift change will be performed at the discretion of the controller. The participants for the second shift will pre-stage away from the initial demonstration activity area. At controller interjection, appropriate communications will be made to the members of the second shift to report for shift turnover. This objective demonstration is complete after the applicable briefing and turnovers are completed. The second shift will continue play to complete additional objectives. The shift change will be demonstrated for the following minimum staff: Jackson Mon/Decon Center: the Personnel Recorder (Officer-in-Charge), the initial Vehicle Monitor, the initial Vehicle Recorder, the initial Personnel Monitor, and the secondary Personnel Monitor. Total 5 positions per shift. LSU Reception Center: Reception Center Manager (1), Office of Family Support (1 registration desk position), Red Cross (1 position), Officer in Charge (1), vehicle monitor (1), initial Personnel Monitor (1), initial Recorder (1), personnel decontamination station (1), secondary Monitor (1), secondary Recorder (1), a total 10 positions per shift.

ARCA: None

OBJECTIVE 32: UNANNOUNCED EXERCISE OR DRILL

Demonstrate the capability to carry out emergency response functions in an unannounced exercise of drill.

Locations: West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge)

Extent-of-Play: Out-of-Sequence Demonstration: The demonstration will be scheduled within a 7-day window of the exercise date, starting Sunday, June 4, 2000, at 6:00 p.m. and ending Saturday June 10, 2000, at 4:00 a.m.. All activities associated with this objective will be demonstrated in a parish specific drill independent of the exercise. All activities associated with this objective will be demonstrated through the use of communications equipment and procedures, as it would be in an actual emergency. One EOC key staff member will be mobilized to the EOC upon receipt of a message containing the declaration of a Site Area Emergency. The staff member will demonstrate the capability to use communication equipment and procedures. The dispatcher or the staff member will conduct a call down of EOC personnel and establish availability and ETAs, however, EOC personnel will not actually respond.

ARCA: None

OBJECTIVE 33: OFF-HOURS EXERCISE OR DRILL

Demonstrate the capability to carry out emergency response functions during an off-hours exercise or drill

Locations: West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Pointe Coupee Parish EOC (New Roads), West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge)

Extent-of-Play: *Out-of-Sequence Demonstration:* The demonstration will be scheduled within a 7-day window of the exercise date, starting Sunday, June 4, 2000, at 6:00 p.m. and ending Saturday, June 10, 2000, at 4:00 a.m. All activities associated with this objective will be demonstrated in a parish specific drill independent of the exercise. All activities associated with this objective will be demonstrated through the use of communications equipment and procedures, as it would be in an actual emergency. One EOC key staff member will be mobilized to the EOC upon receipt of a message containing the declaration of a Site Area Emergency. The staff member will demonstrate the capability to use communication equipment and procedures. The dispatcher or the staff member will conduct a call down of EOC personnel and establish availability and ETAs, however, EOC personnel will not actually respond.

ARCA: None

Notes:

1. An audible test of the Siren system is scheduled for 10:00 a. m. on the first Wednesday of each month. The test will be performed on June 7, 2000 but will be independent of the exercise. A designated RBS person located in the EOF communications room will perform the test. All parish drill participants will be instructed to ignore the siren sounding at 10:00 a. m. When (if) the scenario requires siren alert and notification, the sounding of the sirens will be simulated by talk-through at the EOC. The sirens will not be sounded for the exercise.

2. **Objective 24, ARCA 53-98-24-A-01**, will be demonstrated in the next ingestion Pathway, graded exercise.

3. Objective 5, Extent-of-play for exposure limits for parish emergency workers: The exposure limits for all the emergency workers will be based on the release mix. LDEQ Technical Logistic Coordinator at the EOF will inform the parish Radiological Officer of the exposure limits for the accident that will result in a one (1) Rem TEDE and five (5) Rem TEDE. The Radiological Officer will explain to the evaluator how the emergency workers will use the exposure limits, and how he will inform the emergency workers of these limits. **Since the low range dosimeters are not available yet for the parishes the emergency workers working outside in the plume area will still be given the 1R as an exposure limit. The emergency workers will not discuss any limit but the 1R value that has been always used.** Training on the new limits will be accomplished after the exercise. For people working outside the plume zone, like Monitoring and Decon and Reception Centers their exposure is their TEDE since there are no inhalation effects. So their limit will be 1 R at any time.

Potassium Iodide (KI)

Since Objective 14 is not part of this exercise, then if the scenario drives the use of Potassium Iodide, it will be talked through. But if the scenario does not drive it, then the ARCAs for Objective 5 ARCAs 53-98-05-A-02 and 53-98-05-A-03 in East Feliciana Parish will be corrected by appropriate Controller interjection and will be demonstrated by talking through procedures.

Correction on the Spot

The following objectives/locations to be considered for on the spot correction:

Objective 5: Emergency worker exposure control

Locations: West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Jackson Mon/Decon Center, Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge), LSU Reception/Care Center (Baton Rouge) Only if function takes place outside the EOC.

Objective 15: Implementation of Protective Actions-Special Population

Location: West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge)

Objective 16 Implementation of Protective Actions-Schools

Location: West Feliciana Parish, St. Francisville High School, and bus driver

Objective 17: Traffic and Access Control

Location: All traffic control points

Objective 18: Reception Center --Monitoring, Decontamination and Registration

Location: LSU

Objective 19: Congregate Care

Location: LSU.

Objective 22: Emergency Workers, Equipment, and Vehicles - Monitoring and Decontamination

Location: Jackson, LA Fire Department.

Objective 28: Relocation, Re-entry and Return - Decision making

Location: West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge)

Objective 29: Relocation, Re-entry and Return - Implementation

Location: West Feliciana Parish EOC (St. Francisville), East Feliciana Parish EOC (Jackson), Pointe Coupee Parish EOC, West Baton Rouge Parish EOC (Port Allen), East Baton Rouge Parish EOC (Baton Rouge)

Objective 30: Continuous, 24 - Hour Staffing

Location: Jackson Monitoring and Decon, LSU

GENERAL EXTENT-OF-PLAY (EOP)

1. With regard to last minute additions or changes to any previously approved Extent-of-Play, all suggested changes must be forwarded to the RAC Chair for approval.
2. The goal of all offsite response organizations (ORO) is to protect the health and safety of the public. This goal is achieved through the execution of appropriate plans and procedures. It is recognized that situations may arise that could limit the organizations in the exact execution of these plans and procedures.
3. In the event of an unanticipated situation, OROs are permitted to exercise flexibility in the implementation of their plans and procedures in order to successfully achieve the objective of protection of public health and safety and protection of the environment.
4. As a statement of fact, no ORO will deliberately deviate from its plans and procedures with the intent of avoiding responsibility.

APPENDIX 4

SCENARIO AND SEQUENCE OF EVENTS

The scenario has been prepared to test the effectiveness of the emergency response organization and functions of the RBS Emergency Plan, implementing procedures, facilities, and equipment. Some events that occur during this drill are unrealistic and may not be strictly in accordance with the design basis of the Facility.

The event is initiated by unidentified leakage in the Drywell to require a Notification of Unusual Event (NOUE) and will degrade to 200 gpm. When the Alert is declared after leakage exceeds 50 gpm, the emergency response facilities will be staffed. A Site Area Emergency (SAE) will be declared when it is determined that a SSE seismic event has occurred. The seismic event will further degrade the Recirculation system pipe leak to cause level to lower below the top of active fuel. Containment leakage will exceed design leakage because of a failed airlock penetration. A General Emergency will be declared due to fission product barrier potential and/or actual loss. The release will be a monitored release.

0800 Initial Conditions

- Plant operating at approximately 82% power. FWS-PIA is tagged out for seal replacement.
- Weather is 85 degrees F and clear with winds from 022 at 6 mph. $-T = -0.6$
- Div. I work week.
 - RHR A pump is drained and tagged out for a boroscopic examination of the heat exchanger. Rated flow cannot be achieved. Seven day LCO 3.5.1 and 3.6.2.3.
 - HVR-UC1A is tagged out for fan hub replacement. High vibration and hub cracking required the UC to be taken out of service. Seven day LCO 3.6.1.7.
- JRB-DRA1, 171' airlock inner door is inoperable because of seal failure, 5 hours into the LCO 3.6.1.2. The operable outer door is locked closed. Work is scheduled to start today with the STP to follow. No spare parts in the warehouse, new seals scheduled to arrive at the Baton Rouge airport at 0900. The 113' EL airlock is operable and being used for access.
- Both RWCU filter demins are to be backwashed and precoated today.

NOTE

*The times indicated in the timeline are approximate.
The time of scenario events may be affected by operator
response in the simulator or by the timeliness of
Emergency Response Facility activation and actions.*

0800 - 0805 Event 1 – NOUE Unidentified coolant leak in the Drywell >5 gpm

- A leakage alarm 601-19A-B05, DW AIR CLR DRN HI LEAKAGE FLOW (setpoint 4 gpm) will cue the operators of abnormal leakage rate. Additional alarm 601-19A-A05 will come in when leakage reaches 5 gpm. When requested, the leakage report will indicate unidentified leakage of greater than 5 gpm. A trouble alarm will come in when the second Drywell Floor Drain Sump Pump starts.
- The crew will respond in accordance with Tech. Spec. 3.4.5 and Alarm Response Procedures (ARP).

0830. Event 2 – ALERT Unidentified coolant leak in the Drywell >50 gpm

- The leak is IGSCC on the Recirc pump A suction line, downstream of MOVF023A at the weld on the RWCU line tap off.
- When the operator requests an updated leakage report, he/she will receive a report of unidentified leakage of 60 gpm. Drywell temperature and pressure will rise to cue the operators of the severity of the leak rate. A Drywell high differential pressure initiation signal of 1.68 will be received. A **scram** is initiated if the operators have not inserted a manual scram signal.

0830 – 0845 Declaration of an ALERT

- Within approximately 15 minutes of receiving the leakage report, the OSS will declare an **Alert** EAL 2 (Primary Coolant Leak Rate >50 gpm with Reactor Water Temperature >200 degrees F). EIP-2-001, *Classifications* will be used to determine declaration and EIP-2-002, *Classification Actions* will be implemented.
- Within approximately 15 minutes of the declaration and when directed by the OSS, the communicator will make ESP-Comm notifications and activate the applicable emergency response organization pagers in accordance with EIP-2-006, *Notifications*

0830 – 0930 Activation and Staffing of the Emergency Response Organization

- The emergency response facilities will become operational and the EOF and TSC will assume the Recovery Manager and Emergency Director functions. The TSC and then the EOF will assume notification function.
- The DW leakage rate will continue to rise. The containment isolation valves will auto isolate when a DW high differential pressure of 1.68 is received. After isolation, the sump will fill and a method to determine the severity of the leak is not available.
- After the auto start of LPCS on a DW initiation signal, a leak will develop at CSL-V26 in the pump room. The leak is downstream of the LPCS suction valve, E21-MOVF001. The only way to isolate the leak is to close E21-MOVF001. The operators will be cued by an alarm H13-P870/51A/G03 of an Aux Bldg sump high/low level. They will use the PMS computer CRT on P680 to determine that the leak is in the LPCS room. When the room level exceeds the max safe operating level of 4 inches above the cubicle floor, they will isolate the leak by closing E21-MOVF001 in accordance with EOP-3.
- Attempts to isolate the DW leak by closing B33-MOVF023A, Recirc A suction valve will not be successful using the switch on control panel P680.

1000 Event 3–SITE AREA EMERGENCY Seismic Event

The following alarms will come in:

- P680/02A/C06 Seismic Event High
- P680/02A/B06 Seismic Event High/High
- P680/02A/D06 Seismic Tape Recording System Start
- P680/02A/C07 Vibration Monitor Trouble
- P808/83A/F07 Loose Parts Monitoring System Trouble
- P808/83A/F08 Loose Parts Detected in Primary System
- OnPNL869 in the Control Room, ERS-NBI102 white indication. Recorders ERS-NBR2H, ERS-NBR2I, ERS-NBR2J, and ERS-NBR2K stops running about 10 seconds after the SEISMIC TRIGGER
- The instrument line for the outer seal on the Containment 171' airlock fails and the seals degrade. Containment leakage will exceed design leakage. The operators will be cued of the airlock seal failure by alarms on P863 and lowering containment pressure.
- The seismic event will cause a vibration on the Standby Gas Treatment Fan A and the fan manual inlet damper, GTS*DMP1A resulting in damage to the damper and ductwork. The damage is extensive enough to allow inleakage of the surrounding air, bypassing the filter train. In addition, the panel door on the charcoal unit fell off. This will create an unfiltered but monitored leakage pathway. The operators will be cued of the system misoperation by the alarm P863/73A/D05 on P863 or by field team report. Flow will initially drop to cause the alarm at <656 cfm and then will increase. The GTS-FLT1A Trouble alarm P863/73A/D02 will also come in to add a cue for

recognition. Both alarms will clear but the flow will remain high. Additionally, the door into the GTS A room had inadvertently been propped open at some time prior to the event without the Control Room's knowledge. During the event, torsional stress on the welds for the door hinge mounts will fail and the hinges will shear. The welds will completely fail and the door will fall off. The field team doing the post seismic event plant walkdown will report the condition of GTS to the control room.

- The event will cause an electrical transient on BYS-INV01B that will cause a momentary undervoltage on instrument bus VBN-PNL01B1. One of the UPS protection fuses, F1, in the inverter will blow and the static bypass switch operates to restore the inverter. The static switch will mis-operate such that the switch is not timely and will cause the momentary undervoltage. This will cause a transient on the Feedwater Level Control System (Feed Reg valves fail as is).
- Any running Feedwater pumps trip, attempts to restart will not be successful. The discharge MOVs will not open. FWS-MOV109 will not open.
- Air inleakage into Aux Bldg will occur through the 171' EL door to the building roof. GTS will maintain building design post accident pressure as long as GTS is running but if GTS is secured, a leakage path will exist out the roof door.
- The event will cause penetration seal stress failure at several drywell penetrations causing drywell bypass leakage into containment, bypassing the suppression pool. A lowering Drywell pressure and rising Containment radiation level will cue the operators.
- A loss of EJS-SWG2B will occur, power will be lost to the following major equipment:
 - a. Various Div II MCCs / MOVs including RHR B and C. RHR B and C may be running with flowpath through the minimum flow valve if operators did not secure the system after an initiation signal on DW pressure. RHR B may be operating in the Suppression Pool Cooling alignment.
 - b. Containment Unit Coolers HVR-UC1B & 1C. Since UC1A is tagged out as an initial condition, no unit coolers are available for accident mitigation. Other methods for Containment pressure and temperature control are Suppression Pool Cooling and the Hydrogen Purge System. If required, RHR B may be aligned to Suppression Pool Cooling by manually opening E12-MOVF024 and closing E12-MOVF064 and E12-MOVF048. Temperature and pressure control will be pursued as directed by EOP-2.
 - c. Drywell unit coolers DRS-UC1B, 1D, and 1F. 3 unit coolers (A, C, & E) will be available
 - d. Div II Annulus Mixing Fan and Standby Gas Treatment Fan. Div I components should be operating in the emergency mode.
 - e. EHS-MCC15B, Diesel Generator Room B 480V MCC. Div II D/G should be operating unloaded in the emergency start mode. The fuel oil transfer pump will lose power. The D/G will trip and coast down when it runs out of fuel in the day tank unless operators anticipate equipment response and take actions to mitigate the event.
 - f. IHS-CHGR1D. The backup charger may be considered to restore IHS
 - g. SLC pump B
- HPCS pump will trip if running.

- RCIC, SLC A and CRD are available for injection.
- Area radiation levels in the Auxiliary Building and the plant effluent monitor will begin to rise.
- A walkdown of plant areas should be conducted to assess the impact of the seismic event.
- The Emergency Director will declare a **Site Area Emergency**, EAL 13, Severe Natural Event near site being experienced or projected with plant not in cold shutdown, in accordance with EIP-2-001.
- The Emergency Director will direct an owner controlled area evacuation and security will determine accountability per EIP-2-018. Demonstration of the evacuation and accountability will be simulated.
- The Recovery Manager will direct the communicator to notify the State and local agencies in accordance with EIP-2-006.

1045 Event 4 – GENERAL EMERGENCY Challenge to Fuel Clad Barrier
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- The crack will propagate on the Recirc A suction pipe such that level cannot be maintained above –162” (TAF).

NOTE

The Emergency Director may determine conditions for a General Emergency are imminent before they exist and declare a General Emergency EAL 2, IC 5.

1045 – 1100 Loss of 2 of 3 fission products with a potential loss of the third General Emergency

- Level will continue to lower to below the top of active fuel, the LOCA has not been isolated, and containment is challenged because of loss of cooling capability and bypass leakage through the airlock.
- The Emergency Director will declare a General Emergency.
- The Recovery Manager will make the Minimum Protective Action Recommendation to evacuate the 2-mile radius, evacuate 5 miles downwind, shelter the 10-mile radius, and evacuate schools, institutions and recreation areas in the 5-mile radius.

1200 CHANGE IN PAR

- A wind shift will occur from 022 to 005 such that PARs must be re-evaluated.

- The Recovery Manager may recommend evacuation of 5 mile radius and shelter the 10 mile radius (Scenario #12) in accordance with EIP-2-007, *Protective Action Recommendation Guidelines*.

1100 (or after level below TAF/GE declared) to 1300 – Equipment Restoration and Recovery

- Fuel Clad Barrier: Injection by Condensate, HPCS and LPCI B/C will be restored by the manual operation of MOVs. Level will start to increase. Level will be restored above TAF.
- RPV Barrier: If dispatched, the team in the field will drive B33-MOVF023A closed at the breaker. The RPV leak will be isolated.
- Containment Barrier: The instrument air for the 171' airlock may be repaired at approximately 1200 or later if teams have been dispatched.
- Unfiltered Release: EJS-SWG2B and SGTS B will be restored.

NOTE

Restoration event times dependent on scenario progression and TSC/OSC corrective action.

EQUIPMENT RESTORATION: See the Supplemental Scenarios. Equipment may be restored as the teams are dispatched if repairs have been simulated as specified in Supplemental Scenarios. A general summary of equipment restoration is indicated below.

1. FWS-P1A Initial condition, will not be restored Supplemental Scenario #1
2. HVR-UC1A Initial condition, will not be restored Supplemental Scenario #2
3. RHR pump A Initial condition, will not be restored Supplemental Scenario #3
4. B33-MOVF023A / F067A fail to close Attempts should be made to drive the valve closed at the switchgear NHS-MCC2A cubicle 1D / 5D. May be successful after level lowered to <TAF (-162") and GE declared. Supplemental Scenarios #10
5. LPCS / CSL-V26 The leak on CSL-V26 may be isolated by closing E21-MOVF001.

This will require the Line Fill pump to be secured and the system will have to be filled and vented if restored. The LPCS pump should be racked out when the suction MOV is closed to prevent a start without a suction path. After the appropriate repairs are simulated, V26 may be restored. After the simulation of the fill and vent, the LPCS system may be restored. All CSL-V26 repairs will be simulated in a C-Zone. Supplemental Scenario #5

6. EJS-SWG2B The failure mechanism for the EJS switchgear will take 3 to 4 hours repair time. The switchgear may be restored after a General Emergency has been declared and the repair and corrective actions have been simulated. Supplemental Scenario #4
7. BYS-INV01B (If pursued) Restored after repairs of blown fuse F1 and the inverter restored to normal lineup. The inverter will remain powered from the static switch if no actions are taken. This should not be pursued or if it is, should be low priority. Supplemental Scenario #6
8. JRB-DRA1, 171 airlock The air supply to the outboard seals may be repaired however high radiological conditions will delay the timeliness of corrective action. Repairs will not be successful until approximately 1200. Supplemental Scenario #12
9. Fill and vent of LPCS After simulation completed as indicated in the Supplemental Scenario. Supplemental Scenario #7
10. FWS-MOVF109 The MOV cannot be opened using the switch on the control panel. Simulation of manually opening the valve will be successful. Opening of the valve should not be pursued or required until after the LOCA and a General Emergency is declared. The valve will be difficult to open because of the dp across it with the Condensate pumps running. Supplemental Scenario #11
11. HPCS pump breaker The breaker relays may be reset and the HPCS pump restored after simulation of activities. Supplemental Scenario #14
12. Manual opening of E12-MOVF053B The MOV cannot be opened using the switch on the control panel because of a loss of power. Simulation of manually opening the valve will be successful. Opening of the valve should not be pursued or required until after the LOCA and a General Emergency is declared. E12-MOVF042B is in the Containment and is not accessible. Supplemental Scenario #9b

13. Manual opening of E12-MOVF042C The MOV cannot be opened using the switch on the control panel because of a loss of power. Simulation of manually opening the valve will be not successful. Opening of the valve should not be pursued or required until after the LOCA and a General Emergency is declared. Supplemental Scenario #9a

1330 Dose rates beyond the site boundary are near background.

<p>1400 [Approximately] The exercise will be terminated</p>

The RBS portion of the exercise will be terminated after it is determined that the objectives have been demonstrated. State and Local government activity may continue at the parish EOC as applicable for completion of some objectives.

Meteorological Data:

Initial conditions for scenario start:

- National Weather Service Report: Weather is sunny, 85 degrees F and clear with winds from 022 at 6 mph.
- Bulletin – none

The wind will shift from direction 022 to direction 005 to require re-evaluation of PARS.

Operating Experience

Limerick 1 LER 352-96006, Unidentified Leakage in Drywell Results in Plant Shutdown and Unusual Event.

Darlington 2 ENR-D-1999-00451, Potential Unavailability of Safety Related Systems Due to Steam Protection Door Failed Open

Duane Arnold 1, LER 331-99001, One Train of Standby Gas Treatment Inoperable Due to the Loss of Seismic Qualification

Pilgrim 1 LER 293-98008, Control Room High Efficiency Air Filtration System Seismic Class I Ductwork was found supported by Class II Ductwork

Oyster Creek 1, LER 219-97013, Secondary Containment Ductwork May Not Meet the Seismic Design Basis

Millstone 1, LER 245-95029, RWCU Weld Indications Greater than ASME Allowable Indications for an Operable Weld

Darlington, ENR-D-1998-01555, Earthquake in Ohio – Slight Vibrations Felt at Darlington

Gentilly 2, OER G2- 97-83, Earthquake with No Noticeable Consequences

Diablo Canyon, 1/17/92, Earthquake Causes Ground Motion in Control Room. An Unusual Event Declared.

San Onofre, OE 6405, 6.6 Seismic Event

Cooper, 3/30/93, Low Magnitude Earthquake at Reactor Site with No Damage to Plant Equipment. Unusual Event Declared

San Onofre, 6/28/92, Seismic Ground Motion Measured at 0.038g was Felt as a Result of Earthquake in Landers, CA, 100 miles from the plant.

APPENDIX 5

AREAS RECOMMENDED FOR IMPROVEMENT AND PLANNING ISSUES

AREAS RECOMMENDED FOR IMPROVEMENT:

Description: LOEP produced four news releases. These were drafted and approved at the State EOC and faxed to the JIC for distribution. However the LOEP spokesperson in the JIC did not distribute the news releases to the JIC or the media. In addition the Governor's Proclamation of a State of Emergency, received at 10:56 a.m., was never distributed throughout the JIC or to the parishes.

Recommendation: Review SOPs/Check Lists to insure that the State news releases and the Governor's Proclamation of State of Emergency are distributed quickly to all appropriate locations in the JIC and to all parishes.

Description: Rumor Control phone numbers need to be consistently published in all News Releases and EAS messages.

Recommendation: Review procedures to insure that the required information is consistent in all news releases and EAS messages.

Description: The media role players asked some questions of the utility and State spokespersons but did not challenge the local spokespersons to provide details about protective actions or danger to the public. The exercise would have more training value for the parish spokespersons if the media role players asked them more and sharper questions. One way to achieve this might be to obtain participation of local media staff or journalism students.

Recommendation: Increase number and prepare more challenging media questions for local spokespersons during media briefings.

Description: At the Warning Point, confusion existed with the Standard Operating Procedure (SOP) that is unclear on what to do with messages received over the digital printer. Procedures state transfer and forwarded which need to be clarified and specific.

Recommendation: Update the SOP to reflect that all messages be re-transmitted directly to the EOC or establish that the utility transmit directly to both the Warning Point and the EOC at the same time. This would also prevent any error in communication to the EOC.

Description: Confusion exists as to which monitoring equipment is required by each team or EW. Additionally, the current practice is to centrally locate all dosimeter chargers within the EOC.

Recommendation: Update the RO's Checklist on what teams will receive what equipment. An updated inventory should be maintained by the RO of all radiological equipment on hand. The Fire Chief and Sheriff should each maintain one charger for easy access in the field.

PLANNING ISSUES:

1. Oral presentation of information to the media could have been delivered in a more planned and integrated manner. Each spokesperson was given the opportunity to individually address the media during the briefings. There was very limited coordination between the spokespersons prior to each briefing. A short meeting of all spokespersons should be held to rehearse and discuss the upcoming briefing. In particular, the presentation of critical emergency information should be carefully planned and strategized. Procedures should be clear to the evaluators that the strategy changes and emphasis shifts from EOI to the parishes from the early news conferences to the latter ones. Technical information was not clearly presented and questions from the mock media were not specifically answered.
2. The Public Information Brochure, which is distributed throughout the EPZ by RBS, lists incorrect phone numbers on page 4 for both East Feliciana and West Baton Rouge Parishes. These numbers should be corrected before the next printing. FEMA will review the PIB before printing if a draft is submitted to the Regional office.
3. EBRP OEP and procedures need to be rewritten to indicate specific agency responsibilities, including the Reception Center Manager, Social/Crisis Counselors, and medical personnel on the Health Unit position. Also, another functional area needs to be added to the RC with the responsibility to address crisis management and child care issues. NUREG 0654, J.10.h., requires that these functions are to be available in an RC and/or CCC. This functional area would require someone who is specially trained and possibly has a degree in social work.
4. The East Baton Rouge Parish Emergency Operations Plan (EBRP EOP) for Reception Centers is lacking detailed information. The EBRP EOP does not designate which Parish agency is responsible for the Reception Center Manager position. Additionally, each of the positions should have a position listing that includes the type of person needed. For example, the Health Unit position (table) has the responsibility to "coordinate the required medical services, ensure adequate sanitary conditions, and assist Council on Aging with the elderly, disabled or others with special needs." EBRP only manned the position with a qualified Sanitarian. This was discussed in detail with the Louisiana Department of Public Health (DPH) medical staff that showed up inadvertently. They were told to initially report to the Riverside Centroplex, and because the facility was not scheduled to be open, they were reassigned to the LSU Field House. According to the medical team, "This Health Unit functional area includes medical responsibilities and; therefore, should have a medical doctor and registered nurse as part of the manning roster." Additionally, and according to the DPH medical staff, "The position should be moved so that it can act as a triage at the entrance of the facility." This location would allow evacuees with medical conditions to be properly diagnosed and guided through the RC.
5. A list of the dosimetry kit contents should be included in the Jackson Fire Department procedures.

APPENDIX 6

EAS STATION OBSERVATIONS

RADIO STATION WJBO

On June 7, 2000 at 8:30 a.m. the FEMA evaluator, a controller from the Louisiana Office of Emergency Preparedness (LOEP), and several staff members of am-fm Communications Inc., (formally Gulfstar Communications) met at the radio studio in Baton Rouge.

Back-up generators and UPS (uninterruptible power supplies) are in service at the studio and each transmitter location. The studio is located several miles from the actual transmitter sites. Microwave systems are utilized as primary links with leased line phone or secondary microwave back-up. If all links fail or the station must be evacuated, the WJBO transmitter can be operated from a hardened site, outside the 10-mile EPZ.

The simulated emergency broadcast started at 11:00 a.m. with a message from LOEP on the dedicated fax line. The incoming fax was not legible. The fax authenticity was confirmed on the dedicated phone line. The pre-scripted scenario (7) was recorded in English and transmitted on the EAS at 11:10 a.m. It is difficult to get all the required information in two minutes. The second message (scenario 6) was received at 12:45 p.m. and broadcast at 12:50 p.m. All messages were documented and rescheduled for broadcast every 15 minutes. The operator selected the stations to be activated. For this exercise six transmitters were simulated: WFMF, WYNK-FM, WYNK-AM, WSKR, KRVE, and WJBO.

Areas of Concern:

The restrictions of the EAS system require messages to be limited to two minutes recording time. This delays and interrupts any messages of more than two minutes by a multiple of two (i.e., a 3 minute message requires 6 minutes, a 5 minute message requires 10 minutes, etc.). It is difficult, if not impossible, to get all the required information in two minutes. During this exercise the interruption occurred and valuable information was still not given (i.e., the nature of the emergency and rumor control numbers).

The incoming fax was not legible. The fax machine should be repaired or replaced as soon as possible. Even though back-up copies of the canned messages are available at the radio studio, LOEP would be unable to send modifications or special instructions.