Federal Emergency Management Agency

Washington, D.C. 20472

29 MAR 1982

MEMORANDUM FOR: Brian Grimes, Director
Division of Emergency Preparedness
U.S. Nuclear Regulatory Commission

FROM: Richard W. Krimm
Assistant Associate Director
Office of Natural and Technological Hazards

SUBJECT: Supplemental Interim Findings on Offsite Emergency Preparedness at the Grand Gulf Nuclear Power Station

This office furnished an "Interim Findings" on offsite emergency preparedness for the Grand Gulf Commercial Nuclear Power Station on November 23, 1981. Subsequently, this office has been furnished additional information from FEMA Regions IV and VI. The purpose of this memorandum is to transmit this supplemental information to the NRC for your use when the NRC Commissioners meet regarding licensing which is scheduled for April 23, 1982. The following information is attached:

1. Memo entitled "Mississippi Site-Specific Radiological Emergency Plan and Preparedness for the Grand Gulf Nuclear Power Station" from Regional Director, Region IV to the Associate Director for State and Local Programs and Support, dated March 5, 1982.

2. "Evaluation of Mississippi Site-Specific Radiological Emergency Response Plan for the Grand Gulf Nuclear Power Station" by Major P. May, Regional Director, FEMA Region IV dated March 5, 1982.

3. Letter from RAC IV Chairman to Director, Mississippi Emergency Management Agency dated November 13, 1981, listing deficiencies noted at November 4-5, 1981 exercise.

4. "Exercise Critique" prepared by the State of Mississippi responding to the deficiency memo of November 13, 1981.

5. "Interim Findings" from FEMA Region VI to Associate Director, State and Local Programs and Support" dated March 18, 1982, with three attachments.

The supplemental information reinforces FEMA's position on the status of offsite emergency preparedness at the Grand Gulf facilities. The Region IV Director states "...I concur with the conclusions of State Officials that the level of radiological emergency preparedness in Mississippi is adequate to protect the health and safety of Mississippi citizens."

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The Region VI evaluation states "Generally, the Louisiana Radiological Emergency Preparedness Plans meet the criteria of NUREG-0654. Implementing procedures need to be incorporated. Most have been developed and have been reviewed by FEMA Region VI. The State of Louisiana demonstrated quite satisfactorily the capability and resources necessary to respond to an accident/incident at the Grand Gulf facility."

The deficiencies in the Mississippi exercise have been corrected or are being corrected. The only outstanding deficiency is the lack of agreements between various parties. The State has indicated that these agreements will be completed and furnished to FEMA Region IV in May 1982.

The State of Louisiana has not provided a firm date for completion of corrections; however, the State has advised FEMA Region VI that they will have all off-site planning complete and ready for final approval prior to or by the time it is needed by the Grand Gulf Nuclear Station Utility Company.

Although the "Alert and Notification" system is in place, the adequacy of the system must be verified in accordance with NUREG 0654/FEMA REP-1.

If I can be of any further assistance on this matter, please contact me or Vern Adler at 287-0200.

Attachments
As Stated

Federal Emergency Management Agency

Region IV 1375 Peachtree Street, NE Atlanta, Georgia 30309

March 5, 1982

MEMORANDUM FOR: ASSOCIATE DIRECTOR FOR STATE AND LOCAL PROGRAMS AND SUPPORT

FROM: Major P. May
Regional Director

SUBJECT: Mississippi Site-Specific Radiological Emergency Plan and Preparedness for the Grand Gulf Nuclear Power Station

In accordance with the provisions of 44 CFR 350 I am forwarding the subject plan for FEMA National Office review and approval. Attached are my evaluation of the November 4-5, 1981 site-specific plans; the exercise of plans; and, the overall adequacy of the state and local preparedness program as stipulated in NUREG 0654/FEMA -REP-1 Rev.1.

As Regional Director FEMA Region IV, I concur with the conclusions of State Officials that the level of radiological emergency preparedness in Mississippi is adequate to protect the health and safety of Mississippi citizens. This indication was provided in the general state plan submittal letter dated May 22, 1981.

It is my opinion that Mississippi has done an excellent job in the development of the Radiological Emergency Response Plan for Plant Grand Gulf. The requirements of the proposed FEMA rule, 44 CFR 350, titled, "Review and Approval of State and Local Radiological Emergency Plans and Preparedness," have been largely met, and deficiencies noted by the exercises have been or are currently being corrected by the State planning and emergency response staff which includes persons with expertise from the State Division of Radiological Health and from the Mississippi Emergency Management Agency.

The only significant deficiency that remains is listed in the RAC chairman's deficiencies letter of June, 3, 1981, under criteria Item A-3 of NUREG-0654; the RAC comment states that "only a list of agreements is provided." Mr. Jim Maher today has informed my staff that these agreements will be completed and sent to this office during the month of May 1982.

I am certain that Governor Winter will appreciate being apprised of the results of the FEMA National Office review.

Attachments

ATTACHMENT 1

Federal Emergency Management Agency
Region IV 1375 Peachtree Street, NE Atlanta, Georgia 30309

NOV 13 1981

Mr. James E. Maher
Director
Mississippi Emergency Management Agency
P. O. Box 4501, Fondren Station
Jackson, Mississippi 39216

Dear Mr. Maher:

Enclosed is a list of deficiencies noted in the Plant Grand Gulf REP Exercise conducted on November 4-5, 1981. These deficiencies were observed by the Regional Assistance Committee and FEMA IV Staff.

We are aware corrections are currently being made in the Plant Grand Gulf State and Site-Specific Plans as a result of the Exercise and participant Critique conducted on November 5, 1981. Thus, at the earliest convenience, please provide the FEMA IV Regional Director with a report on how and when the noted deficiencies will be corrected. Upon receipt of this report, the process of plan review and acceptance may proceed.

We compliment Mississippi for the excellent Radiological Emergency Preparedness effort and assure you that RAC IV and FEMA IV Staff remain committed to future support of REP activities in your State.

Sincerely,

/S/[illegible]

Jack D. Richardson
Chairman, RAC IV

Enclosure

cc:
RAC IV Members ✓

Attachment 3

DEFICIENCIES NOTED

IN THE

GRAND GULF NUCLEAR STATION EXERCISE

CONDUCTED AT

PORT GIBSON, MISSISSIPPI

NOVEMBER 4-5, 1981

DEFICIENCIES NOTED IN THE GRAND GULF NUCLEAR STATION EXERCISE

(1) Notification and Alerting of Officials and Staff

The receipt and dissemination of the notification of an "unusual event" during MEMA day-to-day operations appeared to be confusing. A review and possible improvement of current procedure are warranted.

(2) Notification and Alerting of the Public

The alerting and notification system (sirens and emergency broadcast system) was activated. Observers within the ten mile EPZ (Claiborne County) were not in a position to hear the sirens. Instructions to the public via EBS were not clearly understood.

The alerting and notification system must be tested for acceptance at a later date.

(3) External Communications Capability Between Sites

Communications capability between sites was considered to be good. Some equipment had been recently installed. Additional checking is needed to assure quality and uniform reception at all stations on the utility loop.

(4) Emergency Operations Center (EOC) Facility

The State EOC is considered to be good for this type of response operation. Lay-out of the EOC could be improved by not placing the moveable display in front of communications center glass window.

(5) EOC Internal Communications and Displays

Displayed information on status boards/displays was behind in currency up to 30 minutes at times. There were no EOC briefings during the "unusual event" or "alert" status. Message form use and distribution were unclear among some participants.

(6) Adequacy of Staffing

We would recommend a review of radiological health staffing for sustained accident assessment operations over a protracted period of time.

(7) Facility Access Control/Security

No deficiencies noted.

(8) Support by Responsible Elected or Appointed Officials

No deficiencies noted.

(9) Direction and Control

Specific actions during the "Site-Area Emergency" were taken according to Plan/SOP's. However, the EOC Staff present at the time was not briefed.

(10) Coordination (Between Officials, Agencies, Federal Agencies, etc.)

Coordination on downgrade action (General Emergency to Site-Area Emergency) is questioned. This should have been challenged by State Officials because of the off-site conditions at the time the change in status was made by the utility. During the exercise the utility operator downgraded the emergency classification from a general emergency to a site area emergency at which time the State issued a press release to this effect. Twelve minutes later the utility operator upgraded the event to a general emergency on the basis of postulated above background radiation levels off-site. The State was aware of these levels by virtue of monitoring teams in the field and should have questioned the initial decision to downgrade the event. We recommend the State and Utility Operator develop a coordinated procedure which requires all situations both on on-site and off-site have been stabilized and agree that the event should be downgraded.

(11) Emergency Plans

EOC staff utilization of plans/SOP's during the exercise was not evident. We would encourage more emergency operations staff utilization of the plan as a reference. EOC SOP's should be reviewed and referred to.

(12) Public Information

The State Public Information staff should be expanded. Two people will be insufficient during an actual emergency. We would recommend a re-review and possible re-write of the public information parts of the plans to ensure State, county, and utility organizations are in concert on all public information activities. Some of the factors which should be considered in this effort are:

- Release of information from a single source. The Emergency News Media Center (ENMC) in Port Gibson should be the primary source of news bulletins and locations of press conferences. This applies to both on and off-site information; therefore, we recommend the ENMC be co-manned by State, Utility and Local Government Public Information Staff.

- Utilization of the full spectrum of public information resources available (EBS, newspapers, television, wire services, outreach, etc.)

- Refresher training/meetings with EBS primary and secondary radio stations to include information on how to authenticate the caller.

- More frequent formal press conferences at the ENMC utilizing the "panel of experts" technique during a fast-breaking situation. Specific time windows should be given to media for interviews with the experts following each press conference.

- Heavier emphasis on public information activities in future exercises to include controlled inputs requiring public information staff action (media visits, inaccurate media coverage incidents, requests for interviews, photography requests, etc.) specific attention to public information activity during reentry and recovery operations should also be addressed.

- Public information plans and procedures should be developed to accommodate the possible influx of national and international media organizations (press kits for non-local media would be required).

- Congressional interest and response will be a key public information requirement should an accident occur.

- Calls from concerned citizens should be referred to the public information staff. This will ensure uniformity and consistency in release of information and free up operations staff to carry out emergency functions and responsibilities.

(13) Accident Assessment (monitoring, report projecting, coordination)

The State should give consideration to requesting that MP&L dispatch a knowledgeable technical person to the State EOC. This would improve the communications flow as well as permit the State to fully grasp the severity of on-site conditions.

Although communications hardware systems between the State EOC and Grand Gulf Nuclear Station were adequate, the State experienced difficulty in obtaining technical data from the GGNS. Consequently the State's ability to perform any independent assessment of the incident was hampered. In general, the information flow from the GGNS was consistently 30 to 45 minutes late.

We recommend State and GGNS officials evaluate this deficiency and coordinate an effective solution to ensure the communication flow is timely and accurate.

(14) Protective Actions (Evacuation, Shelter, Reception and Care)

The Utica Junior College Shelter Manager had to drive from Jackson and was not available until three hours after the decision was made to activate the Shelter. Separation of contaminated and non-contaminated shelter evacuees poses a procedural problem which should be reviewed.

Some confusion on evacuation orders was apparent, i.e., evacuate to two miles and shelter out to five miles (Mississippi) vs. evacuate out to five miles (Louisiana).

The announced sectors (operational maps) to be evacuated are not compatible with the areas designated on the brochure distributed by MP&L. This situation should be examined for immediate correction.

(15) Exposure Control (Access and Traffic Control, Use of KI, Recording Dose

No decontamination stations were observed to be set up with decontamination materials (i.e., water hoses, etc.).

Personnel monitoring observed inside EOC. This activity should have taken place outside.

It was not clear at the Claiborne County EOC whether the reported exposure rates were monitored or calculated.

Dosimeters were issued to county emergency workers. However, no dose records or record keeping was observed.

Dosimeters were not evident among shelter management, decontamination staff and public health nurses.

The dosimeters that were distributed were high range (0-200 R), CDV 138's were available and should have been utilized.

Some traffic control personnel (State, County, City) were not issued dosimeters.

(16) Adequacy of Scenario to Test State and Local Plans

The scenario did not call for iodine release. This precluded any use of KI or the decision making process associated with distribution of KI.

The short period of time between the site area emergency and general emergency, as provided for in the scenario, appeared to observers to be unrealistic as compared to the extended time period during the unusual event and the alert phase. For exercising purposes and maximum utilization of time, it appears the majority of exercise time should be spent in the site area emergency or general emergency phase. It is in these phases when most off-site conditions would occur.

(18) Benefit of Exercise to Participants

No deficiencies noted.

(19) Capability of Observed Jurisdictions to Execute REP Plans to Protect the Public

While definite improvements are needed and specific lessons were learned, Mississippi and Claiborne County are capable of executing Site-Specific Plans for the protection of the public in the event of an accident at Grand Gulf Nuclear Station which may have off-site consequences.

EXERCISE CRITIQUE

1. The SOP for the State EOC is being changed to reflect the difference in the notification process for regular office hours and off duty hours.

2. The existing siren system was designed in accordance with NUREG 0654, appendix 3 and FEMA CPG 1-17. Additional sirens are planned for installation and the system is still subject to acceptance testing and approval. System characteristics are described in the enclosed document Siren Alerting System, Grand Gulf Nuclear Power Station.

   The Emergency Public Information component of the plan is being revised and any procedural problems in the EBS will be corrected.

3. The telephone company had installed equipment other than that requested. This equipment is being replaced. Also, appropriate changes have been made in the communications diagram found in appendix C-1 (page C-1-1).

4. We will consider this comment for possible change in the SOP for the State EOC.

5. We do not dispute the 30 minutes delay in updating the status boards/displays; however, they were being updated as expeditiously as information was received. There may have been one occasion when some information, not all, was lacking or not changed.

   The people in the EOC during "unusual event" are MEMA staff and they should know the situation and, therefore, need no briefing.

   During "alert" the only additional staff in the EOC would be the Radiological Emergency Response Coordinator who would be in constant contact with the plant and would thus be aware of the emergency status.

   The message routing system is being revised and additional training of staff will be conducted.

6. The radiological health staff is capable of maintaining operations for 24-48 hours. Additional state personnel are being trained in accident assessment and will be available for support. Additional assistance from the radiological health programs in other states and/or the federal government would be requested if needed.

9. Agreed. Individuals will be briefed as they arrive at the EOC and periodic briefings will be held thereafter.

10. The change in emergency action level was challenged by the state radiological health staff and was noted by the NRC and EPA representatives in the EOC and discussed with them at the time of occurrence. Prior to the arrival of the field response teams in the affected areas, MP&L was requested to re-check the numbers provided by their field teams. It has been requested of MP&L to coordinate with the state radiological health staff prior to downgrading an emergency classification affecting off-site areas.

ATTACHMENT 4

11. Plans and SOP's were available during the exercise for reference as needed. Because of both group and individual training sessions were held prior to the exercise, the need to use these documents seldom arose.

12. MEMA staff will be augmented by public information personnel from the Governor's Office, Board of Health, National Guard, Welfare Department, and other state agencies as needed.

Plans are being revised to call for the activation of Emergency News Media Center (ENMC) in Port Gibson at the site area emergency action level. Procedures for the use of this facility are being developed in cooperation with the licensee and local government.

A message authentication matrix is in existence and is distributed monthly to the National Weather Service, Highway Patrol, Nuclear Plant Manager, and the primary EBS station. A copy of this matrix is enclosed for reference.

The existing press kit is being reviewed and some changes may be made. Kits will be available for distribution to media representatives.

The use of the Governor's action line as a source of public information and rumor control is being investigated. The action line staff would be furnished with all public information being released from the ENMC in Port Gibson in order to ensure the coordinaton of information.

The emergency public information component of the plan is being revised to account for the deficiencies discovered as a result of the exercise.

13. The deficiencies noted regarding accident assessment have been discussed among the agencies involved and it was agreed that a more timely information flow from the plant to off-site agencies is necessary. The licensee has stated that the delays will be corrected and that all necessary technical information will be supplied according to the reporting format specified in the plans.

14. Although the shelter manager was not available until approximately 3 hours after the decision was made to activate the shelters, seven workers had arrived and started operations prior to the arrival of any evacuees.

The scenario dictated the difference in the decisions to evacuate out to two miles and shelter out to five miles (Mississippi) as opposed to evacuate out to five miles (Louisiana). This was done in order to allow both states to respond to the requirements of the regulations.

Public evacuation information will be in terms of the evacuation areas printed on the information brochure. Sectors will be used for internal operations only and a dual purpose map showing sectors and areas will be available in the EOF and the state and local EOC's.

15. Although the county fire station had been designated as the primary decontamination station, this information was not disseminated to all participants.

Personnel had been monitored at the roadblocks and no further monitoring was necessary but was conducted in order to display the local capability. If necessary, future monitoring will be conducted in the Superintendent of Education office adjacent to the local EOC.

Exposure rates were monitored and calculated by state personnel and this information was furnished to local officials. Individual dosimeters were issued to all emergency workers and to a representative sample of personnel in the shelters and local EOC. In almost all cases dose records were maintained and any deficiencies have been corrected.

16. Although the scenario did not call for the release of iodine, KI was available for distribution to emergency workers.

Real time experience will be considered or as a future alternative with the unusual event and alert stages being compressed and the site area and general emergency stages expanded.

Federal Emergency Management Agency

Region VI Federal Center Denton, Texas 76201

March 18, 1982

MEMORANDUM FOR: ASSOCIATE DIRECTOR, STATE AND LOCAL PROGRAMS AND SUPPORT

ATTN: Vern Adler, Technological Hazards Division

FROM: R. Dell Greer, Acting Chief
Natural and Technological Hazards Division

SUBJECT: Interim Findings

SITE: Grand Gulf Nuclear Generating Station

STATE: Louisiana

BASIS FOR FINDINGS: 44 CFR Part 350 All-Agency Exercise of 11/4-5/81

Plans as follow:

(1) Annex J. Appendix 7 to Louisiana Preparedness Plan for Emergency Operations, (State of Louisiana Peacetime Radiological Response Plan, Revision 3, September 1981)

(2) Attachment 2 and Tensas Parish REP Plan.

INTRODUCTION

Site and Area Description

The Grand Gulf Nuclear Station is located in Claiborne County, Mississippi. The site is approximately 1 mile east of the Mississippi River, 25 miles south of Vicksburg, Mississippi and 37 miles north-northeast of Natchez, Mississippi and lies directly across the Mississippi River from Tensas Parish, Louisiana, about 10 miles from Newellton and about 12 miles from St. Joseph, Louisiana

Principal planning organizations

The Louisiana Nuclear Energy Division, Office of Environmental Affairs, Department of Natural Resources is the Office of Primary Responsibility both for planning for and responding to accidents/incidents at fixed nuclear generating facilities at the State level. The Tensas Parish Office of Emergency Preparedness is responsible for the REP planning at the local level, assisted by the Louisiana Nuclear Energy Division. Tensas Parish is the only Parish in the State of Louisiana falling within the 10 mile Emergency Planning Zone of the subject facility.

ATTACHMENT 5

Materials available for examination/status of planning

All plans referenced have been formally submitted to FEMA Region VI by the State of Louisiana, reviewed and evaluated by the FEMA Region VI Regional Assistance Committee and comments relative to the plans forwarded to the State for their consideration and incorporation. All plans referenced have been exercised in accordance with 44 CFR Part 350 and evaluated by the FEMA Region VI Regional Assistance Committee and comments regarding the capability to implement the referenced plans forwarded to the State of Louisiana for their considerations (with the exception of the warning and notification system).

EVALUATION

Attachment 1 is a consolidated synopsis of RAC comments of the Louisiana Peacetime Radiological Response Plan (the State Plan) using NUREG-0654, FEMA-REP-1 as the standard criteria. A full evaluation of each element indicating how the plan meets the criteria as well as how it might be strengthened is available upon request from FEMA Region 6.

Attachment 2 is a consolidated synopsis of RAC comments of the Attachment 2, Tensas Parish plan, using NUREG-0654, FEMA-REP-1 as the criteria for evaluation. Again, this report lists only those planning areas in which the local plan could be strengthened by corrections and or additions. A full evaluation including both comments as to how the plan meets the criteria as well as deficiencies may be requested from FEMA Region 6.

Attachment 3 is a copy of the observations noted in the Grand Gulf Nuclear Station Exercise of November 4 and 5, 1981.

SCHEDULE OF CORRECTIONS

The State of Louisiana has chosen not to assign a firm date for completion of corrections; however, it is the intent of the State to have all off-site planning complete and ready for final approval prior to or by the time it is needed by the Grand Gulf Nuclear Station Utility Company.

Generally, the Louisiana Radiological Emergency Preparedness Plans meet the criteria of NUREG-0654. Implementing procedures need to be incorporated. Most have been developed and have been reviewed by FEMA 6. The State of Louisiana demonstrated quite satisfactorily the capability and resources necessary to respond to an accident/incident at the Grand Gulf facility.

Attachments

CONSOLIDATED SYNOPSIS OF RAC COMMENTS

LOUISIANA PEACETIME RADIOLOGICAL RESPONSE PLAN

GENERAL COMMENTS

The Table of Contents of the State Plan should be expanded to show the various tables, tabs, and enclosures to tabs. This is important, as much of the important information is in these places and is difficult to locate. This is especially critical with Chapters 8 and 9.

State Plan contains both pg. 5-1 as well as its revision, pg. 5-1.

A. ASSIGNMENT OF RESPONSIBILITY

1.e. Twenty-four hour per day emergency response capability, including manning of communications.

Page 3-2 indicates at the state level, LNED will provide coverage of the dedicated land-line telephone during normal office hours and the Louisiana State Police will provide coverage through an extension at other hours (as indicated during RAC meeting, a plan change is required since OEP has been added).

2.a. Functions and responsibility both primary and support.

Many functional assignments are made to organizational entities rather than to individuals by title as specified (e.g., in Section 7, III. A-D and V. D-F, etc.).

Section VI. A. 3. assigns responsibility to each "State Department" (again, not to an individual) to designate an individual, by title to be in charge of remergency response. This step should be accomplished in the Plan rather than given as a responsibility to be accomplished.

3. Written agreements as needed with federal, state, and local support organizations.

The State Plan does not include letters of agreement nor a signature page where functions are covered by laws as is the case in the State of Louisiana.

Section VII, A.4. refers to the Federal Radiological Monitoring and Assessment Plan and to letters of agreement which outline specific Federal resources, etc., but the only agreement that has been executed is apparently between the State and utilities (Section 14). EPA is not listed among the organizations to support/implement the plan (Table 1). If EPA support is anticipated, a written instrument needs to be prepared which details specific EPA resources which are relied upon. Without such written instruments, EPA may not be able to justify the resources needed to maintain the necessary capability.

The Agreement should list any specific EPA resources relied upon and designate the channel(s) of communication to obtain the resources.

B. ONSITE EMERGENCY ORGANIZATION

2. Re utility's designated emergency coordinator who would initiate emergency actions.

While not a state or local function, off-site plans should indicate the utility's designated emergency coordinator who would initiate emergency actions.

C. EMERGENCY RESPONSE SUPPORT AND RESOURCES

1.a. Specific person by title authorized to request federal assistance.

The assistant Secretary or his designated alternate of the Office of Environmental Affairs is listed as the authorized requestor but there should be an alternate named.

1.c. Specific State and local resources needed to support federal response.

Responsibilities are assigned (common) for implementing support responsibilities (VI, A.1.). Implementing procedures are required to be prepared (Section VIII, D.) but are not included in the plan. No specific provisions are made to support EPA, although FRMAP is relied upon (Section VII, A.4.). No airfields specified, no telephone lines or radio frequencies assigned, no telecommunications centers arranged for EPA.

3. Availability and capability of radiological laboratories.

Incomplete. The LNED laboratory is adequately described in the plan. However, other laboratories, such as LSU and local laboratories, are briefly mentioned but no details are provided as to expected availability, or capability.

No specific mention is made of reliance upon EPA laboratory facilities, but such reliance is implied since laboratory support may be requested from DOE. The plan does not, but should, detail specifically what kinds of support may be needed, as well as "turnaround times" required. Requirements should be coordinated with laboratory capabilities, and letters of agreement should also be considered.

4. Availability of support from nuclear and other organizations.

Section VII. A. and B. (pages 36-37) of the plan describes support and resources available from Federal, State, and local agencies. However, letters of agreement are not presented. In particular, L.S.U. is indicated as an organization having a capability which might be used. There should, therefore, be a letter of agreement with the institution so noting the capability and its willingness to respond.

D. EMERGENCY CLASSIFICATION SYSTEM

3. An emergency classification system consistent with that of utility.

Chapter I of the State plan establishes emergency action levels consistent with NUREG-0654, Appendix 1. Assume they are consistent with licensee's.

E. NOTIFICATION METHODS AND PROCEDURES

1. Mutual agreeable procedures for notification of emergency response organizations.

Chapter 2 of the plan indicates the general concept for notifying response organizations of an accident at a nuclear facility including an accident notification from which requires verification. Paragraph III, N. page 2-3 indicates implementing procedures will contain detailed procedures for notifying the various affected entities. (Implementing procedures to be published.)

It is not at all clear from the Plan whether EPA assistance is anticipated. Reference is made to technical federal aupport (Section VIII, A.3. & 4.), so EPA would likely be involved in event federal support is ever requested. However, EPA is omitted from the distribution list for the state plan (Table 1). Implementing procedures which might detail such plans (Table 2) are omitted.

While notification procedures are outlined in Chapter 2, verification requirements are referenced to State and Parish Plan implementing procedures, which are missing. The only reference to verification requirements that could be found is the blank on Tab 1 of Chapter 2 in both plans and a space for noting verification is included on the "Accident Notification Form".

2. Procedures for alerting, notifying and mobilizing emergency response personnel.

Paragraph VI, A. 5. page 23 indicates each state department will be responsible for developing procedures for notification and mobilization of its personnel assigned emergency functions. NOT included in plan.

3. For licensee (emergency messages content).

The plan in Chapter 2, III. A.C., page 2-2 indicates forms for notification will be used. The accident notification form covers areas of consideration noted in criteria with exception of potentially affected population.

5. System for dissemination to public of appropriate information received from licensee.

Notification of the public initially and with following messages is thoroughly addressed. It may be advisable to designate a single source of information. Chapter 5, IV.B. 3. 5. and 6. appear to provide several spokespersons. This could lead to some confusion and perhaps some embarrassment. All those mentioned in the references may well take part in preparation of information but there should be a single source for clarity.

6. Procedures for notification and prompt instruction to the public in the plume exposure pathway.

Incomplete. A means for providing prompt instructions to the public is partially addressed. The state plan states that EBS messages for public protective actions are to be developed. However, the Tensas Parish Plan contains an EBS sheltering and evacuation message.

7. Prescribed written instructional messages for public in affected areas.

State plan references parish attachments which have prescripted messages as Tab 1 to Chapter 4 on pp. 4-4 and 4-5 (parish plan). However, the State plan also has a Tab 1 to its Chapter 4 which indicates EBS messages are to be developed.

F. EMERGENCY COMMUNICATIONS

1.a. An emergency response communications network with manning on a 24-hour basis.

Plan indicates in Chapter 3, III. A. 1. and 2. that dedicated phone circuits will serve as primary communications between the licensee and LNED with commercial telephone as the backup. This does not appear to meet the criteria in that if you lose the primary link you have also lost the secondary link.

1.c. Communications as appropriate with federal emergency response organizations.

LOEP will use NACOM land line and radio to communicate with FEMA with NAWAS being used as an alternate. Plan does not mention notification of other federal response organizations (DOE) if to be coordinated by FEMA, it should be so indicated and should be consistent with the utility scheme for notification.

1.d. Communications between nuclear facility and licensee's EOF, state/local EOC, and RAD monitoring teams.

Do not find provisions for communications between utility and field response teams. A communications schematic or block diagram would help in showing communications capability, systems and flow.

G. PUBLIC EDUCATION AND INFORMATION

3.a. Designated points of contact and physical locations for use by news media.

Inadequate. News media points of contact and specific media reception facilities are not identified. The plan merely says that facilities will be activated as necessary.

4.a. Designated media spokesperson with access to all necessary information.

LNED will designate a spokesperson to release state-wide information with parish governments designating spokespersons for releasing EPI to the parish populace. While the plan reads "spokespersons", it is suggested only one spokesperson being responsible for EPI news releases and this after coordination with spokesperson responsible for state-wide releases. A specific spokesperson is not identified by the state nor is any position (e.g., Public Information Officer).

H. EMERGENCY FACILITIES AND EQUIPMENT

3. Adequacy of emergency operating center.

Paragraph IV, H. and J., page 16 addresses the location and function of the State EOCs. Part N, p. 17 indicates each parish will activate and staff an EOC. Parish EOC here should be classified to read those parishes falling wholly or partially within the 10 mile EPZ.

4. Activation and staffing of EOCs and other facilities.

Timely activation and staffing of EOCs are to be addressed in the implementing procedures which are not included in the plan.

7. Provisions for offsite RAD monitoring equipment.

Chapter 6, Tab 3, enclosure 1 lists the needed equipment and the office where it is available. There is no indication, however, as to how readily the equipment can be made available. Some prior arrangements should be made, and reflected in the Plan, for having the equipment ready on short notice. Maintenance of "kits", or storage of some of the equipment in the mobile laboratory (Chapter 6, Tab 3, Item G.2) are two ways to maintain a state of readiness.

10. Provisions for management of emergency equipment/instruments including inventory and inspection.

Inspection, inventory, and checking of all emergency equipment and instrumentation on an assigned schedule is addressed. There is, however, no indication as to "sufficient reserves" as replacements during calibration or repair.

11. Identification of emergency kits by general category.

No kits are specified. It is not sufficient to merely have the response equipment "available". It must be available in one place in kit form, or in a configuration such that an undue amount of time is not required to collect it.

Equipment not specifically itemized:

1. Instructions for monitoring instruments.
2. Check sources for portable instruments.
3. Instructions for emergency site monitoring and control (DCFs and procedures for projecting dose).

Policy for use of radio-protective drugs is provided (Chapter 9, Section IV. A. V. B. 2. and Tab 1) but no provisions could be found for their supply. These drugs should be considered for incorporation in the emergency kits, especially for use by emergency workers.

I. ACCIDENT ASSESSMENT

8. Rapid assessment of magnitude and location of liquid and gaseous radiological hazards.

This element is thoroughly written in the plan and is well done. The only exception was the absence of estimated deployment times.

No specific provisions were found for notification of monitoring teams at home or at work, although the general procedures are outlined in Chapter 6, Table 3. No call lists, no telephone numbers (or reference to lists), no response times, etc. Chapter 6, Tab 3, Item C refers to "LNED procedures" which may contain such details.

All State departments are responsible for designating an individual to be in charge, but the actual assignments have not been made in general. Instead, responsibilities are listed for organizational entities.

Transportation arrangements are covered in Chapter 6, Tab 3, Item D, but more details would be helpful, e.g., driver assignments, staging procedures, etc.

10. Relating measured parameters to dose rates and estimated integrated doses.

This element is also well described in the plan. However, a section of the plan entitled "Implementing Procedures" was not completed. This should be reviewed before passing final judgement on accident assessment. The provisions for assessing dose rates, estimating integrated dose from the projected and actual dose rates and for comparing these estimates with the protective action guides, will be contained in the implementing procedures when developed.

Chapter 6, Tab 3, enclosure 4, calls for concentration of radioactivity in units of uCi/cm^3. Since EPA PAGs use the different (although equivalent) units Ci/m^3, this table should be modified, or the equivalency of the units noted, to avoid possible confusion.

11. Location and tracking of airborne radioactive plume with aid or federal and/or state resources.

No specific provisions were found for locating or tracking the plume.

J. PROTECTIVE RESPONSE

9. Implementation of protective measures based on protective action guides.

This appears to be complete and adequate except for an "Access Control Map" to be developed and contained in Attachment 2, Chapter 6.

Limits and criteria are given in Chapter 7, Section IV. A. 6. b. and IV. B. 2. for workers VI. B. 1. for general public, IV. B. 3. for institutionalized persons, IV. B. 4. for school children. Chapter 8, Section IV. F. 3. c. 1. cites EPA drinking water standard, IV. F. 3. c. 2. allows 12 x MPC for short term, IV. F. 3. c. 3. allows 1000 x MPC for crisis conditions.

In estimating doses for purposes of Chapter 8, Section IV. F. 3. c. it should be noted that all doses are for "standard man" and doses to children or other population groups may be higher or lower, depending on the particular radio-nuclides involved.

10.d. Procedures for protecting mobility impaired including institutionally confined persons.

Cross reference indicates Chapter 4, II. F. p. 4-2. This is incorrect. Chapter 7, III. E. 4. indicates provisions for transport of persons having impaired mobility has been arranged for.

10.f. Methods used by State Health Department in decisions administering KI to central population.

Chapter 9, Tab 1, p. 9 is given as the cross reference. Should read p. 9-12 which indicates the ASOEA will make the recommendations for the administering of KI to emergency workers or institutionalized people with an established criteria which is printed in the plan on p. 9-12.

10.i. Projection of traffic capacities of evacuation routes under emergency conditions.

Chapter 7, Tab 1, indicates evacuation time studies have been prepared and can be found as supportive documentation to the plan. The criteria indicates the organizations plan shall include projected traffic capacities of evacuation routes under emergency conditions. This aspect of the plan does not meet the criteria as literally interpreted.

10.j. Organization and control of access to evacuated areas.

Chapter 7- IV. A. 3. is given as the reference to the plan satisfying this criteria. While the plan defines what is meant by access control, it does not address how, who, or under what circumstances such an activity might be initiated.

10.k. Identification and means for dealing with potential impediments to evacuation.

Chapter 7, III. E. 3. references the parish plans and Tab 3; Tab 3 of what? There is no Tab 3 to chapter 7 of the state plan. Chapter 6, III. D. 3. p. 6-2 of the Grand Gulf attachment indicates procedures for dealing with potential impediments will be implemented in accordance with highway department operating procedures. Potential impediments (such as flooding) have not been identified and highway department SOPs are not included as part of plan.

10.l. Time estimates for evacuation based on dynamic analysis.

Cross reference notes Chapter 7, Tab 1, addresses this aspect of planning. While this tab indicates supporting documentation is available regarding the time estimates for evacuation, it is not found in the plan.

10.m. Basis for choice of recommended protective actions in plume EPZ.

Chapter 7, II. D. leaves choices to "judgment of responsible officials", using EPA PAGs as a starting point.

No mention is made of protection afforded by sheltering, which is a vital piece of information needed by decision-makers in deciding whether evacuation (Chapter 7, IV. A. 4.) or sheltering (Chapter 7, IV. A. 1.) is preferred. EPA report "effectiveness of Sheltering as a Protective Action Against Nuclear Accidents Involving Gaseous Releases", EPA 520/1-78-001 should be reviewed and factored into the Plan, to assist the decision makers.

11. Protective measures for ingestion pathway.

Protective actions are given in Chapter 8, IV. F. 1. b. for milk, 8. IV. F. 2. for other foods, and 8. IV. F. 3. c. 5. for water.

No procedures were found for determining contamination levels or for estimating dose consequences of uncontrolled ingestion.

Decontamination of food stuffs is covered in Section 8, IV. F. 2.

Maps of water supply intakes and treatment plants are referenced in Chapter 8, Tab 2 and will be maintained by "the State". The specific location of such maps should be indicated, along with the name or title of the person responsible for maintaining them, and telephone number. Consideration should be given to making the maps a part of the plan.

12. Registration and monitoring evacuees in relocation centers.

Chapter 9 addresses monitoring, decontamination procedures, etc. but does not provide for registration of evacuees using or passing through the reception area.

K. RADIATION EXPOSURE CONTROL

4. Decision chain to authorize emergency workers to incur exposures in excess of PAGs.

Procedural arrangements have been made on paper (e.g., Chapter 9. V. B. 1. b.), but methods for tracking over-exposed workers are not detailed. This could be corrected by elaborating the instructions on the Dosimeter Report Form (Chapter 9, Tab 6).

The Preventive PAG levels specified in Chapter 9. V. D. are consistent with EPA guidance to minimize exposures. However, the Plan does not indicate how these PAGs are to be used. Section 9. V. D. 1. indicates exposures up to 25 Rem (W.B.) or 125 Rem (thyroid) will be accumulated "as directed by LNED". This control is not, however, reflected in the Dosimeter Report Form, which implies that there are no restrictions on exposures up to those limits. This should be clarified.

Authorization to exceed emergency PAGs can be given by the chief executive officer of the affected Parish, or by the ASOEA. Neither of these officials is required to have specialized training in radiological health physics. A health physics professional should be explicitly identified somewhere in the decision chain. The professional should be a medical doctor with radiological health training, or should have advanced training dealing with radiation injury.

5.b. Means for decontamination of emergency personnel, supplies, and equipment, and waste disposals.

External contamination control is covered in Chapter 9, Tab 2.

Persons with contaminated wounds are to be referenced to nearest medical facility. (Chapter 9, Tab 4, Item 2). No other internal contamination provisions could be found. Provisions should be added for persons exposed to the plume who may be internally contaminated through the inhalation pathway and require decontamination.

L. MEDICAL AND PUBLIC HEALTH SUPPORT

1. Local and back-up material and medical services.

The State has not yet completed a listing of hospitals equipped to accept radiation accident patients. Tensas Parish Plan provides letters of agreement with several hospitals in this category. Tab 1 to Chapter 9 in the Tensas Parish Plan refers to hospital decontamination plans but no plan was included. These plans must be reviewed before an evaluation of this element can be completed.

3. Lists, locations and capacities of public, private, military hospitals.

Chapter 10 of the plan addresses medical and public health aspects of REP planning. IV. B. 2. indicates Tab 4 lists the hospitals capable of receiving and treating radioactively contaminated persons. Tab 4 is to be developed, therefore is deficient.

4. Transportation of accident victims to medical support facilities.

Chapter 10, paragraph IV. A. 1. addresses transportation of on-site personnel needing medical treatment and IV. A. 2. indicates that parish OEPs are responsible for coordinating emergency medical services and that the ambulance services can be found under Tab 2 which is to be developed and is therefore a deficiency.

M. RECOVERY AND REENTRY PLANNING AND POSTACCIDENT OPERATIONS

1. General plans and procedures for reentry and relaxation of protective measures.

Protective actions will be relaxed by the ASOEA based on LNED recommendation (Chapter 11, III. A.). An individual should be identified to make the recommendation rather than the organizational entity (LNED).

4. Method for periodic estimation of total population exposure.

This is probably implied in Section IV. J. and is a responsibility of the LNED as stated in Section VI. B. 13. e. The plan does not, however, establish a method. Population doses are likely an output of LNED's computer capabilities noted in Chapter 6, III. C. 1. a.

N. EXERCISES AND DRILLS

2. c. Medical emergency drills (licensee/local).

Inadequate. The State plan does not address medical emergency drills and the Tensas Parish Plan states this section is "not applicable".

2.d. Annual radiological monitoring drills.

Annual drills are specified in Chapter 13. IV. A. 2. However, this chapter merely recites NUREG-0654 requirements and does not add the necessary elaboration to make the Plan a working document. For example, responsible individuals should be designated within the organizations to plan and coordinate the drills, it should be stated whether the State participates in each annual drill at each facility, the extent of realism required, i.e., simulation vs. actual data collection and response actions, etc.

2. 3. Health physics drills

Chapter 13, IV. A. 3., indicates health physics drills will be conducted semi-annually. Plan does not indicate analysis of simulated elevated airborne sample (wording of sentence is of such to indicate only liquid analysis).

2.e.(1) Semi-annual health physics drills

Chapter 13. IV. A. 3., also merely recites NUREG-0654 requirements without elaboration. There is no indication how many health physicists are to be involved, whether two drills are required at each facility, who is the individual responsible, etc.

O. RADIOLOGICAL EMERGENCY RESPONSE TRAINING

1.b. Training programs for offsite response organizations including fire, police, and ambulance/rescue personnel.

Chapter 12, III. A. 1., indicates training will be provided by the facility for offsite personnel responding on site. Did not find provisions for training of those organizations who might have mutual aid pacts or agreements with the primary emergency response organizations.

P. RESPONSIBILITY FOR THE PLANNING EFFORT

1. Training of planning personnel

Chapter 12, V. B. is listed as cross reference - incorrect. Should read Basic plan, V. B. p. 20 which says the ASOEA is authorized to direct the development and implementation of emergency response plans for FNFs. It is not indicated that State Planning Personnel shall be trained but can only be assumed.

6. A listing of supporting plans

Inadequate. Some supporting plans are referred to in various parts of the State and Parish plans but there is no detailed listing of State or local supporting plans and related documents.

7. A listing by title of SOPs

Inadequate. These procedures are not in either the Parish or State plans. Both plans indicate procedures are " to be developed".

This is an important element and must be provided to complete the plan evaluation.

8. A table of contents and cross references to NUREG-0654/FEMA-REP-1, Rev. 1

B. P. page i is a table of contents for the plan. The cross reference while not numbered as a part of the plan is included (needs corrections).

CONSOLIDATED SYNOPSIS OF RAC COMMENTS

Re: Attachment #2 (Tensas Parish Plan)

GENERAL COMMENTS

1. The Tensas Parish attachment lacks an index. This makes the information extremely difficult to locate and is totally unacceptable for an emergency plan.

2. Page 11, #12, second line -- replace injection with ingestion.

3. Page 12, #19 -- suggest this title be broadened by removing "personnel" to define "contamination survey".

4. Misspelled words?

A. ASSIGNMENT OF RESPONSIBILITY

3. Written agreements. Chapter 13 (II.B.) indicates that specific areas of response potentially requiring support from Federal, State, Parish, and private organizations have been identified. Letters of Agreement with local support organizations are contained in that chapter. Since there are no agreements with State and Federal agencies included in Chapter 13, does this mean there is no need for assistance from these agencies?

C. EMERGENCY RESPONSE SUPPORT AND SERVICES

Nothing

D. EMERGENCY CLASSIFICATION SYSTEM

Nothing

E. NOTIFICATION METHODS AND PROCEDURES

1. NOTIFICATION/VERIFICATION. Chapter 2 addresses accident notification. While the accident notification form has a place for message verification and it is implied verification will be performed, the plan does not specifically say it will be done and how.

3. Establishment of content of initial emergency message to be sent from the utility. Criteria E-3 refers to joint State, local, licensee establishment but it was not listed as a State/local planning responsibility at the time of the revision of FEMA-REP-1. This item was not addressed in the plan.

Affected population dose is not required to be reported directly but requires a knowledge of sector populations. This information is contained in the Parish Plan, Tables 1 and 2, which use an alphanumeric notation system. The alphanumeric system is not, however, tied in to the Site Vicinity and General Area maps so the population groups can be readily located. These maps use the conventional N,E,S,W designations, and need to be altered to show the alphanumeric system instead of or in addition to the conventional system.

F. EMERGENCY COMMUNICATIONS

1.e. Pages 2-6 denotes day and night numbers but there is no mention made of when to call the day or night timewise.

2. Coordinated communications link with fixed and mobile medical support facilities. This is addressed but without specificity of communication links.

G. PUBLIC EDUCATION AND INFORMATION

3.a. Designated points of contact for the media. The plan indicates the media will be directed to the Tensas Parish public information contact point but the physical location is not established.

H. EMERGENCY FACILITIES AND EQUIPMENT

4. Activation/staffing. Chapter 2 (III.D. and E) only indicate that call lists will be implemented. There are no provisions to alert people if telephones are out of service or if the individual is not at the designated number.

11. Emergency Kits. The cross reference indicates Tab 3 to Chapter 8 addresses this criteria element; however, Tab 3 is missing from the Plan.

J. PROTECTIVE RESPONSE

10.a. Tab 1 to Chapter 6 has evacuation maps, traffic flow patterns, routes and areas. Staging centers are addressed but locations of reception centers in host towns are not found. Pre-selected sampling and monitoring points were not listed or shown. Shelter areas were not identified.

10.b. Population distribution is indicated by zone and sector under Table 1, Tab 1 to Chapter 6. It is not shown on maps.

10.e. Provision for radioprotective drugs is incomplete -- it does not indicate how much, where stored, or means of distribution. Plan indicates this item should be considered for institutionalized persons.

10.h. Relocation centers are not identified in Chapter 6 as indicated. (Also monitored under 10.a.).

10.i. Chapter 6 (IV.D.) notes evacuation time estimates and projected highway traffic capacities for clear and adverse weather conditions. However, projected traffic capacities of evacuation routes use 1970 data and the average speed is listed as 40 MPH as opposed to 30 MPH used in the CRP studies.

10.j. Chapter 6 (III.B.1.c.) indicates there will be specific actions for the protection of the public which includes access control. The State

Plan (IV.K.) is given as a reference. It refers to assistance from law enforcement from adjoining parishes. Need implementing procedures, Tab 2. Also, paragraph C(1) on pages 6-10 refers to "roadblocks at the following locations" but fails to list the locations.

10.k. Chapter 6 (III.D.3.) indicates procedures for dealing with potential impediments along evacuation routes will be implemented. The plan should identify these impediments and indicate how they will be dealt with. Implementing procedures cover this?

10.l. Chapter 6 (Tab 1,0) notes evacuation time estimates. These are not given by sectors and distance as required by NUREG-0654. The estimates are unrealistic and are based on dated material (1970 vs 1980 census). Because of low population density and rapid evacuation, could probably use total time for Tensas Parish sectors for individual sectors.

12. Chapter 6 (IV.B.4.) is reference given for registration and monitoring of evacuees in relocation centers. However, no provisions could be found for registering and monitoring evacuees. Emergency supplies will evidently be listed in Chapter 8, Tab 3, but it is not clear whether such supplies will also be intended for use with evacuees. Tab 3 is missing.

L. MEDICAL AND PUBLIC HEALTH SUPPORT

1. Hospital/medical services are not listed -- makes general reference to State plan. The State plan has not yet completed a listing of hospitals equipped to accept radiation accident patients. The Tensas Parish Plan provides letters of agreement with several hospitals in this category. Should be specific in listing of facilities and their capabilities.

Also, Tab 1 to Chapter 9 in the Tensas Parish Plan refers to hospital decontamination plans but no plan was included. These plans must be reviewed before an evaluation of this element can be completed.

M. RECOVERY AND REENTRY

1.b. II,III indicates parish government will participate in exercises and the critique thereof. The local plan does not specifically address the varying time commencement requirement of exercises but must be assumed the parish will exercise in cooperation and consistent with LNED.

N. EXERCISES AND DRILLS

2.c.(FEMA comments) Plan indicates this element is not applicable to Grand Gulf facility and I agree considering the geographical barrier (MS river with no land access for aporoximately 65 miles) between the subject parish and the GGNS.

(NRC comments) Inadequate. The State plan does not address medical emergency drills and the Tensas Parish Plan states this section is "not applicable".

4. Chapter 11, IV.B. indicates provisions will be made for supervision and evaluation of drills. 0654 differentiates between drills and exercises (see N.1.a. for exercise and N.2 for drills). Element N.4 refers to exercises, not drills. I feel further clarification of the evaluation process of exercises at the local level is needed. This could include the evaluation, after-action report, assignments for correction of deficiencies and final changes in local plans.

O. RADIOLOGICAL EMERGENCY RESPONSE TRAINING

1.b. Chapter 10, III, B. indicates training of each off-site response organization. Does not address those organizations with whom mutual aid pacts or agreements might be established so must assume there are none.

4.a-j. Chapter 10, III indicates LNED and LOEP will be responsible for conducting the training programs for the local parish response personnel. The State plan defines the categories of personnel to be trained. Does not specifically state that individuals as listed in 4.a. through 4.j. will attend what training or when.

5. Plans at the State and Parish level call for the initial orientation and training of emergency response personnel. State plans call for retraining of personnel on an annual basis. Parish plans only address replacement training as needed.

R. RESPONSIBILITY FOR THE PLANNING EFFORT

1. Chapter 10, III indicates training will be accomplished to enhance comprehension of the plans but not specifically for the planning effort as noted in 0654.

5. General Plan (VIII.B). The EPC is responsible for the distribution of plans. Does not indicate updates to plan to be dated and marked.

6. Cross reference indicates A.P., VIII. This is incorrect. The only support plan listing found is under B.P.I.B, authority which is neither detailed nor are sources provided. Plan inadequate. Some supporting plans are referred to in various parts of the State and Parish plans but there is no detailed listing of State or local supporting plans and related documents.

7. G.P.II.E is the standard operating procedures which are to be developed. Deficient. Both State and Parish plans indicate procedures are to be developed. This is an important element and must be provided to complete plan evaluation.

8. G.P.II.D which is the NUREG-0654/attachment 2 cross-reference is the only likeness to a table of contents found. Should have a more detailed and easily referenced table of contents. Also, covered under "General Comments".

OBSERVATIONS NOTED IN THE GRAND GULF NUCLEAR STATION EXERCISE

I. Emergency Operations Facilities and Resources

C.1.b. - What are the procedures to be used to request Federal resources? What Federal resources were requested during the exercise and by whom? Was the Federal response adequate and timely?

Scenario did not call for exercising this element.

C.1.c. - What procedures have been established to provide available State and local resources to support the Federal response? Were these resources needed during the exercise? Were they provided in a timely manner and were they adequate?

Scenario did not call for exercising this element.

F.1.b. - What provisions have been established for communications with contiguous state/local governments within the Emergency Planning Zone? Were these provisions effectively executed during the exercise? If there were problems, indicate what they were.

Initial warning and notification was not exercised consistent with the plan. LOEP has the capability for 24-hour warning and notification as well as LNED. Question that the dedicated telephone circuitry and the commercial telephone circuitry satisfies the requirement for dissimilar initial warning and notification from the licensee to the OPR. Unable to hear the ring of the dedicated land line circuit. OEP needs to establish SOPs for utilization of dedicated land line circuitry.

Rating: 3

F.1.c. - What were the provisons for communications with the Federal emergency response organizations? Were these provisions initiated and if so, what were the results?

Scenario did not call for exercising this element. However, LOEP did not notify FEMA Region 6 at the alert EAL.

Rating: 3

F.1.d. - What provisons were established for communications between the nuclear facility and the licensee's near-site EOF, State and local EOCs, and radiological monitoring teams? Were the systems/procedures effective to the overall emergency response as observed during the exercise?

Satisfactory

Rating: 4

H.3. - Where are the State and local emergency operating centers? If readily available, how much EOC working space is there? Is this adequate? What are the provisions for EOC security? Were the provisions initiated and what were the results? What are the provisions in the plan for EOC communications? Describe the EOC internal communications system as you observed it. Is it adequate? Are there provisions in the plan for the necessary display information and who is responsible for it? As you observed the EOC displays, were they adequate? Others needed?

Limited space at the local EOC. There was demonstrated need to keep the EOC participants better informed. Adequate local visuals, but not properly displayed and message board not kept current. State displays were adequate but not properly utilized. The state plan lacks specific procedures for internal communications. Recommend LNED and LOEP coordinate and provide for adequate displays for the governor's press room.

Rating: 4

J.10.a.- What are the provisions for maps showing evacuation routes, evacuation areas, preselected radiological sampling and monitoring points, relocation centers in host areas, and shelter areas? As observed, did the decision makers use the maps and did the maps appear to be adequate?

The radiological sampling and monitoring maps, relocation maps, and shelter area maps are not in the plan. Radiological sampling and monitoring map was not available at the local EOC. Shelter area map not at the local EOC. Maps need enlarging and vectored. The state EOC had adequate maps but they were not used to any great extent.

Rating: 3

J.10.b.- What are provisons for sector maps showing population distribution around the nuclear facility? Did the decision makers use the maps and did the maps appear to be adequate?

No deficiencies noted.

Rating: 3

II. Alerting and Notification of Officials and Staff

A.1.e. - In what manner has the organization to be evaluated provided for a 24-hour per day emergency response capability, including a 24-hour per day manning of the communications system? Did the provisions, when initiated, work well? Other comments?

The plan sufficiently addressed the 24-hour per day alert capability. Was not exercised, assumed to be sufficient.

A.4. - What are the provisions for continuous (24-hour) operations for a protracted period? Who is responsible for assuring continuity of resources? As observed, were the provisions adequate? Was there an observed capability for effective shift change over an extended period of time? Comments?

Capability not exercised.

C.2.a. - The plan indicates the Louisiana Nuclear Energy Division will dispatch a technical analysis representative to the licensee's near-site EOF. Was this done during the exercise?

Satisfactory.

Rating: 4

E.1. - What are the established procedures for notification of response organizations? If observed, how effective were these procedures, when implemented? How effective is the verification system for transmission and receipt of communications between State and local organizations?

Additional practice needed at the local level but implemented satisfactorily.

Rating: 4

E.2. - What are the procedures for alerting, notifying and mobilizing emergency response personnel? Were these procedures used and how effective did they appear to be?

There was one incorrect telephone listing, otherwise satisfactory.

Rating: 4

E.3. - Were the initial emergency messages sent by the licensee handled effectively? Did they contain the following information: (1) identification of the emergency action level (2) if a release is taking place, (3) identification of potentially affected population and areas, and (4) whether protective measures may be necessary?

Received erroneous information from the utility. However, did not detract from state and local capability.

Rating: 3

F.1.a. - What are the provisions for an emergency response communications network with manning on a 24-hour basis? Was this notification capability and effective ability to activate the emergency response network demonstrated during the exercise? Was there a telephone link and an alternate means for notification available and what were they?

Satisfactorily demonstrated.

Rating: 3

F.1.e. - What procedures have been established for alerting or activating emergency personnel in the organization being evaluated? Were these procedures activated and how effective were they?

Alerting notification and activation of local personnel was demonstrated satisfactorily.

Rating: 4

F.2. - What is the provision for a coordinated communications link for fixed and mobile medical support facilities? Was the method used during the exercise and did it add to the overall emergency response capability?

Emergency personnel should use channel 2 on the radio frequency for normal operational messages. Lack of voice communications between mobile medical and fixed medical - planned to be corrected in the future.

Rating: 3

H.4. - What are the procedures for timely activation and staffing of the emergency response centers? During the exercise, were the centers activated and staffed in a timely manner?

Procedures for activation and staffing of the EOC should be included in the plan.

Rating: 3

III. Emergency Operations Management

A.1.a. - Who are the organizations identified as a part of the overall response organization? Was each organization participating in the exercise?

No comment - each organization participated.

Rating: 3

A.1.b. - How is the organization's role in the concept of operations defined? Could the observer determine from observation the organization's role and its relationship to the total effort during the exercise?

All operations controlled through EOC effectively.

Rating: 3

A.1.d. - Who is the individual,by title, who is in charge of emergency response? During the exercise, did the designated official assume charge of emergency response?

The designated official assumed the leadership role satisfactorily.

Rating: 4

A.2.a. - What are the assigned functions and responsibilities assigned to the organization being evaluated? How well did the organizations carry out these functions and responsibilities?

All functions and responsibilities were carried out effectively.

Rating: 4

A.3. - What written agreements have been made for the organizational function being evaluated? Were these agreements implemented during the exercise?

Any written agreements which had been made and consummated were done effectively.

Rating: 4

C.1.a. - Who is the person, by title, authorized to request Federal assistance? Was such request for assistance observed during the exercise?

Not exercised.

C.4. - What nuclear and other facilities, organizations, or individuals have been identified which can be relied upon to provide emergency assistance to the organization being evaluated? Did the observer note any assistance being requested from any of these identified groups and were the responses adequate?

Assistance requested from several organizations and all responded in an effective manner.

Rating: 4

D.3. - Were State and local classification and emergency action levels used during the exercise consistent with that of the utility?

State and local EALs were consistent with that of the utility.

Rating: 4

D.4. - What procedures are in place that provide for emergency actions to be taken which are consistent with the emergency actions recommended by the nuclear facility licensee, taking into account off-site conditions? Were these procedures implemented and what were the results?

All procedures were implemented effectively with favorable results.

Rating: 4

IV. Public Alerting and Notification

E.5. - What system is to be used for dissemination to the public of information received from the licensee (includes EBS)? Was activation of this system observed and what were the results?

The EBS was activated satisfactorily.

Rating: 4

E.6. - What is the administrative and physical means planned for prompt notification to the public? Is the system in place? Was it used during the exercise and was it adequate to warn all the population requiring notification?

The system is in place and was tested. Questionable whether all people can be warned by the present system. The alert notification system will be tested at a later date. A rating will be given at that time.

E.7. - Are there messages in the plan intended for the public, giving appropriate instructions with regard to specific protective actions to be taken, etc. Were these messages used during the exercise? Did the messages provide all the information needed?

Was not exercised completely.

Rating: 3

J.10.c.- How does the plan provide for notification to all segments of the transient and resident population? Is this system adequate as demonstrated during the exercise?

All systems were not tested during the exercise. The ones that were, were satisfactory - the remainder will be tested at a later date.

Rating: 3

V. Public and Media Relations

G.1. - What is the method to be used for periodic dissemination of information to the public regarding how they will be notified and what their actions should be in an emergency? Was there any evidence during the exercise to indicate that this periodic dissemination was being made?

Method for periodic dissemination has been accomplished. However, there is a need for coordination between MP&L spokesperson and media at the local level in Louisiana.

Rating: 4

G.2. - What provisions have been made for a public information program for the permanent and transient population in the 10 mile EPZ? Was evidence of this observed during the exercise?

Provisions for information to permanent and transient population has been addressed and was observed to be sufficient.

Rating: 4

G.3.a. - Who are the points of contact and physical locations for use by news media during an emergency? Were there any problems finding the contact persons or the location of the PIOs?

Recommend that LNED and LOEP discuss and settle on one news media site at the state level taking into consideration the desires of the governor. Appropriate functions of each should be worked out. Also, needed in the plan is the procedure whereby news releases would be cleared with the utility media center.

Rating: 3

G.3.a. (con't) - If there was a joint media facility, what were the good and bad points?

The Mississippi side is responsible for the emergency news media center. However, the state of Louisiana did experience some difficulty in coordinating news responses with them.

No rating.

G.4.a. - Who is the designated media spokesperson for the organization being evaluated, or if that organization does not have a spokesperson, who is to speak for it?

Reference remarks under G.3.a.

Rating: 3

G.4.b. - What arrangements have been made for a timely exchange of information among designated spokespersons? Were these arrangements used during the exercise and were they adequate?

A lack of advance arrangements for inter-media exchange of information.

Rating: 3

G.4.c. - What are the coordinated arrangements planned for dealing with rumors? Were these arrangements initiated and were they effective?

Arrangements had been made for dealing with rumors but were not put into effect during the exercise.

VI. Accident Assessment

H.7. - What are the provisions for offsite radiological monitoring equipment in the vicinity of the nuclear facility? Were these provisions adequate?

Observed and were adequate.

Rating: 3

H.12. - Has each organization established a central point (preferably associated with the licensee's near-site EOF) for the receipt and analysis of all field monitoring data and coordination of sample media? Were there any problems in getting the data/sample media to the specified central point?

The requirement has been met.

Rating: 4

I.7. - Was the capability and resources for field monitoring, as described in the plan observed to be adequate during the exercise?

Adequate, but need additional training.

Rating: 3

I.8. - What are the provisions for methods, equipment, and expertise to make rapid assessments of the actual or potential radiological hazards through liquid or gaseous release pathways? During the exercise, were adequate assessments made? (The assessment should include the magnitude and location of the release as well as the method of activation, notification means, field team compositions, transportation, communications, monitoring equipment, and estimated deployment times).

Misinterpretation of technical data was believed to be by GGNS and not a fault of NED. Activation of field deployment teams was very satisfactory.

Rating: 4

I.9. - Does the organization being evaluated have the capability to detect the measure radio-iodine concentrations in the air within the plume exposure EPZ as low as 10'4Ci/cc under field conditions? Were any such measurements made during the exercise and did they appear to be accurate?

Not observed but sufficiently addressed in the plan.

I.10. - Does the State level organization have the means for relating measured parameters to dose rates for Key isotopes and gross radioactivity measurements? Are there detailed provisions described in separate procedures? Were these procedures implemented during the exercise and what were the results?

Good capability exists.

Rating: 4

I.11. - What are the arrangements to locate and track the airborne radioactive plume? Were these arrangements carried out during the exercise and were they workable?

Arrangements were satisfactory and demonstrated during the exercise.

Rating: 4

J.10.m.- At the State level does the plan provide bases for the choice of recommended protective actions from the plume exposure pathway during emergency conditions? During the exercise were the recommended protective actions made in accordance with the plan bases?

There was some confusion on interpretation of protective actions recommended by EPA PAGs (apparently confusion by GGNS).

Rating: 3

C.3. - What radiological laboratories were named in the plan, and what are their general capabilities and expected availability? Were requests made or simulated to these laboratories during the exercise? What were the results?

Requests were simulated for laboratory assistance during the exercise but were not needed.

Rating: 4

VII. Actions to Protect the Public

J.2. - Are there contingency plans for movement of onsite individual to offsite locations? Were these plans implemented during the exercise and what were the results?

Not applicable.

J.9. - How did the State and local organizations implement protective measures based on protective action guides (PAGs) and other related criteria? Was it consistent with the plan? Was this activity adequate for the protection of the public?

Protective measures consistent with PAGs.

Rating: 4

J.10.d.- What are the provisions for protecting those persons whose mobility may be impaired, confined at home or in institutions? Were these provisions exercised and what were the results?

Provisions for protecting persons with impairments, disabilities, etc., well addressed and simulated during exercise.

Rating: 5

J.10.g.- What are the procedures for implementing relocation of the populace? Were these procedures followed during the exercise and what were the results?

A need for more information to personnel responsible for shelters.

Rating: 3

J.10.h.- Where are the planned relocation centers? Were these centers activated during the exercise and what were the results?

Relocation centers were reactivated. Demonstrated need for additional training by shelter staff.

Rating: 4

J.10.k.- What are the potential impediments to use evacuation routes identified in the plan? What are the means of dealing with these potential impediments? Did the exercise include an impediment as identified and how was it handled?

None identified in the plan. However, it was noted there is a railroad track passing through St. Joseph which could be a potential impediment. The exercise did not include any impediments.

J.10.l.- What are the time estimates for evacuation as projected in the plan? Was evacuation simulated during the exercise? If there was a partial evacuation, describe. What potential problems might be encountered as seen from the exercise?

Misdirection of traffic at roadblock 6 (simulated evacuation).

Rating: 3

J.11. - What protective measures are specified in the plan for use in the ingestion pathway, including the methods for protecting the public from consumption of contaminated food stuffs? Was there any exercise of the ingestion pathway protective measures and what were the results?

The scenario did not call for implementation of 50-mile ingested pathway zone precautionary measures.

J.12. - What are the provisions for registration and monitoring of evacuees at relocation centers? Were these functions observed during the exercise? Were they handled in an effective manner, or were there problems?

More information to registrants at relocation centers.

Rating: 4

VIII. Health, Medical, and Exposure Control Measures

J.10.e.- What are the provisions in the plan for the use of radio-protective drugs, particularly for emergency workers and institutionalized persons in the plume EPZ, including quantities, storage, and method of distribution? Was the use of such drugs simulated during the exercise? Comments?

The use of radio-protective drugs not exercised.

J.10.f.- What is the method to be used by the State Health Department in decisions to administer KI to the general population during an emergency and the predetermined conditions under which such drugs may be used by offsite emergency workers?

Not implemented.

J.10.j.- What are the provisions for control of access to evacuated areas and organizational responsibilities for such control? Were these provisions demonstrated during the exercise? Simulated? Comments?

Provisions for control of access to evacuated areas were adequate.

Rating: 4

K.3.a. - What are the provisions for a 24-hour-per-day capability to determine the doses received by emergency personnel? Were these provisions implemented during the exercise and what were the results?

Provisions were covered in the plan. However, only self-reading devices were observed.

K.3.b. - What are the provisions for frequent emergency worker dosimeter readings and how are dosage records to be kept? Were these provisions carried out during the exercise and how successfully were they carried out?

Sufficiently addressed in the plan - minimal observation during exercise.

K.4. - What is the decision chain established for authorizing emergency workers to incur exposures in excess of EPAs PAGs? Was this action a part of the exercise? Comment?

Scenario did not call for exercising this element.

K.5.a. - What are the action levels specified for determination of the need for decontamination? As used during the exercise, were the action levels adequate?

Not exercised.

K.5.b. - What means is provided for radiological decontamination of emergency personnel wounds, supplies, instruments and equipment, and waste disposal? Was decontamination required during the exercise? How effective?

Not exercised.

L.1. - What arrangements have been made for local and backup hospital and medical services with capability for evaluation/treatment of contaminated individuals? How did the implementation of the arrangements work out? What facilities were used and how well did the medical personnel perform? Were the facilities adequate?

Question the need for medical decontamination capability. Was exercised and additional training needed.

Rating: 3

L.3. - Has the State developed a list of the location of public, private, and military hospitals and other emergency medical services facilities considered capable of providing medical support for any contaminated injured individual? Were any of these facilities called on for assistance during the exercise?

Failed to see the need for this capability for this facility and was not exercised.

L.4. - What arrangements have been made for the transportation of accident victims to medical support facilities? During the exercise, were there any accident victims? If so, how effective was the pre-arranged transportation?

Sufficiently addressed.

Rating: 3

M.4. - What method has the State outlined for periodic estimation of total population exposure? Was this in evidence during the exercise? Comments?

Vaguely implied in the plan and was not observed during exercise.

IX. Recovery and Reentry Operations

M.1. - What generally is planned to accomplish recovery and reentry functions? Was recovery and reentry exercised? Describe what took place? Are the provisions adequate?

Exercised minimally.

M.3. - What are the State procedures for informing response organizations that reentry has been initiated? Exercised? Adequate?

Exercised minimally.

X. Relevance of the Exercise Experience

N.1.a. - Did the exercise test the integrated capability of the various plans and organizations? Did it test a major portion of the basic elements of the plans? Comments?

A need for additional training and education at the local and state level. Public warning devices need attention.

Rating: 3

N.1.b. - Did the observer feel the scenario was adequate to verify the capability to respond to a radiological accident? Comments?

The scenario was limited. The ability of the state and local emergency organizations to respond to a radiological accident is adequate.

Rating: 3

Did the exercise appear to benefit the participants? Explain.

Brought out items that needed further clarification in the plan and some weak areas that could be enhanced by further training and education.