



Federal Emergency Management Agency

Washington, D.C. 20472

FEB 7 1984

MEMORANDUM FOR: Edward L. Jordan
Director
Division of Emergency Preparedness
and Engineering Response
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission

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

SUBJECT: Interim Finding on Waterford III Steam Electric Station

The Federal Emergency Management Agency (FEMA) transmits to the Nuclear Regulatory Commission (NRC) the attached Interim Finding on Waterford III Steam Electric Station dated September 16, 1983, an addendum to the Interim Finding dated December 27, 1983, and comments on the E.L. Quarantelli Report entitled: "Evacuation Behavior: Case Study of the Taft Louisiana Chemical Tank Explosion Incident."

These attachments include a response to the concerns raised by the St. John the Baptist Parish Civil Defense Director as requested in your memorandum of March 25, 1983.

FEMA Region VI staff and the State of Louisiana are continuing discussions on several unresolved elements. When a resolution to these issues has been reached, an addendum will be forwarded to your office. Based on the Region VI review of the Louisiana and St. John the Baptist and St. Charles Parishes' off-site radiological emergency preparedness plans, there is reasonable assurance that the plans are adequate and capable of being implemented in the event of an accident at the site. An exercise to test these plans is scheduled for February 8, 1984. A finding on preparedness will be made following this exercise.

Attachments
As Stated

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Federal Emergency Management Agency

Region VI, Federal Center, 800 North Loop 288
Denton, Texas 76201-3698

January 17, 1984

MEMORANDUM FOR: RICHARD W. KRIMM, ASSISTANT ASSOCIATE DIRECTOR
Office of Natural and Technological Hazards

ATTENTION: Gloria Joyner, Program Specialist

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

SUBJECT: Interim Findings for Waterford III
(Report of Professor E. L. Quarantelli entitled: "Evacuation
Behavior: Case Study of the Taft Louisiana Chemical Tank
Explosior Incident")

The attached review is to be included in previous submissions to complete the interim findings for Waterford III.

Region VI, at this time, sees no need to make any recommendations to Louisiana for plan changes around the Waterford III site due to the comments made in the Quarantelli report. Many of the problems sited in the report were covered by changes made to the plans since the Quarantelli report was made. Also problems will be eliminated due to the installation of the A/N system that has been completed since the report was made.

Region VI will be making a complete evaluation of the plans and the preparedness of the State and local parishes around Waterford III in the upcoming exercise to be held on February 8, 1984.

A complete exercise report on the Waterford III Exercise will be prepared and furnished to FEMA National as soon as possible after February 8, 1984.

Review of E. L. Quarantelli's final report of the Evacuation Behavior: Case Study of the Taft, Louisiana, Chemical Tank Expulsion Incident.

Throughout the report are discussions of the activities of the local emergency organizations, particularly their involvement in the large-scale evacuation that occurred as a result of the chemical explosion.

We have limited our response to Section VII of the report, "An Assessment of Actions in the Incident," since we feel this covers the major discussion items made throughout the report.

VII. An Assessment of Actions in the Incident

1. How well-prepared were the organizations and the community for the incident that occurred?

Discussion: The Quarantelli report states that for this locality, "There was better than average preparations." Therefore, we will not comment on this section except that FEMA will be evaluating the preparedness of the State and local parishes during the waterford exercise to be held on February 8, 1984, and will furnish a complete report of the exercise as soon as possible after its completion.

2. How well did the community and the organization learn about the threat?

Discussion: In the event that an accident happens at Waterford III, the public will be alerted by a siren system (now installed and operating, not officially tested) that covers the 10-mile EPZ. The sirens will be controlled and operated by parish emergency preparedness officials. Some fringe areas will be alerted by portable sirens and other means. A Public Information Brochure will be distributed to the public prior to the plant becoming operational. This brochure will describe to the public that if the siren system is sounded they are to listen to certain radio and T.V. stations for instructions on what actions they are to take. There are also direct communication link-ups between the utility, local and State emergency operating centers so that information on the conditions at the utility can be passed to the decisionmakers and then on to the public for actions to either evacuate the area, take shelter or other procedures.

3. How well was the evacuation organized?

Discussion: As previously mentioned, the Public Information Brochure will have a map showing evacuation routes that people living in certain sections are to follow to a known reception center. Also they are told to listen to Radio and T.V. stations for additional information on evacuation procedures to follow. This PIB was not in the hands of the public during this evacuation. In addition, prewritten notification messages and public information materials have been developed for the parish emergency plans. These messages specify the personal items that the public are to take with them, procedures to follow, and information about the reception centers to go to if told to evacuate. This information will be repeated regularly over the Emergency Broadcast System (EBS) radio and T.V. stations.

4. How well were evacuees sheltered?

Discussion: The plans developed for Waterford call for reception centers (already pre-selected and identified) to be located outside the 10-mile EPZ. These centers will be managed by emergency personnel of the parishes in which the centers are located. This should remove the only minor problem mentioned in the Quarantelli report that "the management of the shelters was criticized by some persons." The Quarantelli report had no major problems with this section of the evaluation; therefore, no further discussion will be offered on this.

5. How well handled was the return to normal?

Discussion: There are several points made in the Quarantelli report under this heading. One was the need for non-routine interaction among several key organizations and key decisionmakers at the plant. The emergency plans for Waterford already specify a precise network of communications between the State, local parishes, and the utility. The type of information to be passed and the responsible decisionmakers have been identified in advance, and technical support to the EOC is through established procedures.

Convergence at the local EOC's and dealing with the mass media personnel were additional problems.

In the future, security personnel will be stationed at the EOC's to allow entry to only those personnel who have proper identification. The waterford plans have an established method to cover the mass media situation; however, this procedure has not been tested as yet.



Federal Emergency Management Agency

Region VI, Federal Center, 800 North Loop 288
Denton, Texas 76201-3698

December 27, 1983

MEMORANDUM FOR: DAVE McLOUGHLIN, Deputy Associate Director
State and Local Programs and Support

ATTENTION: Gloria Joyner, Program Specialist
State and Local Programs and Support
Natural and Technological Hazards Division

FROM: *for* *Robert J. Bruns*
Jerry Stephens, Regional Director

SUBJECT: Addendum to Interim Findings on Waterford III Steam
Electric Station

An interim finding on Waterford III Steam Electric Station was submitted to FEMA Headquarters on September 16, 1983. The plan review discovered that there were still remaining elements that proved to be inadequate or that needed further explanation. To resolve those remaining deficiencies, FEMA Region VI held a meeting November 8, 1983, in Dallas, Texas, with representatives from the State of Louisiana. Also in attendance were representatives from Louisiana Power and Light Company (LP&L), Argonne Lab, and Region VI RAC.

Attachment I provides a list of those unresolved elements that were specifically discussed at the November 8, 1983, meeting and progress made on resolving those elements. As noted, several of the elements have since been resolved while the remaining ones have been agreed upon but resolution not yet completed.

Attachment II is the formal submittal of the State of Louisiana comments to the Consolidated RAC Review (Interim Finding dated September 16, 1983) and also a response to concerns and resolutions pertaining to St. John Parish. FEMA Region VI is satisfied that all concerns pertaining to St. John Parish have been resolved.

You should note that the State of Louisiana included additional information and clarification on the following elements which were previously evaluated as adequate by FEMA Region VI. Those elements are as follows: A.1.d., C.2.a., D.4., F.1.d., G.1., G.4.a., H.10., I.8., J.10.i., J.10.1., J.12., K.4., O.1., P.3., P.8.

Also, please be advised that my staff is in the process of developing a written response pertaining to the Quarantelli Report per your memo dated November 23, 1983. Those comments will be forthcoming as soon as possible.

We will continue to maintain close liaison with the State of Louisiana to ensure that the remaining elements are completed to our satisfaction and will notify FEMA National accordingly.

Should you have any questions pertaining to this information, please contact Mr. Al Lookabaugh, Chief, Technological Hazards Branch.

Attachments

WATERFORD III

DISCUSSION OF UNRESOLVED ELEMENTS

A.2.a.

Resolved

RAC comment: Most agencies do not mention key individuals by title.

Resolution: The State of Louisiana brought to our attention that key state individuals are specified in the State Implementing Procedures. Also key Parish individuals are specified in the Parish Implementing Procedures. A cross-reference to indicate this will be added to the State Plan.

A.3.

Resolved

RAC comment: EPA is not listed among the organizations to support the plan.

Resolution: EPA was not listed because DOE and FEMA are specified as the lead agencies in the State plan. Support from other agencies will be coordinated through these two Federal agencies. Also, FEMA Region VI agrees that REACT is not expected to be used by the parishes in emergencies and references to REACT should be dropped in the next revision to the State Plan.

RAC comment: Letters of Agreement need to be formalized and updated before the Plan can be considered to be complete. This includes updating letters as needed.

Resolution: State of Louisiana forwarded to FEMA dated November 16, 1983, a copy of all Letters of Agreement that are currently on file at LNEC. All letters will not be incorporated in the plans but rather a list will be used to illustrate which letters are on file. State of Louisiana agrees to update Letters of Agreement as necessary and verification by FEMA would be available for inspection. Relative to the ambulance service agreements for responding to an accident at Waterford III, an intra-parish mutual aid agreement currently exist which specifies general ambulance support between parishes. This agreement is through the Southeast Louisiana Emergency Medical System Council. FEMA Region VI has reviewed this mutual aid agreement document and approves of it.

C.1.b.

In agreement but resolution not completed

RAC comment: Inadequate until plans/agreements are completed relating to specific Federal resources expected.

Resolution: The State of Louisiana has said that resource request will be specified when known to the Louisiana Nuclear Energy Division through final version of the Federal Radiological Monitoring and Assessment Plan (FRMAP). FEMA Region VI staff and RAC agree with the State of Louisiana.

C.1.c.

In agreement but resolution not yet completed

RAC comment: Specific support resources are to be outlined in Letters of Agreement which have not been completed. Incorrect cross-references.

Resolution: FEMA Region VI staff and RAC agree with the State of Louisiana that only after the final version of the Federal Radiological Monitoring and Assessment Plan should specific State and local resources be available to support the Federal response. Reference to Letters of Agreement in Section VII.A.4., page 40, will be deleted in the next revision of the State Plan. Cross references will be corrected in the next plan revision.

C.3.

In agreement but resolution not completed

RAC comment: Plan needs more detailed description pertaining to the capabilities and availability of the labs.

Resolution: An updated Letter of Agreement relative to the LSU Nuclear Science Department lab capability will be completed and amplified with the State of Louisiana. Also the concept of a mobile laboratory has been dropped by LNED and will be deleted in the next revision of the State Plan. Samples will be taken back to the Baton Rouge lab which is only an hour's drive.

C.4.

Resolved:

RAC comment: No Letters of Agreement found in the Southern Mutual Radiological Assistance Plan. Also Letters of Agreement with hospitals need to be completed. No specific arrangements for emergency support by other local organizations or individuals could be found in plans.

Resolution: The Southern Mutual Radiological Assistance Plan constitutes an agreement (covered by law) that has been signed by the governors of the respective states. Letters of Agreement with the hospitals and nursing homes have been completed and will be submitted with the other letters. FEMA Region VI has since received the hospitals' Letters of Agreement. Request for outside resources is detailed in Parish Implementing Procedures and response time has been anticipated. Also State and Parish Implementing Procedures provide methods for detailing anticipated resource requirements at different emergency classifications. This information will be transmitted to the proper response organization prior to exhausting available resources. Thus, FEMA Region VI is satisfied that this element has been met.

E.1.

Resolved

RAC comment: Message verification was not clear in the plans. Also EPA has no defined role in plan.

E.1.
(Continued)

Resolution: The operational Hotline is a self-verifying notification system. Initiating calls can only be made from the plant. Also, each message form has a commercial telephone number available for verification. Also as stated in response to A.e., DOE and FEMA are the lead Federal agencies. Any supporting agencies will be notified through these two Federal agencies. Thus, FEMA Region VI is satisfied that this element has been met.

E.5.

Resolved

RAC comment: It is not clear that a joint public information center coordinates the information to be released. Also it should be made clear which public information officers can approve information for release at local level.

Resolution: Federal guidance does not require a joint public information center. Protection action messages will be released by local and State organizations via local media and EBS as appropriate. The St. Charles and St. John emergency plans call for the release of emergency public information through their respective parish public information officers. It is specified in the Parish Implementing Procedures that only the Parish President can authorize public information releases. Thus, FEMA Region VI is satisfied that this element has been met.

H.11.

In agreement but resolution not completed

RAC comment: What is the concept on kits? Plan might benefit by describing what portion of this equipment is in kits and where those kits are.

Resolution: State of Louisiana states that emergency kits are in a foot locker. Some items are used regularly and are not locked in a kit. There will be a change in the plans to include a listing of all items. Will also change wording in the plan from "sampling supplies" to "LNED Emergency Response Kits."

I.10.

In agreement but resolution not completed

RAC comment: Alternative methods for estimating dose should be described in the plan. Also the computer may not be available when needed.

Resolution: The procedures for estimating dose are those incorporated by EPA-520/1-75-001, Appendix D. A hand method for estimating doses will be included in the next revision of the State Implementing Procedures.

J.2.

Resolved

RAC comment: State Plan does not provide for provisions concerning on-site individuals at the plant.

J.2.
(Continued)

Resolution: This criteria refers to the evacuation of on-site personnel to suitable off-site locations. It does not refer to arrangements for reception or sheltering of the general public in support parishes. Information is provided in Chapter 4.VI.F., enclosures 1 and 2, demonstrates coordination between the Waterford III Plan and local plans for movement and handling of on-site personnel who may need to be evacuated to an off-site location. Appropriate cross references to State Plan should be added to indicate this information is located in the parish enclosures. Thus, FEMA Region VI is satisfied that this element has been met.

J.9.

In agreement but resolution not completed

RAC comment: Section IV.A.6.b. of Chapter 7 needs to be revised. The dose levels mentioned there can in no way be considered "limits for routine operations" as stated. Also the note on page 8-5 regarding the bases for the PAG's needs to be expanded or placed elsewhere in the text.

Resolution: State of Louisiana explained the dose levels considered "limits for routine operations" and the EPA RAC representative then agreed. In next plan revision (Chapter 7, IV.A.6.b., page 7-7, the term "for routine operations" will be changed to "for the general population." Also (Chapter 7, IV.B.2.b.(1) page 7-9) the term "available" will be changed to "warranted." A correction was agreed upon to change the note on page 8-5 to indicate that such note is not correct for FDA which refers to critical receptor but is correct for contaminated drinking water supplies. Not correct for food preventive PAG's. Appropriate changes will be made in the next plan revision by the State of Louisiana.

J.10.e.

In agreement but resolution not completed

RAC comment: Nowhere in either the State or parish plans does it provide for the quantities and storage of KI. Also, additional cross-references needed.

Resolution: Next revision of plan will include a statement "Quantities of KI, sufficient to meet short term off-site contingencies, will be made available to St. Charles and St. John Parishes by Louisiana Power and Light for storage in their EOC's, and will be administered at the order of the ASOEA in accordance with State policy.

J.10.m.

In agreement but resolution not completed

RAC comment: Interpretation of projected dose must be clearly understood by the decisionmakers and carefully spelled out in the plan.

J.10.m.
(Continued)

Resolution: State of Louisiana has agreed to put a full definition of projected dose in a footnote, referenced, and defined in Tab 1, Chapter 6 and 7, in the next revision of the State Plan.

L.1.

In agreement but resolution not complete

RAC comment: There should be a statement in the plan to verify the capability of Ochsner Clinic.

Resolution: State of Louisiana agreed to put a statement of capability in the next revision of the State plan.

RAC comment: Who is responsible for training?

Resolution: The entire issue surrounding training and who is responsible for specific training is still unresolved. The Southeast Louisiana Emergency Medical Systems Council is very interested in providing training along with LNEC. A meeting is to be held the week of December 26 to determine who will be responsible for conducting specific training.

RAC comment: Are agreements signed with local ambulance services for responding to an accident at Waterford III? None were in the plans.

Resolution: Intra-parish mutual aid agreements have been completed concerning ambulance support between parishes. FEMA Region VI now has a copy of the ambulance agreement and approves it as being acceptable.

November 16, 1983

Mr. Al Lookabaugh
FEMA, Region VI
800 N. Loop 288
Denton, Texas 76201-3698

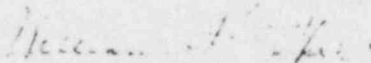
Dear Mr. Lookabaugh:

Subsequent to the meeting held on November 8, 1983, enclosed is the formal submittal of the State of Louisiana comments to the Consolidated RAC Review of the Louisiana Peacetime Radiological Response Plan, Revision 4, and Attachment 1. A few of the items discussed at the meeting remain open or are awaiting completion. Please find enclosed, in **bold print**, the items identified during the meeting which require changes to the State Plan or Attachment 1.

Also enclosed, is our response to your Attachment 1 of the Consolidated RAC Review dated September 28, 1983, St. John the Baptist Parish Concerns and Resolutions.

If there are any questions or further information needed, please contact Mr. Thomas Laiche at the address shown below.

Sincerely,


William H. Spell

WHS:TL:st

Enclosures

RESPONSE TO RAC REVIEW COMMENTS OF SEPTEMBER 28, 1983

- A.1.d The Director of the Bureau of Emergency Medical Services is identified in the Department of Health and Human Resources, Office of Hospitals, Bureau of EMS Implementing Procedures.
- A.2.a Key state individuals are specified in the state Implementing Procedures (IP's).

Key parish individuals are specified in the parish Implementing Procedures (IP's). **A cross reference will be added to the State Plan to indicate this.**
- A.3 DOE and FEMA are specified as the lead agencies in the state plan. Support from other agencies will be coordinated through these agencies.

A list of Letters of Agreement will be added to the Plan. Copies of the letters and any verifying statements will be made available upon request.

REACT is not expected to be used by the parishes in emergencies and references to REACT will be dropped in the next revision to the State Plan.
- C.1.b Resources will be specified, when made known to the Louisiana Nuclear Energy Division through final version of the Federal Radiological Monitoring and Assessment Plan (FRMAP).
- C.1.c State and local resources available to support the Federal response, will be outlined when Federal response resources and anticipated support needed are specified through final version of FRMAP.

Reference to letters of agreement in Section VII.A.4, page 40 will be deleted in the next revision of the State Plan.

Correct cross reference as specified.
Attachment, page iii.
Change page number.
- C.2.a Correct cross reference as specified.
Attachment, page iii.
Change page number.
- C.3 State Plan
Tab 3 to Chapter 6
G.2. page 6-13
Delete sentence which describes mobile laboratory.

Add a description of the LSU Nuclear Science Department capability to support LNED's emergency response.

- C.4 Southern Mutual Radiological Assistance Plan (SMRAP) constitutes an agreement (see Chapter 2 of SMRAP) and has been signed by the governors of the respective states.

LOA with Hospitals and Nursing Homes have been completed and will be submitted with the other letters.

Request for outside resources is detailed in parish IP's and response time has been anticipated.

State and parish IP's provide methods for detailing anticipated resource requirements at different emergency classifications. This information will be transmitted to the proper response organization prior to exhausting available resources.

- D.4 **Add a cross reference to the State Plan that indicates this information this information is also available in State IP's.**

- E.1 The Operational Hotline is a self-verifying notification system. Initiating calls can only be made from the plant. Also, each message form has a commercial telephone number available for verification.

As stated in response A.3, DOE and FEMA are the lead federal agencies. Any supporting agencies will be notified through these. Federal resource requirements will be listed as soon as they are made available to the LNED.

- E.5 Federal guidance does not require a joint public information center. Protective action messages will be released by local and state organizations via local media and EBS as appropriate. The St. Charles and St. John emergency plans call for the release of emergency public information through their respective Parish Public Information Offices. It is specified in the parish IP's that only the Parish President can authorize public information releases.

- F.1.d **Correct cross reference as specified.**
State Plan, page vii Attachment, page iv
Add page number 3-3 Enclosure 2, change letter I to H

- G.1 **Correct cross reference**
Attachment, page iv
G.1., add page number 24

- G.4.a St. John the Baptist and St. Charles parishes reserve the right to maintain independent public information organizations. Information released is specific to the individual parishes. A TWX capability has been established specifically for coordination of public information between organizations.

The Parish President, as the chief elected official, reserves the right by home rule charter to make this decision. There may be situations where the designated spokesperson is not the public information officer.

- H.10 Correct cross reference as specified.
State Plan, page vii
Add - H.10 Chapter 6, page 6-13, Tab 3,G
- H.11 Enclosure 1 to Tab 3 of Chapter 6
11.B. page 6-17
Change title Sampling Supplies to LNED Emergency Response Kits
- These kits are maintained and inventoried in the LNED laboratory after use or semi-annually.
- Parish emergency equipment is supplied and maintained by LOEP and is inventoried at each parish EOC after use or semi-annually.
- I.8 Add anticipated response times for LNED personnel
Add a cross reference to State Plan to show that call our list for LNED personnel is located in the State implementing procedures
- I.10 The procedures used are those incorporated by EPA-520/1-75-001, Appendix D.
- A hand method for estimating off-site dose projections will be added to State implementing procedures.
Add a cross reference to the State plan that indicates this information is available in the State IP's.
- J.2 This criteria refers to the evacuation of onsite personnel to suitable offsite locations. It does not refer to arrangements for reception or sheltering of the general public in support parishes. The information provided in Chapter 4.VI.F, enclosures 1 and 2, demonstrates coordination between the W3 Site Plan and local plans for movement and handling of onsite personnel who may need to be evacuated to an offsite location.
- Add a cross reference to the State plan to indicate this information is located in the Parish Enclosures
- J.9 The statement is intended to say that limitations to exposure for emergency workers will be imposed when radiation doses approach the 5 rem threshold. The intention is to be more conservative, rather than allow emergency workers doses to reach 25 rem.
- Chapter 7, IV.A.6.b., page 7-7, change the term "for routine operations" to "for the general population."
- Chapter 7, IV.B.2.b.(1) page 7-9, change the term "available" to "warranted".

- J.10.e **Correct cross reference as specified.**
State Plan, page viii
Add - Chapter 9, V.B.2, page 9-9
Table to Chapter 9, page 9-13
- Change the following:
Chapter 5 to Attachment I V.B.2.b., page 46
Delete the second sentence which reads, "This substance will be supplied by LNEED..." Add the following: "Quantities of KI, sufficient to meet short term offsite contingencies, is available at St. Charles Parish and St. John the Baptist Parish EOC's, and will be administered at the order of the ASOEA in accordance with state policy"
- J.10.i The W3, Evacuation Time Estimate is referenced in the emergency plans
and for the respective parishes and is available to those decision makers who
J.10.1. will locate in the Parish EOC's.
- J.10.m Tabs 1 and 2, Chapter 6, pages 6-7 through 6-10 explain the concept of
PAG's. However, the PAG's are not the only criteria used in determining
protective actions. The parish parishes use considerable flexibility in making
decisions for protective actions.
- A full definition of projected dose as stated in EPA-520/1-75-0001,
September 1975, page 2.1 - 2.2 will be included in Tab 1, Chapter 6 and
Tab 1, Chapter 7 of the State Plan.**
- J.12 Arrangement for the registering and monitoring of evacuees are available
in the support parish plans. The radiation monitoring equipment is also
described in support parish plans. Equipment is stored in the support parish
Civil Defense offices, with back-up units available through the Louisiana
Office of Emergency Preparedness.
- K.4 **State Plan Chapter 9, III.E. page 9-3, lines 4 and 5:**
Change the work "will" to "may".
- L.1 1. **A statement to verify Ochsner's capability will be included in the
revision of the State Plan.**
- 2.) Training for local and back-up medical services is provided for by the
Southeast Louisiana Emergency Medical Systems Council.
- 3.) Intra parish mutual aid agreement exist which specifies general
ambulance support between parishes. Training will be provided by
the Southeast Louisiana Emergency Medical Systems Council.
- 4.) At this time, the State is re-evaluating its' position with regards to
the use of the local hospitals to handle contaminated individuals.
Major hospitals that are near the Nuclear facilities are more capable
of handling contamination problems. Training at the major hospitals

can be more comprehensive than trying to train a large number of smaller, local hospitals that may not be able to cope with a contamination situation. When a more definite decision is made by the state, you will be notified. Training will be provided for through the state and the Southeast Louisiana Emergency Medical Systems Council.

- 5). See answer number 4 above.
- 6). See answer number 3 above.
- 7). St. Charles and St. John the Baptist parishes are unique in their need and development of emergency plans. Yes, the EMS system was involved in the planning stages.
- 8). NUREG 0654 section L.1. requires the hospital and medical support be arranged for, and that personnel are trained for this support role. It is our opinion that a description of how a local plan interfaced with the EMS system and how the parishes arrived at their needs for medical manpower is not required for inclusion in the plans.
- 9). Medical attendants are provided with ambulances as a normal business procedures. Again, training for drivers and attendants is provided for by the Southeast Louisiana Emergency Medical Systems Council in coordination with LNED.
- 10). See answer number 1 above.

O.1 LNED has the responsibility of training. At this time, LNED and the licensee are developing a training program and timetable for upcoming training.

P.3 **Correct cross reference as specified.**
State Plan, page ix
Change page number from 22 to 26

P.8 **Correct cross reference as specified.**
Attachment
Add page numbers iv through viii

ST. JOHN THE BAPTIST PARISH CONCERNS AND RESOLUTIONS

1. Frequent malfunction of the operational hotline phone.

The initial problems encountered with the operational hotline have been resolved. The proper operation of the hotline is being confirmed through monthly tests leading to the Waterford 3 exercise-for-score. Following the exercise, the operational hotline will be tested in accordance with the guidance established in NUREG-0654. Any malfunctions discovered as part of the testing program will promptly be remedied by LP&L.

In addition, a push-to-talk feature and a mouthpiece confidencer device have been installed at St. John's hotline station to reduce background noise from being transmitted through the system. Also, a feature is to be installed which will allow each hotline station to ring-up the Waterford site during an emergency.

2. Prompt notification of individuals in the fish camps within the 10-mile EPZ.

LP&L has purchased a portable siren for St. John Parish which will be capable of notifying 75% of the camps located in the wetlands. LP&L is in the process of purchasing two helicopter mounted warning devices for St. John Parish and two for St. Charles Parish.

The Louisiana Nuclear Energy Division has made contact with three State agencies who operate helicopters: the Louisiana State Police, the Louisiana Department of Wildlife and Fisheries, and the Louisiana Department of Transportation and Development. Each of these agencies has given assurance that helicopters will be made available in the event of an emergency. In addition, St. John Civil Defense is seeking an agreement from a private provider for two helicopters to be used in an emergency. These private helicopters are located several miles beyond the perimeter of the 10 mile EPZ and could be made available on short notice.



Federal Emergency Management Agency

Region VI

Federal Center

Denton, Texas 76201

September 16, 1983

MEMORANDUM FOR: DAVE MC LOUGHLIN
Acting Associate Director
State and Local Programs and Support

FROM: Jerry Stephens
Regional Director

SUBJECT: Interim Finding on Waterford III Steam Electric Station

Attached is a copy of the Federal Emergency Management Agency Region VI Radiological Assistance Committee, Argonne National Laboratory, and FEMA Region VI review of the State of Louisiana Peacetime Radiological Response Plan Revision #4 and the St. Charles and St. John the Baptist Parishes' emergency response plans. These off-site plans were developed and submitted to FEMA Region VI in accordance with Paragraph 350.7 of 44 CFR, Part 350 in support of the Waterford Plant.

The review of the plans was based on Section II (A through P), Planning Standards and Evaluation Criteria, NUREG-0654/FEMA-REP-1, Rev. 1.

Also in response to a memorandum dated March 25, 1983, from Edward L. Jordan to Richard W. Krimm, FEMA was requested to review the five concerns expressed by the St. John Parish Civil Defense Director and include our findings as a part of this interim finding.

We also had a concern brought up by Mr. Charles Hackney (NRC Regional Office, Arlington, Texas) to my RAC Chairman concerning how the personnel on the ships that are docked along the Mississippi (loading or unloading cargo) would be evacuated.

This item was discussed by the RAC Chairman with State and local personnel who advised that the ships' personnel would be considered as part of the industry where the ships were docked. Therefore, the ships' personnel would be evacuated using the evacuation plan for that particular industry.

The inadequate elements discovered by the review of the State and Local Plans will be furnished to the State of Louisiana by letter for comment and/or corrections. We will maintain close liaison with the State to see that the inadequate elements are corrected to our satisfaction and will notify FEMA National at that time.

Based on the review of the State and Parish Off-site Emergency Response Plans, there is reasonable assurance that the plans are adequate and capable of being implemented.

Many of the remarks in the review of the plans indicate that several elements are inadequate due to the lack of letters of agreement. The State has assured FEMA that most of these letters have already been obtained and they are in the process of obtaining the remainder. They wished to obtain all letters before submitting them to FEMA.

Attachments

ST. JOHN THE BAPTIST PARISH CONCERNS AND RESOLUTIONS1. Frequent malfunction of the operational hotline phone.

Initially the hotline had several malfunctions. However, the problem had been with the South Central Bell Telephone Company. The hotline is presently working satisfactorily; however, additional improvements are in the process of being added. A push-to-talk feature is on order with South Central Bell and will be installed in the very near future. Also a feasibility study is presently being undertaken by the utility to assess providing St. John and St. Charles Parishes with the ability to ring up Waterford III plant during an emergency.

2. Prompt notification of individuals in the fish camps within the 10-mile EPZ.

The utility company has purchased a portable siren for St. John Parish which will enable them to warn 75% of the fish camps in question. This leaves approximately seven additional fish camps that will not be warned by this procedure. A letter of agreement is to be obtained between Louisiana Nuclear Energy Division and the Louisiana Game and Fish Department regarding utilization of manpower in alerting these additional camps. The State police also have given a verbal agreement to utilize some of their personnel to warn these camps. However, they have stated they would not furnish a letter of agreement for this purpose. One additional step is being looked into by the utility and parish which is to obtain a letter of agreement for the services of a private helicopter to be used to notify these camps.

3. Availability of low-range self-reading dosimeters for St. John Parish emergency workers.

This concern is resolved. St. John Parish has now received a sufficient number of low-range self-reading dosimeters.

4. Communication and coordination between the Fixed Response Teams of the Louisiana Nuclear Energy Division, Louisiana Office of Emergency Preparedness, and the St. John Parish EOC.

Louisiana Nuclear Energy Division and the Louisiana Office of Emergency Preparedness have agreed to assign an individual to the St. John Parish EOC so that coordination can be maintained between the field teams and the EOC's. LNED is also in the process of obtaining radio equipment which will permit their field teams to communicate with the LNED field response center on 800 MHz band. Once this equipment is purchased and installed, a decision will be made to purchase equipment for the Parishes to allow them to monitor the 800 MHz band.

5. The time required for shutdown of the chemical plants (approximately 15-20 hours) and protection of the shutdown crews.

This concern is resolved. Plans are to conduct another training seminar for industries. The seminars will be developed and coordinated by the Louisiana Nuclear Energy Division, St. John and St. Charles Parish Civil Defense Directors, and the Louisiana Power and Light Company.

Another solution to this concern was to utilize industrial workers as emergency workers and the use of KI under State regulations.

RAC REVIEW COMMENTS

LOUISIANA STATE PLAN

AND

ST. CHARLES AND ST. JOHN THE BAPTIST PARISH PLANS

WATERFORD III STEAM ELECTRIC STATION

- References:
- State of Louisiana Peacetime Radiological Response Plan Revision 4
 - State of Louisiana Peacetime Radiological Response Plan Revision 4, Attachment 1, St. Charles, Enclosure 1, and St. John the Baptist, Enclosure 2, Parish Emergency Plans
 - State Implementing Procedures
 - St. Charles Implementing Procedures
 - St. John the Baptist Implementing Procedures

Criteria: NUREG-0654, FEMA REP 1, Rev. 1

The RAC and federal agency designation for the consolidated comments are as follows:

FEMA - Federal Emergency Management Agency
NRC - Nuclear Regulatory Commission
DOE - Department of Energy
EPA - Environmental Protection Agency
FDA - Food and Drug Administration
DOT - Department of Transportation
USDA - United States Department of Agriculture
ANL - Argonne National Laboratories
(FEMA Contractor)

ST. CHARLES AND ST. JOHN THE BAPTIST PARISH PLANS

RAC CONSOLIDATED COMMENTS

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
A.1.a.		Adequate
A.1.b.		Adequate
A.1.c.		Adequate
A.1.d.		Adequate
A.1.e.		Adequate
A.2.a.		Adequate
A.2.b.		Adequate
A.3.	FEMA	Inadequate, there are <u>no</u> agreements or letters of understanding included in the two Parish plans.
	EPA	Parish Plans (Chapter 8) list agreements that will be entered into, but no evidence could be found that such agreements have been finalized yet. These agreements must be formalized before the plan can be considered to be complete.
	DOE	Concept okay, but letters must be included.
	ANL	Inadequate, letters of understanding have not yet been developed. REACT is not included in the list of letters to be prepared.
A.4.		Adequate
C.1.a.		N/A
C.1.b.		N/A
C.1.c.	FEMA	Specific local support resources are not included in the plans.
	DOE	Local requirement but not included in the plans.

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
	EPA	Specific support resources are to be outlined in letters of agreement which have not been completed.
C.2.a.		Adequate
C.2.b.		N/A
C.3.		N/A
C.4.	FEMA	This element requires letters of agreement which are not found in the plans. Also, shouldn't the hospitals be added to the list?
	EPA	No specific arrangements for emergency support by other local organizations or individuals could be found in plans.
	DOT	Letters of agreement are still not included in the plans. Agencies have been identified and appear to include all of those needed.
	DOE	Adequate, but outside resources should be requested when it is apparent that local resources will be exhausted, <u>not</u> after they are exhausted, i.e., allow for response time.
	ANL	Inadequate, as noted in element A.3., letters of agreement have not been developed.
D.1.		N/A
D.2.		N/A
D.3.		Adequate
D.4.		Adequate
E.1.		Adequate
E.2.		Adequate
E.3.		N/A
E.4.a.-n.		N/A

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
E.5.	DOE	It should be made clear which public information officers can approve information for release.
E.6.		Adequate
E.7.		Adequate
F.1.a.		Adequate
F.1.b.		Adequate
F.1.c.		Adequate
F.1.d.		Adequate
F.1.e.		Adequate
F.1.f.		N/A
F.2.		Adequate
F.3.		Adequate
G.1.		Adequate
G.2.		Adequate
G.3.a.		Adequate
G.3.b.		N/A
G.4.a.	DOE	Adequate, but local press releases should be coordinated with State and utility public information officers.
	ANL	It is recommended that a change in wording be used in the cross-reference sentence, General, Chapter 1, V.,B, 2, page 24. The words "his designee" in the sentence should be changed to <u>public information officer</u> . This will clarify who the designated spokesperson is.
G.4.b.		Adequate
G.4.c.		Adequate
G.5.		Adequate

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
H.1.		N/A
H.2.		N/A
H.3.		Adequate
H.4.		Adequate
H.5.a.-6.c.		N/A
H.7.		Adequate
H.8.		N/A
H.9.		N/A
H.10.		Adequate
H.11.	NRC	Adequate, however, Plan might benefit by describing what portion of this equipment is in kits and where those kits are.
	EPA	Appropriate response equipment will be available, as listed in chapter 6, tab 3, enclosure 1, but the concept of kits (maintaining equipment in designated location where it is readily collectible) is not mentioned and evidently not planned.
	ANL	Inadequate, emergency supplies and protective equipment are not identified.
H.12.		Adequately addressed in State Plan.
I.1.		N/A
I.2.		N/A
I.3.a.		N/A
I.3.b.		N/A
I.4. and 5.		N/A
I.6.		N/A
I.7.	DOE	No capabilities but adequately addressed in State Plan.
I.8.	DOE	No capabilities but adequately addressed in State Plan.

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
I.8. (Cont'd.)	NRC	What about estimated deployment times?
	EPA	Chapter 6, Tab 3, Item C, refers to procedures for notifying response team members, but no call lists, or reference to lists, could be found, nor any telephone numbers, response times, etc.
I.9.		N/A
I.10.		N/A
I.11.		N/A
J.1.a.-d.		N/A
J.2.	FEMA	<p>Parish plans only state on page 114 (St. Charles) and page 210 (St. John) that "all arrangements for the reception and sheltering of parish evacuees will be handled by support parishes." Stated that shelter will be provided for the following parishes.</p> <ol style="list-style-type: none"> 1. Jefferson 2. Orleans 3. La fourche 4. Tangipchoa <p>Does not describe how this will be handled.</p> <p>Nothing in parish plans relates to or provides for on-site individuals, etc., in meeting this element.</p>
J.3.-8.		N/A
J.9.	EPA	<p>Parish plans page 108 and 204.6.b. relating to limitation to duration of exposures need to be revised. The dose levels mentioned there can in no way be considered "limits for routine operations" as stated. The guides are taken from the EPA Manual of Protection Action Guides and Protective Actions for Nuclear Incidents, EPA-520/1-75-001, and apply only to <u>post-incident</u> conditions. Five rem WB and 25 rem thyroid dose are the upper limits of projected dose levels to population groups for which evacuation is not mandatory, and these limits are not related to emergency workers' doses.</p>

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
J.10.a.		Adequate
J.10.b.		Adequate
J.10.c.		Adequate
J.10.d.		Adequate
J.10.e.	FEMA	Adequate, however, nowhere in the Parish plans does it provide for the quantities and storage of KI.
J.10.f.		Adequate
J.10.g.		Adequate
J.10.h.		Adequate
J.10.i.	DOT	The plan makes assurances that the "Evacuation time estimate information is available to decisionmakers in the event of an emergency requiring evacuation. The only question is whether this constitutes substantial compliance with the regulatory requirement for inclusion in the plan.
J.10.j.		Adequate
J.10.k.		Adequate
J.10.l.	DOT	Same comments as J.10.i. above.
J.10.m.		N/A
J.11.		N/A
J.12.	DOE	Adequate, however, additional details such as the approximate number of persons and support parish plans and procedures are needed.
K.1.-2.		N/A
K.3.a.		Adequate
K.3.b.		Adequate
K.4.		Adequate
K.5.a.-b.		Adequate
K.6.-7.		N/A

NUREG-0654 ElementAgencyComments

L.1.

NRC

Local and backup hospital and medical services are provided for. Question remaining, however, concerning assurances that persons providing these services are adequately prepared to handle contaminated individuals. Who is responsible for training?

FEMA

The same procedures for handling contaminated patients should be taught to both the hospital ER personnel and EMS personnel. Again, who is responsible for training?

Agreements have been signed with Ochsner and West Jefferson General Hospitals. What about agreements signed with local ambulance services?

HHS

A progressive system for EMS has been developed in the southeastern region of Louisiana, of which St. Charles and St. John the Baptist are a part. The two parishes should have benefited from this in their plan development. Was this EMS system involved in the planning stages?

There was no reference to this in relation to local and regional Medical Control and communications. It would be most beneficial in evaluating the local capabilities if a description of how the local plans interfaced with the Emergency Medical Service System.

Also it was not clear how the parishes arrived at the need for Medical Manpower on pages 151 and 248. Example, need two ambulances and twenty-six ambulance drivers. What about medical attendants for each ambulance?

Also the capability of the Ochsner Hospital should have been verified in the plans.

L.2.

N/A

L.3.

N/A

L.4.

FEMA

Adequate, however, plans do not include agreements signed with the local ambulance services for transportation.

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
M.1.		Adequate
M.2.		N/A
M.3.		N/A
M.4.		N/A
N.1.a.		Adequate
N.1.b.		Adequate
N.2.a.		Adequate
N.2.b.		N/A
N.2.c.		Adequate
N.2.d.		Adequate
N.2.e.		N/A
N.3.a.-f.		Adequate
N.4.-5.		Adequate
0.1.	FEMA	Adequate, however, in general plan states that LNED and LOEP will provide training to the two parishes. Who is the lead agency on training?
0.1.a.		N/A
0.1.b.		Adequate
0.2.		N/A
0.3.		N/A.
0.4.a.-d.		Adequate
0.4.e.		N/A
0.4.f.-h.		Adequate
0.4.i.		N/A
0.4.j.		Adequate
0.5.		Adequate
P.1.-8.		Adequate
P.9.		N/A
P.10.		Adequate

LOUISIANA STATE PLAN

RAC CONSOLIDATED COMMENTS

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
A.1.a.		Adequate
A.1.b.		Adequate
A.1.c.		Adequate
A.1.d.	HHS	Adequate, however, on page 30 of the State Plan, the Department of Health and Human Resources, Office of Hospitals, Bureau of Emergency Medical Services is assigned the responsibility for Health and Medical Services. Does the Bureau of Emergency Medical Services have a Director or will a designated position in the Office of Hospitals be assigned this responsibility?
A.1.e.		Adequate
A.2.a.	DOE	Inadequate, most agencies do not mention key individuals by title. Agency roles are properly delineated but a point of contact and coordination is required.
	ANL	Inadequate, a list of key individuals by title should be included for the organizations shown in the emergency function and responsibility chart, Fig. 3., p. 39 of the State Plan.
A.2.b.		Adequate
A.3.	DOE	Inadequate, letters of agreement must be included in the plan, not just listed. Agreements and procedures from other state agencies would be helpful even though not required.
	EPA	Chapter 14 of the Plan summarizes the formal agreements that will be developed. These agreements must be formalized before the Plan can be considered to be complete. EPA is not listed among the organizations to support the Plan (table 1).
	FEMA	Letters of agreement need to be updated as stated in plans. No updates were included in the State Plan.

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
A.3. (Cont'd.)	ANL	Inadequate, chapter 14 of the State Plan provides that letters of agreement will be developed. They, or a signature page should be included in the State Plan.
A.4.		Adequate
C.1.a.		Adequate
C.1.b.	DOE	Inadequate until Plans/Agreements are completed.
C.1.c.	EPA	Specific support resources are to be outlined in letters of agreement (page 40), which have not been completed.
	DOE	Inadequate, letters of agreements not included.
	ANL	Inadequate, letters of agreement identified in section VII, A.4, page 4C, of the State Plan should be included.
C.2.a.		Adequate
C.2.b.		N/A
C.3.	NRC	State Plan assigns primary responsibility for environmental monitoring to LNED. Principal laboratory for radiological analyses is LNED's lab in Baton Rouge. To the extent that backup labs, such as LSU's, would be relied upon, the plan would benefit from more detailed description of the capabilities and availability of these labs. In addition, the capabilities for field analysis of samples, if that capability exists, should be described more thoroughly (mobil laboratory mentioned on page 6-13).
	DOE	Not adequately described. Could be included with letters of agreement.
C.4.	EPA	Southern Mutual Radiological Assistance Plan identified for manpower support (page 41), but no letter of agreement was found. No specific arrangements for emergency support by other local organizations or individuals could be found.
	DOE	Inadequate until plans and agreements are included.
D.1. and 2.		N/A

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
D.3.		Adequate
D.4.		Adequate
E.1.	EPA	Notification procedures are outlined in chapter 2. Initial notification form (tab 1 to chapter 2) does not specify message verification, although the Revision 3 version of this form did so. Verification of messages to State and Parish officials is stated to be detailed in the implementing procedures (page 2-3), but could not be found in attachment 1, "Notification Procedure" or in attachment 2, "Communications Procedure," which in any case are explicitly excluded as a formal part of the Plan.
		EPA has no defined role in plan. If called upon, notification of EPA will evidently be done by DOE (page 40). Resources relied upon will be listed in tab 6 to chapter 6, which, however, has not yet been developed.
E.2.		Adequate
E.3. through 4.		N/A
E.5.	DOE	Inadequate, it is not clear that a joint public information center coordinates the information to be released.
E.6.		Adequate
E.7.		Adequate
F.1.a.		Adequate
F.1.b.		Adequate
F.1.c.		Adequate
F.1.d.		Adequate
F.1.e.		Adequate
F.1.f.		N/A
F.2.		Adequate

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
F.3.		Adequate
G.1.		Adequate
G.2.		Adequate
G.3.a.		Adequate
G.3.b.		N/A
G.4.a.		Adequate
G.4.b.		Adequate
G.4.c.		Adequate
G.5.		Adequate
H.1.		N/A
H.2.		N/A
H.3.		Adequate
H.4.		Adequate
H.5. and 6.		N/A
H.7.		Adequate
H.8. and 9.		N/A
H.10.	FEMA	Adequate, however, State Plan does not give a cross reference for this element. It is missing. The cross reference is Chapter 6, page 6-13, tab 3, G.
	DOE	Adequate, but cross reference should be included.
H.11.	EPA	Appropriate response equipment will be available, as listed in Chapter 6, tab 3, enclosure 1, but the concept of kits (maintaining equipment in designated location where it is readily collectible) is not mentioned and evidently not planned.

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
H.12.	NRC	Plan might benefit by describing what portion of this equipment is in kits and where those kits are.
I.1. through 6.		N/A
I.7.		Adequate
I.8.	EPA	Chapter 6, tab 3, item C refers to procedures for notifying response team members, but no call lists, or reference to lists, could be found, nor any telephone numbers, response times, etc.
	DOE	Adequate, but deployment times should be estimated.
	NRC	Estimated deployment times?
I.9.		Adequate:
I.10.	EPA	In-house computer capabilities are referenced (page 6-4) and methodology will track EPA's Manual of Protective Action Guides. Since it is conceivable that the computer will not be available when needed, alternative methods for estimating dose should be available and described in the Plan. Merely noting that computer capabilities exist and a particular methodology referenced does not satisfy the requirement that "procedures be stated." Additional descriptions and procedures, including data forms and specific formulas and/or nomograms, should be included.
I.11.		Adequate
J.1.		N/A
J.2.	FEMA	Inadequate, nothing in State Plan relating to provisions for on-site individuals in meeting this element.
J.3. through 8.		N/A

NUREG-0654 ElementAgencyComments

J.9.

EPA

Sec. IV.A.6.b. of Chapter 7 needs to be revised. The dose levels mentioned there can in no way be considered "limits for routine operations" as stated. The guides are taken from the EPA Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, EPA-520/1-75-001, and apply only to post-incident conditions. Five rem WB and 25 rem thyroid dose are the upper limits of projected dose levels to population groups for which evacuation is not mandatory, and these limits are not related to emergency workers doses.

Sec. IV.B.2.b.(1) directs that potassium iodide will be administered to emergency workers, if available, even though exposure conditions may not involve any thyroid dose (e.g., projected dose is 10 rem WB but no radioiodine in release). In such a situation iodine blocking may not be desirable, and its use should be based on judgment as in the lower worker exposure categories and for institutionalized persons in the section following.

The note on p. 8-5 regarding the bases for the PAG's needs to be expanded or placed elsewhere in the text. The note appears to be correct for contaminated drinking water supplies and for food emergency PAG's, but as I read the FDA recommendations (Fed. Reg. 58790, Dec. 15, 1978) and supporting documentation of May 23, 1978, not correct for food preventive PAG's, which refer to the critical receptor.

Implementation of protective actions generally tracks EPA recommendations.

J.10.a.

Adequate

J.10.b.

Adequate

J.10.c.

Adequate

J.10.d.

Adequate

J.10.e.

FEMA

Adequate, however, nowhere in the State Plan does it provide for the quantities and storage of KI.

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
J.10.f.		Adequate
J.10.g.		Adequate
J.10.h.		Adequate
J.10.i.	DOT	Evacuation Time Estimates for Waterford Steam Electric Station Unit Number 3 apparently includes the required information and has been reviewed by FEMA/NRC. The plan makes assurances that this information is available to decisionmakers in the event of an emergency requiring evacuation. The only question is whether this constitutes substantial compliance with the regulatory requirement for inclusion in the plan.
J.10.j.		Adequate
J.10.k.		Adequate
J.10.l.	DOT	Evacuation Time Estimates for Waterford Steam Electric Station Unit Number 3 apparently includes the required information and has been reviewed by FEMA/NRC. The plan makes assurances that this information is available to decisionmakers in the event of an emergency requiring evacuation. The only question is whether this constitutes substantial compliance with the regulatory requirement for inclusion in the plan.
J.10.m.	EPA	The first sentence in Sec. IV.B. of Chap. 7 "sort of" implies that the EPA PAG's are only applicable at the time of an accident, and dose projections are to be calculated from that time. This is not the case, but I could not find the concept of "projected dose" clarified in the Plan. The intent of the EPA PAG's is to apply the numerical guides as of the time the action is under consideration. For example, if a population group has already been exposed for 4 rem WB and an additional 2 rem WB is projected, the PAG would not recommend mandatory evacuation. The 5 rem mandatory evacuation guide refers to the (additional) <u>projected dose</u> which in the above example is 2 rem (not $4 + 2 = 6$ rem). If the EPA guidance is being strictly followed, this interpretation of projected dose must be clearly understood by the decisionmakers and carefully spelled out in the Plan.

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
J.11.		Adequate
J.12.	EPA	The means for registering and monitoring evacuees at relocation centers are outlined in Chapter 9. No lists of equipment and supplies, other than radiation monitoring equipment, could be located. Equipment storage locations and custodians could not be found in the Plan.
K.1. and 2.		N/A
K.3.a.		Adequate
K.3.b.		Adequate
K.4.	EPA	Adequate, however, would suggest that the wording in Chapter 9, Section III, on page 9-3 be changed to make it more clear that the authorization to exceed established exposure limits is not an automatic process, but rather is based on judgement. Specifically, I suggest the word "will" in lines 4 and 5 be changes to "may."
K.5.a.		Adequate
K.5.b.		Adequate
K.6. and 7.		N/A
L.1.	HHS	The national reputation of Ochsner Clinic leaves little doubt to this reviewer of the capability of this hospital to adequately handle contaminated individuals. However, there should be a statement to verify this capability.
	NRC	Local and backup hospital and medical services are provided for. Question remains, however, concerning assurances that persons providing these services are adequately prepared to handle contaminated individuals. Who is responsible for training?
	FEMA	Are agreements signed with local ambulance services for responding to an accident at Waterford III? None were found in plans.
L.2.		N/A

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
L.3.		Adequate
L.4.		Adequate
M.1.		Adequate
M.2.		N/A
M.3.		Adequate
M.4.		Adequate
N.1.a.		Adequate
N.1.b.		Adequate
N.2.a.		Adequate
N.2.b.		N/A
N.2.c.		N/A
N.2.d.		Adequate
N.2.e.1.		Adequate
N.2.e.2.		N/A
N.3.a. through N.3.f.		Adequate
N.4.		Adequate
N.5.		Adequate
0.1.	FEMA	Adequate, however, who is responsible for training? LNED or LOEP?
0.1.a.		N/A
0.1.b.		Adequate
0.2.		N/A
0.3.		N/A
0.4.a. through 0.4.j.		Adequate
0.5.		Adequate

<u>NUREG-0654 Element</u>	<u>Agency</u>	<u>Comments</u>
P.1.		Adequate
P.2.		Adequate
P.3.		Adequate
P.4.		Adequate
P.5.		Adequate
P.6.		Adequate
P.7.		Adequate
P.8.		Adequate
P.9.		N/A
P.10.		Adequate

LOUISIANA STATE PLAN
AND
ST. CHARLES AND ST. JOHN THE BAPTIST PARISH PLANS
EVALUATION OF RADIOLOGICAL EMERGENCY RESPONSE PLANS
FOR WATERFORD III STEAM ELECTRIC STATION

A. Assignment of Responsibility (Organizational Control)
Planning Standard

Primary responsibilities for emergency response by the nuclear facility licensee, and by State and local organizations within the Emergency Planning Zones have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
A.1.a.	State Plan, section VI and VII, pages 26-42. Also pages 45 and 46.	Adequate
	St. John Parish Plan Enclosure 2, page 157 and page 171 provides responsibility chart.	Adequate
	St. Charles Parish Plan Enclosure 1, page 57 and page 72 provides responsibility chart.	Adequate
A.1.b.	State Plan section IV and VI, pages 17-20 and 26-38.	Adequate
	St. Charles Parish, concept of operations begin on page 67.	Adequate
	St. John Parish, concept of operations begin on page 167.	Adequate
	Also Parish attachments and implementing procedures.	
A.1.c.	State Plan, diagrams charts pages 21 and 25.	Adequate
	St. Charles Parish, diagram chart, page 73.	Adequate
	St. John Parish, diagram chart, page 172.	Adequate

NUREG REFERENCECROSS REFERENCEEVALUATION AND COMMENTS

A.1.d.

State Plan Section V,
pages 22-24.

Adequate, however on page 30 of the State Plan, the Department of Health and Human Resources, Office of Hospitals, Bureau of Emergency Medical Services is assigned the responsibility for Health and Medical Services. Does the Bureau of Emergency Medical Services have a Director or will a designated position in the Office of Hospitals be assigned this responsibility?

St. Charles Parish, page 56
(St. Charles Parish President)

Adequate

St. John Parish, page 167
(St. John Parish President)
Also Parish attachments and
procedures.

Adequate

A.1.e.

State Plan Chapter 3, III,
4.,5., page 3-2 provides
24 hr. coverage by LOEP and
Parish Sheriff's Office.

Adequate

St. Charles Parish, pages 66
and 96.

Adequate

St. John Parish, pages 166
and 192.

Adequate

Also Parish attachments and
implementing procedures.

A.2.a.

State Plan section V and VI,
pages 22-38. Table for
primary and secondary responsi-
bilities given on page 39.

Inadequate, most agencies do not mention key individuals by title. Agency roles are properly delineated but a point of contact and coordination is required.

Parish attachments.

Inadequate, a list of key individuals by title should be included for the organizations shown in the emergency function and responsibility chart, Fig. 3., p. 39 of the State Plan.

St. Charles Parish, Table of
responsibilities, page 72.

Adequate

St. John Parish, Table of
responsibilities, page 171.

Adequate

NUREG REFERENCECROSS REFERENCEEVALUATION AND COMMENTS

A.2.b.

State Plan, Section I.D.,
page 2.

Adequate

St. Charles Parish,
attachment 1, page 57.

Adequate

St. John Parish,
attachment 1, page 157.

Adequate

A.3.

State Plan, chapter 14, page
14-1.

Inadequate, letters of agreement must be included in the plan, not just listed. Agreements and procedures from other state agencies would be helpful even though not required.

Chapter 14 of the Plan summarizes the formal agreements that will be developed. These agreements must be formalized before the Plan can be considered to be complete. EPA is not listed among the organizations to support the Plan (table 1).

Letters of agreement need to be updated as stated in plans. No updates were included in the State Plan.

Inadequate, chapter 14 of the State Plan provides that letters of agreement will be developed. They, or a signature page should be included in the State Plan.

St. Charles Parish, page
148.

Inadequate, there are no agreements or letters of understanding included in the two Parish plans.

Parish Plans (Chapter 8) list agreements that will be entered into, but no evidence could be found that such agreements have been finalized yet. These agreements must be formalized before the plan can be considered to be complete.

Concept okay, but letters must be included.

Inadequate, letters of understanding have not yet been developed. REACT is not included in the list of letters to be prepared.

St. John Parish, page 245.

Inadequate. Same as S.C. above.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
A.4.	State Plan, V., B., page 22 and VI., A., 3., 4., page 26.	Adequate
	St. Charles Parish, C., 2., 3., page 66.	Adequate
	St. John Parish, C., 2., 3., page 166.	Adequate

C. Emergency Response Support and Resources
Planning Standards

Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate State and local staff at the licensee's near site Emergency Operations Facility have been made, and other organizations capable of augmenting the planned response have been identified.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
C.1.a.	State Plan, V., B., page 22	Adequate
	Parish Plans	N/A
C.1.b.	State Plan, VII., A., page 40.	Inadequate until Plans/Agreements are completed.
	Parish Plans	N/A
C.1.c.	State Plan, VII., A., 4., page 40. Local Parish Plan cross reference page III refers to State Plan page 36 which is the wrong cross reference. Should be page 40.	Specific support resources are to be outlined in letters of agreement (page 40), which have not been completed.
		Inadequate, letters of agreements not included.
		Inadequate, letters of agreement identified in section VII., A., page 40, of the State Plan should be included.
	St. Charles Parish	Specific local support resources are not included in the plans.
		Local requirement, but not included in the plans.
		Specific support resources are to be outlined in letters of agreement which have not been completed.
		Also note incorrect page number for cross reference in local plans.
	St. John Parish	Same comments as S.C. above.

NUREG REFERENCECROSS REFERENCEEVALUATION AND COMMENTS

C.2.a.

State Plan, IV., O. page 19 and VII., C., 1., page 41 Local Parish Plan cross reference page iii refers to State Plan page 37 which is the wrong cross reference. Should be page 41.

Adequate, however, please note the incorrect cross reference page number in local plans.

C.2.b.

N/A

C.3.

State Plan, VII., B., 1. and 2, page 41. Chapter 6, III., B. and C., pages 6-2 through 6-5. Chapter 6, Tab 3, pages 6-11 through 6-15.

State Plan assigns primary responsibility for environmental monitoring to LNEC. Principal laboratory for radiological analyses is LNEC's lab in Baton Rouge. To the extent that backup labs, such as LSU's, would be relied upon, the plan would benefit from more detailed description of the capabilities and availability of these labs. In addition, the capabilities for field analysis of samples, if that capability exists, should be described more thoroughly (mobil laboratory mentioned on page 6-13).

Not adequately described. Could be included with letters of agreement.

St. Charles Parish Plans.

N/A

St. John Parish Plans.

N/A

C.4.

State Plan, VII., A., 1-4, page 40 and VII., B., 1-3, pages 40 & 41. General local plan section IV, page 10.

Southern Mutual Radiological Assistance Plan identified for manpower support (page 41), but no letter of agreement was found. No specific arrangements for emergency support by other local organizations or individuals could be found.

Inadequate until plans and agreements are included.

St. Charles Parish, chapter 8, page 148 and St. John Parish, chapter 8, page 245.

This element requires letters of agreement which are not found in the plans. Also, shouldn't the hospitals be added to the list?

No specific arrangements for emergency support by other local organizations or individuals could be found in plans.

NUREG REFERENCECROSS REFERENCEEVALUATION AND COMMENTS

Letters of agreement are still not included in the plans. Agencies have been identified and appear to include all of those needed.

Adequate, but outside resources should be requested when it is apparent that local resources will be exhausted, not after they are exhausted, i.e., allow for response time.

Inadequate, as noted in element A.3., letters of agreement have not been developed.

D. Emergency Classification System
Planning Standard

A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determination of minimum initial off-site response measures.

NUREG REFERENCECROSS REFERENCEEVALUATION AND COMMENTS

D.1. and 2.

N/A

D.3.

State Plan, chapter 1,
pages 1-1 through 1-7.

Adequate

Parish Plans, General,
chapter 4, pages 36
through 39.

Adequate

D.4.

State Plan, chapter 6, III.,
A., 1. and 2., pages 6-1 and
6-2. Also chapter 6, III.,
C.1. and 2., pages 6-3 through
6-5.

Adequate, in addition, in the State implementing procedures plan there are administrative procedures relating to the emergency classification system which is not listed in the cross reference. This should be added next time the plans are revised.

St. Charles Parish, D., pages
67 through 70.

Adequate

St. John Parish, D., pages
167 through 170.

Adequate

Also section VI pages 4-6 in
the State implementing
procedures plan.

E. Notification Methods and Procedures
Planning Standard

Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all response organizations; the content of initial and followup messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
E.1.	State Plan, chapter 2, Implementing procedures, page 2-1 (Accident Notification) State Procedures Plan, page 1 (Accident Notification).	Notification procedures are outlined in chapter 2. Initial notification form (tab 1 to chapter 2) does not specify message verification, although the Revision 3 version of this form did so. Verification of messages to State and Parish officials is stated to be detailed in the implementing procedures (page 2-3) but could not be found in attachment 1, "Notification Procedure" or in attachment 2, "Communications Procedure," which in any case are explicitly excluded as a formal part of the Plan. EPA has no defined role in plan. If called upon, notification of EPA will evidently be done by DOE (page 40). Resources relied upon will be listed in tab 6 to chapter 6, which, however, has not yet been developed.
	St. Charles Parish, page 93 EOC Implementing Procedures, attachment 6, page A.6-1.	Adequate
	St. John Parish, page 189 EOC Implementing Procedures, attachment 8, page A.8-1.	Adequate
E.2.	State Plan, VI., A.5, page 26 and chapter 2, II., page 2-3. Also state implementing procedures (State procedures book), page 1.	Adequate
	St. Charles Parish, chapter 1, page 93.	Adequate
	St. John Parish, chapter 1, page 189.	Adequate

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
E.3.		N/A
E.4.a.-n.		N/A
E.5.	State Plan, chapter 4 (Public Alert/Notification) page 4-1.	Inadequate, it is not clear that a joint public information center coordinates the information to be released.
	St. Charles Parish, chapter 3, (Public Alert/Notification) page 99.	It should be made clear which public information officers can approve information for release.
	St. John Parish, chapter 3 (Public Alert/Notification) page 195.	It should be made clear which public information officers can approve information for release.
E.6.	State Plan, chapter 4, (Public Alert/Notification) page 4-1. Also Parish attachments.	Adequate.
	St. Charles Parish, chapter 3, page 99 (Public Alert/Notification)	Adequate
	St. John Parish, chapter 3, page 195 (Public Alert/Notification)	Adequate
E.7.	State Plan, chapter 4, IV. pages 4-3 and 4-4. Also chapter 4, Tab 1, page 4-6. Parish attachments.	Adequate
	St. Charles Parish EOC Implementing Procedures, attachment 8, enclosure 3, page A.8-E3-1.	Adequate
	St. John Parish EOC Implementing Procedures, attachment 4, enclosure 3, page A.4-E.3-1.	Adequate

F. Emergency Communications
Planning Standard

Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
F.1.a.	State Plan, chapter 3, III, A., pages 3-1 and 3-2.	Adequate
	St. Charles, enclosure 1, chapter 1, III., page 93 and enclosure 1, chapter 2, III., page 97.	Adequate
	St. John Parish, enclosure 2, chapter 1, III., page 189 and enclosure 2, chapter 2, III., page 193.	Adequate
F.1.b.	State Plan, chapter 3, III., A., pages 3-1 and 3-2 and B., 2., pages 3-2 and 3-3.	Adequate
	St. Charles, enclosure 1, chapter 2, III., page 97.	Adequate
	St. John, enclosure 2, chapter 2, III., page 193.	Adequate
F.1.c.	State Plan, chapter 3, III., B.3., page 3-3.	Adequate
	St. Charles, enclosure 1, chapter 2, III., K., page 98.	Adequate
	St. John, enclosure 2, chapter 2., III., J., page 194.	Adequate
F.1.d.	State Plan, chapter 3., III., A., pages 3-1 and 3-2.	Adequate, however, incorrect cross reference on St. John page 194. Should be "H" instead of "J." Also on State Plan cross reference should include page 3-3 on monitoring teams.
	St. Charles, enclosure 1, chapter 2., III., J., page 98.	Adequate
	St. John, enclosure 2, chapter 2., III., H., page 194.	Adequate

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
F.1.e.	State Plan, chapter 3, III., A., 1., 4., pages 3-1 and 3-2.	Adequate
	St. Charles, enclosure 1, chapter 1, III., C., page 94. EOC Implementing Procedure, attachment 2.	Adequate
	St. John, enclosure 2, chapter 1, III., D., page 190. EOC Implementing Procedure, attachment 1.	Adequate
F.1.f.		N/A
F.2.	State Plan, chapter 3., III., D., page 3-3.	Adequate
	St. Charles, Enclosure 1, chapter 6., IV., A., 2., d. and e., page 138.	Adequate
	St. John, enclosure 2, chapter 6., IV., A., 4. and 5., page 235.	Adequate
F.3.	State Plan, chapter 13., IV., A., 1., page 13-3.	Adequate
	St. Charles, enclosure 1, chapter 2., IV., page 98.	Adequate
	St. John, enclosure 2, chapter 2., IV., page 194.	Adequate

G. Public Education and Information
Planning Standard

Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station and remaining indoors), the principal points of contact with the news media for dissemination of information during an emergency (including the physical location or locations) are established in advance, and procedures for coordinated dissemination of information to the public are established.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
G.1.	State Plan, chapter 5., IV., A., 1 and 4., pages 5-2 and 5-3.	Adequate.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
	St. Charles Plan, General, chapter 1, IV. and V., pages 22, 23, & 24.	Adequate, however, should add page 24 to cross reference.
	St. John Plan, General, chapter 1, IV. and V., pages 22, 23, & 24.	Adequate, same as S.C. above.
G.2.	State Plan, chapter 5., IV., A., 1., 5., and 6., pages 5-2 and 5-3.	Adequate
	St. Charles Plan, General, chapter 1, V., A., 3., page 24.	Adequate
	St. John Plan, General, chapter 1, V., A., 3., page 24.	Adequate
G.3.a.	State Plan, chapter 5., IV., C., 1., 2., and 3., page 5-5.	Adequate
	St. Charles Plan, General, chapter 1., V., C., 1., page 25.	Adequate
	St. John Plan, General, chapter 1, V., C., 1., page 25.	Adequate
G.3.b.		N/A
G.4.a.	State Plan, chapter 5., IV., B., 1., and 3., pages 5-3 and 5-4.	Adequate.
	St. Charles Plan, General, chapter 1, V., B., 2., page 24.	Adequate, but local press releases should be coordinated with State and utility public information officers. It is recommended that a change in wording be used in the cross-reference sentence, General, chapter 1, V., B., 2., page 24. The words "his designee" in the sentence should be changed to <u>public information officer</u> . This will clarify who the designated spokesperson is.
	St. John Plan, General, chapter 1., V., B., 2., page 24.	Same comments as S.C. Plan above.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
G.4.b.	State Plan, chapter 5., IV., B., 5., 6., 7., and 8., page 5-4.	Adequate
	St. Charles Plan, General, chapter 1., V., B., 3., page 24.	Adequate
	St. John Plan, General, chapter 1., V., B., 3., page 24.	Adequate
G.4.c.	State Plan, chapter 5., IV., B., 4., page 5-4.	Adequate
	St. Charles Plan, General, chapter 1., V., B., 4., page 24.	Adequate
	St. John Plan, General, chapter 1., V., B., 4., page 24.	Adequate
G.5.	State Plan, chapter 5., IV., C., 4., page 5-5.	Adequate
	St. Charles Plan, General, chapter 1, V., C., 2., page 25.	Adequate
	St. John Plan, General, chapter 1., V., C., 2., page 25.	Adequate

H. Emergency Facilities and Equipment
Planning Standard

Adequate emergency facilities and equipment to support the emergency response are provided.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
H.1. and 2.		N/A
H.3.	State Plan, IV., H., J., and N., pages 18 & 19. Also Parish attachments.	Adequate

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
	St. Charles, enclosure 1, Basic, C., 1., page 66.	Adequate
	St. John, enclosure 2., Basic, C., 1., page 166.	Adequate
H.4.	State Plan, Implementing Procedures.	Adequate
	St. Charles, enclosure 1, Basic, D., 5., page 67.	Adequate
	St. John, enclosure 2, Basic, D., 5., page 167.	Adequate
H.5.a. through 6.c.		N/A
H.7.	State Plan, chapter 6, III., B., 2., pages 6-2 and 6-3. Chapter 6, Tab 7, pages 6-28 through 6-30.	Adequate
	St. Charles Plan, General, chapter 5., V., B., 1., e., page 46. Enclosure 1, chapter 9, Tab 1, page 151.	Adequate
	St. John Plan, General, chapter 5., V., B., 1., e., page 46. Enclosure 2, chapter 9, tab 1, page 248.	Adequate
H.8. and 9.		N/A
H.10.	State Plan, chapter 6, tab 3, G., page 6-13.	Adequate, however, State Plan does not give a cross reference for this element. It is missing. The cross reference is Chapter 6, page 6-13, tab 3., G.
		Adequate, but cross reference should be included.
	St. Charles Plan, General, chapter 5., III., G., page 42.	Adequate

NUREG REFERENCECROSS REFERENCEEVALUATION AND COMMENTS

	St. John Plan, General, chapter 5., III., G., page 42.	Adequate
H.11.	State Plan, chapter 6, Tab 3, enclosure 1, pages 6-16 through 6-19, chapter 6, Tab 3, E., page 6-12.	Appropriate response equipment will be available, as listed in chapter 6, tab 3, enclosure 1, but the concept of kits (maintaining equipment in designated location where it is readily collectible) is not mentioned and evidently not planned.
	St. Charles, enclosure 1, chapter 9, tab 1, page 151.	Adequate, however, Plan might benefit by describing what portion of this equipment is in kits and where those kits are.
		Appropriate response equipment will be available, as listed in chapter 6, tab 3, enclosure 1, but the concept of kits (maintaining equipment in designated location where it is readily collectible) is not mentioned and evidently not planned.
		Inadequate, emergency supplies and protective equipment are not identified.
	St. John, enclosure 2, chapter 9, Tab 1, page 248.	Same comments as S.C. above.
	Parish Plans, General, chapter 5, V., B., 1., e., page 46.	
H.12.	State Plan, chapter 6, Tab 3, A., page 6-11, chapter 6, Tab 3, E., page 6-12.	Plan might benefit by describing what portion of this equipment is in kits and where those kits are.
	Parish Plans refer to State Plans, chapter 6, Tab 3, F., 1., page 6-12.	Adequate

I. Accident Assessment
Planning Standard

Adequate methods, systems and equipment for assessing and monitoring actual or potential off-site consequences of a radiological emergency condition are in use.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
I.1. through 6.		N/A
I.7.	State Plan, chapter 6, Tab 3, pages 6-11 through 6-22. Chapter 6, Tab 5, page 6-26 Chapter 6, Tab 7, pages 6-28 through 6-30.	Adequate
	Parish Plans refer to State Plan, chapter 6, Tab 3, pages 6-11 through 6-22.	No capabilities, but adequately addressed in State Plan.
I.8.	State Plan, chapter 6, Tab 3, pages 6-11 through 6-22, State Implementing Procedures.	Chapter 6, Tab 3, item C refers to procedures for notifying response team members, but no call lists, or reference to lists, could be found, nor any telephone numbers, response times, etc.
		Adequate, but deployment times should be estimated.
		Estimated deployment times?
	Parish Plans refer to State Plans page 6-11 through 6-22.	No capabilities but adequately addressed in State Plan.
I.9.	State Plan, chapter 6, Tab 3, F., 4., b., page 6-13.	Adequate
	Parish Plans	N/A
I.10.	State Plan, Implementing Procedures	In-house computer capabilities are referenced (page 6-4) and methodology will track EPA's Manual of Protective Action Guides. Since it is conceivable that the computer will not be available when needed, alternative methods for estimating dose should be available and described in the Plan.
		Merely noting that computer capabilities exist and a particular methodology referenced does not satisfy the requirement that "procedures be stated." Additional descriptions and procedures, including data forms and specific formulas and/or nomograms, should be included.
	Parish Plans	N/A

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
I.11.	State Plan, Chapter 6, Tab 3. H., I., page 6-14.	Adequate
	Parish Plans	N/A

J. Protective Response
Planning Standard

A range of protective actions have been developed for the plume exposure pathway EPZ for emergency workers and the public. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
J.1.a.-d.		N/A
J.2.	State Plan, Nothing	Inadequate, nothing in State Plan relating to provisions for on-site individuals in meeting this element.
	St. Charles, enclosure 1, chapter 4, VI., F., page 114.	Parish Plans only state on page 114 (St. Charles) and page 210 (St. John) that "all arrangements for the reception and sheltering of parish evacuees will be handled by support Parishes." Stated that shelter will be provided for the following parishes:
	St. John, enclosure 2, chapter 4, VI., F., page 210.	1. Jefferson 2. Orleans 3. La fourche 4. Tangipchoa
		Does not describe how this will be handled.
J.9.	State Plan, chapter 7, IV., pages 7-4 through 7-11 Chapter 8, IV., pages 8-3 through 8-13.	Sec. IV.A.6.b. of Chapter 7 needs to be revised. The dose levels mentioned there can in no way be considered "limits for routine operations" as stated. The guides are taken from the EPA Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, EPA-520/1-75-001, and apply only to post-incident conditions. Five rem WB and 25 rem thyroid dose are the upper limits of projected dose levels to population groups for which evacuation is not mandatory, and these limits are not related to emergency workers' doses.

NUREG REFERENCECROSS REFERENCEEVALUATION AND COMMENTS

Sec. IV.B.2.b.(1) directs that potassium iodide will be administered to emergency workers, if available, even though exposure conditions may not involve any thyroid dose (e.g., projected dose is 10 rem WB but no radioiodine in release). In such a situation iodine blocking may not be desirable, and its use should be based on judgment as in the lower worker exposure categories and for institutionalized persons in the section following.

The note on p. 8-5 regarding the bases for the PAG's needs to be expanded or placed elsewhere in the text. The note appears to be correct for contaminated drinking water supplies and for food emergency PAG's, but as I read the FDA recommendations (Fed. Reg. 58790, Dec. 15, 1978) and supporting documentation of May 23, 1978, not correct for food preventive PAG's, which refer to the critical receptor.

Implementation of protective actions generally tracks EPA recommendations.

St. Charles, enclosure 1, chapter 4, V., page 108.
EOC implementing procedures.
Fire Services Implementing Procedure, Attachment 4.
Radiological Exposure Control Implementing Procedure.

St. John, enclosure 2, chapter 4, V., page 204.
EOC implementing procedures.
Fire Services Implementing Procedure, Attachment 4.
Radiological Exposure Control Implementing Procedure.

J.10.a.

State Plan, chapter 6, tab 7, pages 6-28 through 6-38. Parish Attachments.

St. Charles, enclosure 1, chapter 4, tab 3, page 125.

St. John, enclosure 2, chapter 4, tab 3, page 221.

Parish Plans page 108 and 204.6.b. relating to limitation to duration of exposures need to be revised. The dose levels mentioned there can in no way be considered "limits for routine operations" as stated. The guides are taken from the EPA Manual of Protection Action Guides and Protective Actions for Nuclear Incidents, EPA-520/1-75-001, and apply only to post-incident conditions. Five rem WB and 25 rem thyroid dose are the upper limits of projected dose levels to population groups for which evacuation is not mandatory, and these limits are not related to emergency workers' doses.

Adequate

Adequate

Adequate

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
J.10.b.	State Plan refers to Parish Attachments and General, tab 4, page 18 and 132.	Adequate for both State and local plans.
J.10.c.	State Plan, chapter 4, pages 4-1 through 4-5.	Adequate, EBS stations are WCKW and WK07. LOEP is the agency that activates the EBS.
	St. Charles, enclosure 1, chapter 3, IV., c., page 101.	Adequate
	St. John, enclosure 2, chapter 3, IV., c., page 197.	Adequate
J.10.d.	State Plan, chapter 7, III., E., 4., page 7-4; chapter 7, IV., A., 2., c., page 7-5; chapter 7, IV., A., 5., b., page 7-6; chapter 7, IV., B., 3., pages 7-9 and 7-10.	Adequate
	St. Charles, enclosure 1, basic, B., 1., i., page 58. St. Charles Parish School Services Implementing Procedure. Health and Medical Services Implementing Procedure. Law Enforcement Services Implementing Procedure, Attachment 4. Transportation Services Implementing Procedure.	Adequate
	St. John, enclosure 2, basic, B., 1., i., page 158. St. John Parish School Services Implementing Procedure. Health and Medical Services Implementing Procedure. St. John, Enclosure 2, chapter 4, tab 4, page 225. Transportation Services Implementing Procedure.	Adequate

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
J.10.e.	State Plan, chapter 7, IV., A., pages 7-6 and 7-7; chapter 7, IV., B., 2. and 3., pages 7-8 through 7-10.	Adequate, however nowhere in either the State Plans or Parish Plans does it provide for the quantities and storage of KI.
	Parish Plans, General, chapter 5, V., B., 2., page 46. Additional cross references that need to be added: State Plan, chapter 9, page 9-9 on use of KI and page 9-13 Radioprotective Drugs.	Adequate, however, should include additional cross references when plans are revised.
J.10.f.	State Plan, chapter 9, tab 1, page 9-13.	Adequate, the ASOEA will recommend the use of KI.
	Parish Plans, General, chapter 5., V., B., 2., b., page 46.	Adequate
J.10.g.	State Plan, chapter 7, III., E., 4., page 7-4; General, III., B., 3., page 10.	Adequate
	St. Charles, Enclosure 1, basic, tab 6, page 81. Transportation Services Implementing Procedure, Attachment 3.	Adequate
	St. John, Enclosure 2, basic, tab 6, page 179. Transportation Services Implementing Procedure, Attachment 3.	Adequate
J.10.h.	State Plan, Parish Attachments; St. Charles, Enclosure 1, chapter 4, tab 2, page 117 and St. John, Enclosure 2, chapter 4, tab 2, page 213.	Adequate, both State and Local Plans.
J.10.i.	State Plan, Parish Attachments	Evacuation Time Estimates for Waterford Steam Electric Station Unit Number 3 apparently includes the required information and has been reviewed by FEMA/NRC. The plan makes assurances that this information is available to decisionmakers in the event of an emergency requiring evacuation. The only question is whether this constitutes substantial compliance with the regulatory requirement for inclusion in the plan.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
J.10.i.	St. Charles, Enclosure 1, chapter 4, tab 1, page 116.	The plan makes assurances that the "Evacuation time estimate information is available to decisionmakers in the event of an emergency requiring evacuation. The only question is whether this constitutes substantial compliance with the regulatory requirement for inclusion in the plan.
	St. John, Enclosure 2, chapter 4, tab 1, page 212.	Same comments as S.C. above.
J.10.j.	State Plan, chapter 7, IV., A., 3., pages 7-5 and 7-6.	Adequate
	St. Charles, Enclosure 1, basic, tab 3, pages 74 and 75. Law Enforcement Services Implementing Procedure, Attachment 5.	Adequate
	St. John, Enclosure 2, basic, tab 3, page 173. Law Enforcement and Traffic Control Implementing Procedure, Attachment 1.	Adequate
J.10.k.	State Plan, chapter 7, III., E., 3., page 7-3 Implementing Procedures.	Adequate
	St. Charles, Enclosure 1, basic, tab 8, page 89.	Adequate
	St. John, Enclosure 2, basic, tab 8, page 185.	Adequate
J.10.l.	State Plan, chapter 7, tab 1, page 7-12, Parish attachments.	In regards to both the State and Local Plans, the Evacuation Time Estimates for Waterford Steam Electric Station Unit Number 3 apparently includes the required information and has been reviewed by FEMA/NRC. The plan makes assurances that this information is available to decisionmakers in the event of an emergency requiring evacuation. The only question is whether this constitutes substantial compliance with the regulatory requirement for inclusion in the plan.
	St. Charles, Enclosure 1, chapter 4, tab 1, page 116.	
	St. John, Enclosure 2, chapter 4, tab 1, page 212.	

NUREG REFERENCECROSS REFERENCEEVALUATION AND COMMENTS

J.10.m.

State Plan, chapter 7, II.,
D., page 7-2

The first sentence in Sec. IV.B. of Chapter 7 "sort of " implies that the EPA PAG's are only applicable at the time of an accident, and dose projections are to be calculated from that time. This is not the case, but I could not find the concept of "projected dose" clarified in the Plan. The intent of the EPA PAG's is to apply the numerical guides as of the time the action is under consideration. For example, if a population group has already been exposed for 4 rem WB and an additional 2 rem WB is projected, the PAG would not recommend mandatory evacuation. The 5 rem mandatory evacuation guide refers to the (additional) projected dose which in the above example is 2 rem (not $4 + 2 = 6$ rem). If the EPA guidance is being strictly followed, this interpretation of projected dose must be clearly understood by the decisionmakers and carefully spelled out in the Plan.

Parish Plans

N/A

J.11.

State Plan, chapter 8,
page 8-1.

Adequate

Parish Plans

N/A

J.12.

State Plan, chapter 9,
IV., pages 9-3 through
9-7.

The means for registering and monitoring evacuees at relocation centers are outlined in Chapter 9. No lists of equipment and supplies, other than radiation monitoring equipment, could be located. Equipment storage locations and custodians could not be found in the Plan.

St. Charles, Enclosure 1,
chapter 4, VI., F., 1.,
page 114.

Adequate, however, additional details such as the approximate number of persons and support parish plans and procedures are needed.

St. John, Enclosure 1,
chapter 4, VI., F., 1.,
page 210.

Same comments as S.C. above.

K. Radiological Exposure Control
Planning Standard

Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protection Action Guides.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>QUALIFICATION AND COMMENTS</u>
K.1. and 2.		N/A
K.3.a.	State Plan, chapter 9, III., A., page 9-2; chapter 9, V., B., 1., a., pages 9-7 and 9-8.	Adequate
	Parish Plans refer to State Plan, chapter 9, III., A., page 9-2.	Adequate
K.3.b.	State Plan, chapter 9, tab 5, 2-4, pages 9-20 and 9-21; chapter 9, tab 6, page 9-22. General, chapter 5, V., B., 1., C., and D., page 45.	Adequate.
	St. Charles Parish Radiological Exposure Control Implementing Procedures, Attachments 3 and 6.	Adequate
	St. John Parish Radiological Exposure Control Implementing Procedure, Attachments 3 and 6.	Adequate
K.4.	State Plan, chapter 9, V., D., pages 9-10 and 9-12. General, chapter 5, V., D., page 47.	Adequate, however, would suggest that the wording in Chapter 9, Section III, on page 9-3 be changed to make it more clear that the authorization to exceed established exposure limits is not an automatic process, but rather is based on judgement. Specifically, I suggest the word "will" in lines 4 and 5 be changes to "may."
	St. Charles, Enclosure 1, chapter 4, V., B., 2., C., page 111.	Adequate
	St. John, Enclosure 2, Chapter 4, V., B., 2., C., page 207.	Adequate

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
K.5.a.	State Plan, chapter 9, IV., B., 3., page 9-5; chapter 9, IV., D., 1 and 2, pages 9-6 and 9-7; chapter 9, V., C., 2., page 9-9.	Adequate
	Parish Plans, General, chapter 5, V., C., 2, page 47; General, chapter 5, VI., B., 3., page 49; General, chapter 5, VI., D., page 51.	Adequate
K.5.b.	State Plan, chapter 9, V., C., 2., page 9-9; chapter 9, tab 4, pages 9-17 through 9-19.	Adequate
	St. Charles Parish Radiological Exposure Control Implementing Procedure, Attachments 1, 2, 5 and 10.	Adequate
	St. John Parish Radiological Exposure Control Implementing Procedure, Attachments 1, 2, 5 and 10.	Adequate
K.6. and 7.		N/A

L. Medical and Public Health Support Planning Standard

Arrangements are made for medical services for contaminated, injured individuals.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
L.1.	State Plan, Chapter 10, IV., B., 1., pages 10-3 and 10-4; chapter 10, tab 4, pages 10-11 through 10-13.	<p>The national reputation of Ochsner Clinic leaves little doubt to this reviewer of the capability of this hospital to adequately handle contaminated individuals. However, there should be a statement to verify this capability.</p> <p>Local and backup hospital and medical services are provided for. Question remains, however, concerning assurances that persons providing these services are adequately prepared to handle contaminated individuals. Who is responsible for training?</p>

NUREG REFERENCE

CROSS REFERENCE

EVALUATION AND COMMENTS

St. Charles, Enclosure 1, chapter 6, IV., A., 2., page 137. Health and Medical Services Implementing Procedure, Attachment 7.

Are agreements signed with local ambulance services for responding to an accident at Waterfore III? None were found in Plans.

Local and backup hospital and medical services are provided for. Question remaining, however, concerning assurances that persons providing these services are adequately prepared to handle contaminated individuals. Who is responsible for training?

The same procedures for handling contaminated patients should be taught to both the hospital ER personnel and EMS personnel. Again, who is responsible for training?

Agreements have been signed with Ochsner and West Jefferson General Hospitals. What about agreements signed with local ambulance services?

A progressive system for EMS has been developed in the southeastern region of Louisiana, of which St. Charles and St. John the Baptist are a part. The two parishes should have benefited from this in their plan development. Was this EMS system involved in the planning stages?

There was no reference to this in relation to local and regional Medical Control and communications. It would be most beneficial in evaluating the local capabilities if a description of how the local plans interfaced with the Emergency Medical Service System.

Also it was not clear how the parishes arrived at the need for Medical Manpower on pages 151 and 248. Example, need two ambulances and twenty-six ambulance drivers. What about medical attendants for each ambulance?

Also the capability of the Ochsner Hospital should have been verified in the Plans.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
	St. John, Enclosure 2, chapter 6, IV., A., page 235. Health and Medical Services Implementing Procedure, Attachment 3.	Same comments as S.C. above.
L.2.		N/A
L.3.	State Plan, chapter 10, IV., B., 2., pages 10-4 and 10-5; chapter 10, tab 2, pages 10-8 and 10-9.	Adequate
	Parish Plans	N/A
L.4.	State Plan, chapter 10, IV., A., pages 10-2 and 10-3; chapter 10, tab 2, pages 10-8 and 10-9.	Adequate
	St. Charles, Enclosure 1, chapter 6, IV., A., 2., page 137.	Adequate, however, plans do not include agreements signed with the local ambulance services for transportation.
	St. John, Enclosure 2, chapter 6, IV., A., 1., page 235.	Same comments as S.C. above.

M. Recovery and Reentry Planning and Post-accident Operations Planning Standard

General plans for recovery and reentry are developed.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
M.1.	State Plan, chapter 11, page 11-1.	Adequate
	St. Charles, Enclosure 1, chapter 7, page 141.	Adequate
	St. John, Enclosure 2, chapter 7, page 238.	Adequate
M.2.		N/A

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
M.3.	State Plan, chapter 11, III., B., 2., page 11-3; chapter 11, III., E., page 11-3.	Adequate
	Parish Plans	N/A
M.4.	State Plan, chapter 11, III., I., page 11-4	Adequate
	Parish Plans	N/A

N. Exercises and Drills
Planning Standard

Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
N.1.a.	State Plan, chapter 13, III., A., pages 13-1 through 13-3.	Adequate
	Parish Plans, General, chapter 3, II., page 31.	Adequate
N.1.b.	State Plan, chapter 13, III., pages 13-1 through 13-3.	Adequate
	Parish Plans, General, chapter 3, III., B., page 32. Also State Plan, chapter 13, page 13-1.	Adequate
N.2.a.	State Plan, chapter 13, IV., A., 1., pages 13-3 and 13-4. General, chapter 3, IV., B., 1., page 33.	Adequate
N.2.b.		N/A
N.2.c.	State Plan.	N/A
	Parish Plans, General, chapter 3, IV., B., 2., page 33.	Adequate

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
N.2.d.	State Plan, chapter 13, IV., A., 2., page 13-4.	Adequate
	Parish Plans, General, chapter 3, IV., B., 3., pages 33 and 34.	Adequate
N.2.e.(1).	State Plan, chapter 13, IV., A., 3., page 13-4.	Adequate
	Parish Plans	N/A
N.2.e.(2).		N/A
N.3.a. through f.	State Plan, chapter 13, V., page 13-5.	Adequate
N.3.a. through d.	Parish Plans, General, chapter 3, IV., B., 1., 2., 3., 4., page 34.	Adequate
N.3.e. through f.	Parish Plans, General, chapter 3, V., B., 5., 6., page 35.	Adequate
N.4.	State Plan, chapter 13, III., A., 5., page 13-2 and 13-3.	Adequate
	Parish Plans, General, chapter 3, III., B., 1., page 32.	Adequate
N.5.	State Plan, chapter 13, III., A., 5. and 6., page 13-3.	Adequate
	Parish Plans, General, chapter 3, III., B., 2., page 32.	Adequate

O. Radiological Emergency Response Training Planning Standard

Radiological emergency response training is provided for those who may be called on to assist in an emergency.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
O.1.	State Plan, chapter 12, page 12-1.	Adequate, however, who is responsible for training? LNED or LOEP?

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
	Parish Plans, General, chapter 2, pages 26 through 30.	Adequate, however, in general plan states that LNED and LOEP will provide training to the two parishes. Who is the lead agency on training?
0.1.a.		N/A
0.1.b.	State Plan, chapter 12, III., A., 2., page 12-2.	Adequate
	Parish Plans, General, chapter 2, III., A., 2., pages 26 and 27.	Adequate
0.2.		N/A
0.3.		N/A
0.4.a. through f.	State Plan, chapter 12., III., B., pages 12-2 and 12-3.	Adequate
	Parish Plans, General, chapter 2, III., B., 4., a., pages 27 and 28.	Adequate
0.5.	State Plan, chapter 12, III., B., 5., 6., and 7, page 12-3.	Adequate
	Parish Plans, General, chapter 2, III., B., 5., 6., and 8, page 28.	Adequate

P. Responsibility for the Planning Effort: Development, Periodic Review and Distribution of Emergency Plans
Planning Standard

Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
P.1.	State Plan, chapter 12, IV., B., 1., pages 12-4 and 12-5.	Adequate
	Parish Plans, General, chapter 2, III., C., a., page 29.	Adequate

<u>NUREG REFERENCE</u>	<u>CROSS REFERENCE</u>	<u>EVALUATION AND COMMENTS</u>
P.2.	State Plan, V., B., and G., pages 22 and 23.	Adequate, ASOEA is responsible for emergency response planning.
	St. Charles, enclosure 1, basic, B., 2., a., (1) pages 59 and 60.	Adequate, Emergency Preparedness Director responsible for response planning.
	St. John, enclosure 2, basic, B., 2., a., (1), pages 159 and 160.	Adequate, Civil Defense Director responsible for response planning.
P.3.	State Plan, VI., A., 3., page 26; and VI., B., page 26.	Adequate, however, cross reference is incorrect. Should be page 26 instead of page 22.
	Implementing Procedures; Parish attachments.	
	St. Charles, enclosure 1, basic, B., 2., a., (1) pages 59 and 60.	Adequate
	St. John, enclosure 2, basic, B., 2., a., (1), pages 159 and 160.	Adequate
P.4.	State Plan, VIII., B., page 42.	Adequate
	Parish Plans, General, V., B., 1 and 4, page 11.	Adequate
P.5.	State Plan, VIII., C., pages 42 and 43.	Adequate
	Parish Plans, General, V., C., 1 and 2, page 12.	Adequate
P.6.	State Plan, Table 3, page 49.	Adequate
	St. Charles, enclosure 1, basic, tab 10, page 92.	Adequate
	St. John, enclosure 2, basic, tab 10, page 188.	Adequate