May 23, 1984

Docket No. 50-255

Consumers Power Company ATTN: Mr. R. B. DeWitt Vice President Nuclear Operations 212 West Michigan Avenue Jackson, MI 49201

Gentlemen:

We have received the attached Federal Emergency Management Agency (FEMA) letter dated April 26, 1984, and associated final exercise evaluations on the offsite emergency preparedness exercise conducted on May 25, 1983, for the State of Michigan, Berien, Allegan, and Van Buren Counties. This final exercise evaluation lists several recommendations (which are referred to in the FEMA letter and attachments as deficiencies) regarding the offsite emergency response plans for the area around the Palisades Nuclear Power Plant. However, these recommendations did not detract from the overall demonstrated capability to protect the public in the event of a radiological emergency.

Based on the performance of the offsite agencies during the exercise, FEMA did not identify any impediments to protecting the public in the event of an accident at the Palisades Nuclear Power Plant. Therefore, the approval of your offsite plans issued pursuant to 44 CFR 350 remains in effect.

We fully recognize that the recommendation to be implemented may involve actions by other parties and political institutions which are not under your direct control. Nonetheless, we would expect the subject of offsite preparedness for the area around the Palisades Nuclear Power Station to be addressed by you as well as others.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosure will be placed in the NRC's Public Document Room.

Sincerely,

8405300223 840523 PDR ADDCK 05000255 F PDR

C. J. Paperiello, Chief Emergency Preparedness and Radiological Safety Branch /£:35

Enclosure: As stated

cc w/encl.:
D. J. VandeWalle, Nuclear
Licensing Administrator

R. W. Montross, Manager DMB/Document Control Desk (RIDS) Ronald Callen, Michigan Public Service Commission

RIII/DRMSP Patterson/mf Phillips

RIII Wright RIAL Paperiello



Federal Emergency Management Agency

Washington, D.C. 20472

APR 26 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:

Method W. Willow Fr.

Assistant Associate Director

Office of Natural and Technological

Hazards Programs

SUBJECT:

Final Exercise Report for the Palisades Nuclear Power

Plant Offsite Radiological Emergency Preparedness

Exercise Conducted on May 25, 1983

Attached is the final exercise report for the joint offsite radiological emergency preparedness exercise conducted on May 25, 1983, at the Palisades Nuclear Power Plant. This was a small participation exercise for the State of Michigan and Berrien County, and a full participation exercise for Allegan and Van Buren Counties. This report cites that the State of Michigan and the Counties of Allegan, Berrien and Van Buren demonstrated the capability to protect the public in the event of a radiological emergency at the Palisades Nuclear Power Plant.

Although there were deficiencies observed at the exercise, the attached response submitted by the State of Michigan adequately addresses the deficiencies. Based on the exercise and the State's schedule of corrective actions, we cannot identify any impediments to protecting the public in the event of an accident at the Palisades Nuclear Power Plant. Therefore, the approval under the Federal Emergency Management Agency Rule 44 CFR 350 will remain in effect.

If you have any questions, please contact Mr. Robert Wilkerson, Chief, Technological Hazards Division at 287-0200.

Attachment As Stated

8445434448



Federal Emergency Management Agency

Region V 300 South Wacker, 24th Floor, Chicago, 1L 60606 (312) 353-1500

MAR 3 0 1984

Peter R. Basolo, Captain
Deputy State Director
Emergency Management Division
Michigan Department of State Police
111 South Capitol Avenue
Lansing, Michigan 48913

Dear Captain Basolo:

FEMA Region V Technological Hazards Branch staff have reviewed your letter of February 6, 1984, that further explains the State of Michigan's schedule of corrective actions to the May 25, 1983, Palisades Radiological Emergency of corrective actions to the May 25, 1983, Palisades Radiological Emergency Preparedness exercise. This further explanation was requested in FEMA Region V's letter of December 14, 1983. FEMA Region V's review comments are reflected below:

I. SIGNIFICANT DEFICIENCIES

A. State of Michigan

- 1. E-6 The State response concerning corrective action to the delay in the 15 minute Prompt Alert and Notification identified in the May 25, 1983, exercise is acceptable. This criteria item remains open pending FEMA's formal certification.
- 2. N.1.b. FEMA Region V takes exception to the State of Michigan's statement that FEMA Region V has not provided guidance to the State concerning REP objectives and scenario development. Numerous discussions and meetings have been held over the past several months.

The State's remark that FEMA approved the scenario prior to the exercise is incorrect. Enclosed is FEMA Region V's letter of May 4, 1983, where FEMA Region V found the scenario to be inadequate. In this letter several recommendations were, again, made for State and utility writer consideration. FEMA Region V also requested a revised scenario be provided to FEMA Region V addressing FEMA Region V's

recommendations by May 13, 1983. The revised Palisades exercise scenario was not provided by the deadline requested. Most of the recommendations were not incorporated into the actual exercise scenario. Consequently Allegan County had minimal involvement in the exercise and actually terminated their involvement 15 minutes prior to State exercise termination.

FEMA Region V is cognizant of 44 CFR, Part 351. 20(J). In the absence of its implementation, the responsibility has fallen on the State and utility exercise planners.

Meetings between FEMA Region V and the State and utility scenario writers were held approximately 90-100 days prior to the Palisades exercise. Similar meetings were held within the same time frame for consequent exercises for the Big Rock Point and Donald C. Cook exercises. FEMA Region V is pleased the State plans to continue these pre-exercise meetings since improvement in exercise scenario development has been noted in the Donald C. Cook exercise scenario.

Given the State's comments in its February 6, 1984, letter outlining its schedule of corrective actions and given the actual improvement in the preparation of exercise scenarios since the Palisades exercise, FEMA Region V concludes the State of Michigan's corrective actions are acceptable.

B. Allegan County

- 1. J.10.i State corrective actions are acceptable.
- 2. J.10.b State corrective actions are acceptable.
- 3. E.1, This is a good exemple of low the objectives previously written by the State were confusing F.1.a, when applied during the exercise evaluation. F.1.e, FEMA Region V was impressed by the State's corrective action demonstrated in the development of objectives and the scenario and the demonstration of them at the Donald C. Cook

exercise. As a result, the State's corrective action on these criteria items is acceptable.

4. M.1. This was an exercise objective that was not fully demonstrated during the exercise. FEMA Region V accepts your suggestion that it be an objective during the next Palisades exercise. State corrective action is acceptable.

C. Berrien County

No schedule of corrective actions required.

D. Van Buren County

- 1. E.7. State corrective action is acceptable. FEMA
 Region V does encourage, though, the full
 activation of the Prompt Alert and Notification
 System to include EBS at some future exercise
 so the system effectiveness can be demonstrated.
- 2. J.10.c State corrective action is acceptable.
- 3. J.10.d State corrective action described in their October 18, 1983, letter and their explanation of criteria item E.7. in their February 6, 1984, letter is acceptable.
- 4. E.1, State corrective actions are acceptable. See E.2, comments above for Allegan County. E.1.a, F.1.e, and H.4

II. MINOR DEFICIENCIES

FEMA Region V did not require the State of Michigan to provide a schedule of corrective actions to minor deficiencies. Since a schedule of corrective actions was submitted by Michigan, FEMA Region V has conducted an evaluation and found the schedule of corrective actions to be adequate, as reflected below.

A. State of Michigan

- 1. G.4.a State corrective action is acceptable.
- 2. H.3 State corrective action is acceptable.

3. J.10.a State corrective action is acceptable.

B. Allegan County

- 1. D.4 State corrective action is acceptable.
- 2. K.3.b State corrective action is acceptable.
- 3. A.4 State corrective action is acceptable.
- F.1.d State corrective action is acceptable as described in the State's October 18, 1983, letter.
- 5. G.3.a State corrective action as described in the State's October 18, 1983, letter is acceptable.

C. Berrien County

No corrective actions were required.

D. Van Buren County

- 1. A.1.a State corrective actions as described in the State's October 18, 1983, letter of corrective actions are acceptable.
- J.10.b State corrective action described in their February 6, 1984, letter of corrective actions is acceptable.
- J.10.f State corrective action described in their February 6, 1984, letter (schedule of corrective actions) is acceptable.
- 4. K.3.b State corrective actions described in the letters of October 18, 1983, and February 6, 1984, (schedule of corrective actions) are acceptable.
- 5. J.10.J State corrective actions described in their letter of February 6, 1984, (schedule of corrective actions) are acceptable. FEMA Region V notes this was demonstrated rather than simulated in the Donald C. Cook exercise by Berrien County.
- 6. A.4 State schedule of corrective actions described in their letters of October 18, 1983, and February 6, 1984, are acceptable.

- F.1.b State schedule of corrective actions as described in their letter of October 18, 1984, are acceptable.
- K.3.a State schedule of corrective actions as described in their letter of October 18, 1984, are acceptable.

Sincerely,

Wallace Weaver, Chairman
Regional Assistance Committee

Enclosures

Captain Peter R. Basolo Emergency Management Division Michigan State Police, ATTN: Lt. Tyler 111 South Capitol Avenue Lansing, Michigan 48902

Dear Captain Basolo:

The Scenario for the Palisades Nuclear Power Plant offsite exercise has been reviewed and found inadequate. At the scenario meeting of March 10, 1983, attended by YEMA a recommendation was made to have the wind going to a North or Northwesterly direction in order to invoke a full response in Allegan County as well as Van Buren County. The scenario as presented does not meet this goal.

The scenario does not provide for the opening of the Joint Public Information Center (JPIC).

The scenario does not provide for any supplementary incidents to those generated by the utility that could be impediments to themsovement of the population from the risk area and otherwise involve the BOC staff.

While the scenario outlines a series of activities that should be considered during Recovery and Re-entry it does not present any problems to be considered and acted upon by the EOC staffs.

In order for this exercise to be conducted as scheduled, please provide the Technological Hazards Branch, Battle Creek, with a revised scenario that addresses these deficiencies by May 13, 1983.

Thurs G. Barre

Dan Sement Acting Chief

Technological Hazards Branch

cc: RD

Ch/NTH

R5/TH/Ranthony/sn/x6021/5-4-83

Exten con



JAMES J. BLANCHARD, GOVERNOR DEPARTMENT OF STATE POLICE

COL GERALD L. HOUGH, DIRECTOR

February 6, 1984

EMERGENCY MANAGEMENT DIVISION LOWER LEVEL 111 S. CAPITOL AVENUE

PHONE: 517 273-0617

Mr. Wallace Weaver, Chairman Regional Assistance Committee Federal Emergency Management Agency Region V - Chicago 300 S. Wacker Drive, 24th Floor Chicago, Illinois 60606

Dear Mr. Weaver:

Attached is the Emergency Management Division's response to the December 14, 1983. letter from Frank Finch regarding the Palisades 1983 radiological emergency preparedness exercise.

If you have any questions, please feel free to contact this office.

Sincerely.

BASOLO, CAPTAIN Deputy State Director of Emergency Services

PRB:DMS:cmh

Attachment

cc: Dan Bement, F.E.M.A. - Battle Creek

Revision #1 to the Emergency Management Division response to the Palisades radiological emergency preparedness 1983 exercise.

I. SIGNIFICANT DEFICIENCIES

A. State

1. E.6.: The original FEMA critique comment was that it took longer than 15 minutes for the state to demonstrate prompt alert and notification and that the initial message from the facility was incomplete and confusing. The state response (10-18-83) was that the delay was analyzed by the state and the utility and that changes had been initiated as of the Big Rock Point full-scale exercise (July 26, 1983). Therefore, in regards to the 15 minutes notification, the deficiency should be considered resolved.

A second issue is raised in this latest set of comments from FEMA. The response is that resolution of this deficiency is dependent on FEMA's formal review of the prompt alert notification system; therefore, the issue is not closed and is dependent on FEMA's review and evaluation of the system.

2. N.1.b.: The original FEMA comment was that the scenario was inadequate. The state response was that FEMA approved the scenario prior to the exercise. There is no guidance available from FEMA on the development or content of scenarios beyond element N.3. of NUREG-0654. All items listed in element N.3. of NUREG-0654 were provided to FEMA prior to the exercise. State requests for written guidance from FEMA on scenarios has not been answered.

Therefore, the state response was that this was not a deficiency and no correction action was necessary from the state. Rather, FEMA needs to provide written guidance to the state on scenario development and content. Also, FEMA's suggestion on page 62 of the critique for a meeting 90 to 100 days prior to the exercise to discuss exercise objectives and scenarios was implemented for the D.C. Cook radiological emergency preparedness exercise.

In 44 CFR, Part 351, 351.20(j), FEMA is charged with developing "representative scenario's from which . . . state and local governments may select for use in testing and exercising radiological emergency plans." In the absence of such scenarios or guidance, the state will continue to attempt to address FEMA's request for information on scenarios, and operate on the time table set forth in FEMA Guidance Memo 17 until new guidance is provided.

B. Allegan County

- 1. J.10.1.: The Allegan County Plan (page F8) establishes road blocks on both routes I-196 and A-2. More care will be taken during drills and exercise to ensure that all access control points that are manned are marked on status boards. These items will be covered in the offsite training program prior to the next exercise (August 1984).
- 2. J.10.b.: 1980 population figures will be incorporated into the next update of the Allegan County Emergency Operations Plan prior to the next exercise (August 1984).
- 3. E.1., E.2., F.1.a., F.1.e., H.4.: In its initial critique, FEMA listed these elements as "Significant Deficiencies," as "exercise objectives," as "specified in the exercise objectives," etc. As has been repeatedly stated to FEMA, these were not exercise objectives nor were they implied objectives. Therefore, in terms of the exercise and scenario approved by FEMA, these are not deficiencies. No corrective actions are necessary.

In this latest letter, FEMA states that "each criteria was cited to focus attention on our recommendation that this capability should be demonstrated during the next exercise." If FEMA would like to see these elements demonstrated, FEMA should make this recommendation during the 90 day meeting prior to the next Palisades exercise. In addition, many of these items are being addressed in the D.C. Cook exercise on January 25, 1984.

Based on the original FEMA critique, the state does not feel that there was a deficiency because these elements were not exercise objectives.

4. M.1.: If FEMA would like to see this element demonstrated during the August 1984 exercise, the state would agree. However, this would preclude notification and activation of EOCs because of time constraints.

C. Berrien County

No deficiencies listed.

D. Van Buren County

1. E.7.: Transmission of data to JPIC and EBS would be via phone from the Van Buren County EOC. Calls to EBS are simulated as is the prompt alert notification system (sirens) so as to avoid any possible confusion. EBS is used for non-radiological emergencies frequently enough to allow familiarization for users and to detect problems and have them corrected. In addition, the siren control board was demonstrated to the evaluators up to the point of actually sounding the sirens.

- 2. J.10.c.: The state's response is, again, to see above comment.
- 3. J.10.d.: No additional response necessary.
- 4. E.1., E.2., E.1.a., F.1.e., H.4.: No additional response is necessary for these elements. See Allegan County comments.

II. MINOR DEFICIENCIES

A. State

- 1. G.4.a.: The state has additional personnel at the JPIC in support of the state spokesman as demonstrated at the Big Rock Point full-scale exercise.
- 2. H.3.: The status board will be placed in a more visible position as of the January 25, 1984 Cook Exercise.
- 3. J.10.a.: Radiological Health is currently updating their field sampling monitoring points. These will be provided to the Emergency Management Division as they are completed.

B. Allegan County

- D.4.: Correction, the latest update of the Allegan County EOP has been provided to FEMA as of 10-17-83. This was for the purpose of maintaining controlled distribution of current plans.
- K.3.b.: Correction date during annual training program -July/August, 1984.
- 3. A.4.: Correction date next exercise August 1984.
- 4. F.1.d.: No correction needed.
- 5. G.3.a.: No correction needed.

C. Berrien County

No response required.

D. Van Buren County

- 1. A.l.a.: No additional response necessary.
- J.10.b.: As soon as data is available from NRC, FEMA, or the utility, the maps will be updated to show the population distribution in the 5-10 zones.

J.10.f.: This issue will be resolved by the next exercise in 3. August 1984. K.3.b.: As stated in the state response, the dosimenters will be removed from the County EOC since they are inappropriate and were 4. placed there originally based on FEMA's recommendation. The plans and procedures will be revised if necessary by the next exercise (August 1984) to reflect this change. J.10.1.: The state does not believe it is necessary to move 5. vehicles during an exercise. If, however, FEMA will not accept state policy, an attempt will be made to resolve this issue during the August 1984 exercise if the problems of time, cost, and liability can be resolved with the involved counties. A.4.: Correction date August 1984 exercise. F.1.b.: No response necessary. 7. K.3.a.: No response necessary. 8. III. COMMENTS ON FEMA'S CRITIQUE FEMA did not address the state's comments on its critique. The statement "the critique system has changed as a result of the new 44 CFR 350," does not address all of the issues raised in the comments. There still seems to be confusion on the issue of whether alert, notification, and mobilization was an objective or not for the Palisades exercise. FEMA did not address this. The new exercise critique module still contains subjective evaluations though it is an improvement. Issues raised in IIIB of the state response were not answered by FEMA. -4STATE OF MICHIGAN



DEPARTMENT OF STATE POLICE

February 6, 1984

EMERGENCY MANAGEMENT DI LOWER LEVEL 111 E. CANTOL AVENUE LANSING, MICHIGAN 48812 PHONE: \$17 371-9817

Mr. Wallace Weaver, Chairman Regional Assistance Committee Federal Emergency Management Agency Region V - Chicago 300 S. Wacker Drive, 24th Floor Chicago, Illinois 60606

Dear Mr. Weaver:

Attached is the Emergency Management Division's response to the December 14, 1983, letter from Frank Finch regarding the Palisades 1983 radiological emergency preparedness exercise.

If you have any questions, please feel free to contact this office.

Sincerely,

PETER R. BASOLO, CAPTAIN Deputy State Director of Emergency Services

PRB: DMS: cmh

Attachment

cc: : Dan Bement, F.E.M.A. - Battle Creek

1114

+0 111 98 1

Revision #1 to the Emergency Management Division response to the Palisades radiological emergency preparedness 1983 exercise.

I. SIGNIFICANT DEFICIENCIES

A. State

1. E.6.: The original FEMA critique comment was that it took longer than 15 minutes for the state to demonstrate prompt alert and notification and that the initial message from the facility was incomplete and confusing. The state response (10-18-83) was that the delay was analyzed by the state and the utility and that changes had been initiated as of the Big Rock Point full-scale exercise (July 26, 1983). Therefore, in regards to the 15 minutes notification, the deficiency should be considered resolved.

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2. N.1.b.: The original FEMA comment was that the scenario was inadequate. The state response was that FEMA approved the scenario prior to the exercise. There is no guidance available from FEMA on the development or content of scenarios beyond element N.3. of NUREG-0654. All items listed in element N.3. of NUREG-0654 were provided to FEMA prior to the exercise. State requests for written guidance from FEMA on scenarios has not been answered.

Therefore, the state response was that this was not a deficiency and no correction action was necessary from the state. Rather, FEMA needs to provide written guidance to the state on scenario development and content. Also, FEMA's suggestion on page 62 of the critique for a meeting 90 to 100 days prior to the exercise to discuss exercise objectives and scenarios was implemented for the D.C. Cook radiological emergency preparedness exercise.

In 44 CFR, Part 351, 351.20(j), FEMA is charged with developing "representative scenario's from which . . . state and local governments may select for use in testing and exercising radiological emergency plans." In the absence of such scenarios or guidance, the state will continue to attempt to address FEMA's request for information on scenarios, and operate on the time table set forth in FEMA Guidance Memo 17 until new guidance is provided.

2414

B. Allegan County

- 1. J.10.i.: The Allegan County Plan (page F8) establishes road blocks on both routes I-196 and A-2. More care will be taken during drills and exercise to ensure that all access control points that are manned are marked on status boards. These items will be covered in the offsite training program prior to the next exercise (August 1984).
- J.10.b.: 1980 population figures will be incorporated into the next update of the Allegan County Emergency Operations Plan prior to the next exercise (August 1984).
- 3. E.1., E.2., F.1.a., F.1.e., H.4.: In its initial critique, FEMA listed these elements as "Significant Deficiencies," as "exercise objectives," as "specified in the exercise objectives," etc. As has been repeatedly stated to FEMA, these were not exercise objectives nor were they implied objectives. Therefore, in terms of the exercise and scenario approved by FEMA, these are not deficiencies. No corrective actions are necessary.

In this latest letter, FEMA states that "each criteria was cited to focus attention on our recommendation that this capability should be demonstrated during the next exercise." If FEMA would like to see these elements demonstrated, FEMA should make this recommendation during the 90 day meeting prior to the next Palisades exercise. In addition, many of these items are being addressed in the D.C. Cook exercise on January 25, 1984.

Based on the original FEMA critique, the state does not feel that there was a deficiency because these elements were not exercise objectives.

4. M.l.: If FEMA would like to see this element demonstrated during the August 1984 exercise, the state would agree. However, this would preclude notification and activation of EOCs because of time constraints.

C. Berrien County

No deficiencies listed.

D. Van Buren County

1. E.7.: Transmission of data to JPIC and EBS would be via phone from the Van Buren County EOC. Calls to EBS are simulated as is the prompt alert notification system (sirens) so as to avoid any possible confusion. EBS is used for non-radiological emergencies frequently enough to allow familiarization for users and to detect problems and have them corrected. In addition, the siren control board was demonstrated to the evaluators up to the point of actually sounding the sirens.

- 2. J.10.c.: The state's response is, again, to see above comment.
- 3. J.10.d.: No additional response necessary.
- 4. E.1., E.2., E.1.a., F.1.e., H.4.: No additional response is necessary for these elements. See Allegan County comments.

II. MINOR DEFICIENCIES

A. State

- G.4.a.: The state has additional personnel at the JPIC in support of the state spokesman as demonstrated at the Big Rock Point full-scale exercise.
- H.3.: The status board will be placed in a more visible position as of the January 25, 1984 Cook Exercise.
- J.10.a.: Radiological Health is currently updating their field sampling monitoring points. These will be provided to the Emergency Management Division as they are completed.

B. Allegan County

- D.4.: Correction, the latest update of the Allegan County EOP has been provided to FEMA as of 10-17-83. This was for the purpose of maintaining controlled distribution of current plans.
- K.3.b.: Correction date during annual training program -July/August, 1984.
- 3. A.4.: Correction date next exercise August 1984.
- 4. F.l.d.: No correction needed.
- 5. G.3.a.: No correction needed.

C. Berrien County

No response required.

D. Van Buren County

- 1. A.l.a.: No additional response necessary.
- 2. J.10.b.: As soon as data is available from NRC, FEMA, or the utility, the maps will be updated to show the population distribution in the 5-10 zones.

- J.10.f.: This issue will be resolved by the next exercise in August 1984.
- 4. K.3.b.: As stated in the state response, the dosimenters will be removed from the County EOC since they are inappropriate and were placed there originally based on FEMA's recommendation. The plans and procedures will be revised if necessary by the next exercise (August 1984) to reflect this change.
- 5. J.10.j.: The state does not believe it is necessary to move vehicles during an exercise. If, however, FEMA will not accept state policy, an attempt will be made to resolve this issue during the August 1984 exercise if the problems of time, cost, and liability can be resolved with the involved counties.
- 6. A.4.: Correction date August 1984 exercise.
- 7. F.1.b.: No response necessary.
- 8. K.3.a.: No response necessary.

III. COMMENTS ON FEMA'S CRITTQUE

FEMA did not address the state's comments on its critique. The statement "the critique system has changed as a result of the new 44 CFR 350," does not address all of the issues raised in the comments. There still seems to be confusion on the issue of whether alert, notification, and mobilization was an objective or not for the Palisades exercise. FEMA did not address this. The new exercise critique module still contains subjective evaluations though it is an improvement. Issues raised in IIIB of the state response were not answered by FEMA.



Federal Emergency Management Agency

Region V 300 South Wacker, 24th Floor, Chicago, IL 60606 (312) 353-1500

SEP 1 4 1983

MEMORANDUM FOR: Assistant Associate Director, Office of Natural

and Technological Hazards

Attention: Megs Hepler

FROM:

Chairman, Regional Assistance Committee

SUBJECT:

Palisades Exercise Final Report

Attached is the Final Report for the Palisades Exercise, conducted May 25, 1983. This report indicates the State of Michigan and the Counties of Allegan, Berrien, and Van Buren have demonstrated a capability to protect the health and safety of the citizens and the property in the area at risk.

In view of the fact that this report had been developed prior to receiving the new guidance, and in order not to expend more staff time redoing the report in the new format, we are submitting this under the old procedures.

A schedule of corrections of deficiencies noted in Part IV has been requested from the State of Michigan by October 28, 1983.

For Jan Bement

Attachment

PART I

FINAL REPORT

Palisades Nuclear Power Plant

Exercise

May 25, 1983

Exercise Participants	Number of Evaluators	
State of Michigan (Small-Scale)	3 Federal/1 Contract	
Allegan County (Full-Scale)	1 Federal/1 Contract	
Berrien County (Small-Scale)	1 Contract	
Van Buren County (Full-Scale)	2 Federal/1 Contract	
Roving Exercise Evaluator	1 Federal	

Palisades Nuclear Power Plant

Evaluated by NRC

Involved States Not Participating: None
Involved Localities Not Participating: None

No. of the second secon

Prepared by the:

Federal Emergency Management Agency, Region V
Natural and Technological Hazards Division
Technological Hazards Branch
Federal Center
Battle Creek, Michigan 49016

PART II

EXECUTIVE SUMMARY

This report contains the findings of an ll member evaluation team who observed and evaluated the emergency response capability to a simulated radiological emergency at the Palisades Nuclear Power Plant, South Haven, Michigan, May 25, 1983. The exercise participants included the State of Michigan (small-scale), Berrien County (small-scale), Allegan County (full-scale), Van Buren County (full-scale), and Consumers Power Company, the parent company of the Palisades Nuclear Power Plant. The Nuclear Regulatory Commission evaluated the licensee's emergency response on-site at the Palisades Nuclear Power Plant.

The Federal Emergency Management Agency Region V evaluators were positioned at the principal emergency response centers.

Based on the evaluations of the four teams, it appears that the State of Michigan and the Counties of Allegan, Berrien and Van Buren did an adequate job demonstrating a capability to protect the population of the political jurisdictions concerned.

Revised plans for the Counties of Allegan and Van Buren were used by the EOC staff. At the time of the exercise, these revised plans had not been submitted to FEMA Region V for review. These plans should be forwarded as soon as possible for RAC review.

The following reflects the appraisal of the Federal evaluators, summarized in the ten functional areas.

SUMMARY I

Emergency Operations Facilities and Resources (Space, Internal Comm., Displays, Security

STATE

The EOC was a well-lighted, well-ventilated room and was adequate for the exercise. The communications with local EOCs, EOF and JPIC was by HOTLINE and LEIN (Law Enforcement Information Network) with radio backup. The internal communications, displays and equipment were adequate, however, it is suggested the status board be placed so it can be observed by all participants in the EOC. During a full-scale exercise or actual emergency, over-crowding could be a problem.

ALLEGAN COUNTY

The EOC was spacious, well-lighted, and well arranged. Staff working space was convenient. Map displays were

adequate except the population distribution map was not available. Population data shown in the County plan should be updated as it reflected 1970 Census figures. A backup communication link between the EOF and Allegan County EOC is not currently in place and would be advisable.

BERRIEN COUNTY

Multiple communications systems link Berrien County with the State EOC and with Van Buren and Allegan Counties. Communications were successfully demonstrated during the exercise; when one system temporarily broke down, another was available as backup. Message content was examined and calls were made for clarification of unclear messages.

VAN BUREN COUNTY

Emergency operations facilities in the Van Buren County EOC are good. The communications system is adequate with telephone and Law Enforcement Information Network (LEIN) as the primary systems and Utility Hot Line, radio, and NAWAS as backup. The EOC has adequate amenities. Security was good. Displays and maps were outstanding except for the population map. Incremental divisions of population should be completed through ten miles. Consideration should also be given to remoting the Sheriff's communications to an area closer to the operations room.

Alerting and Mobilization of Officials and Staff (Staffing, 24-Hour Capability, Alerting Timeliness)

> STATE The scenario did not call for alerting and mobilization of staff at the State EOC. Alerting can be accomplished by the State Police network which is manned 24-hours per day.

ALLEGAN COUNTY The Allegan County communications center is operated daily on a 24-hour basis. Alerting and mobilization of the EOC staff was not demonstrated, although it was an exercise objective. Call lists were current and procedures appeared adequate. A shift change demonstrated 24-hour staffing capability for the EOC, but the County Board Chairman and PIO remained on duty through the exercise.

BERRIEN COUNTY Not observed

VAN BUREN COUNTY Alerting and mobilization was one of the objectives of this exercise. It was not demonstrated. A complete shift change was not demonstrated. Both of these functions should be demonstrated during the next exercise.

SUMMARY II

SUMMARY III

Emergency Operations Management (Organization, Control, Leadership, Support by Officials, Decision Making)

STATE

The EOC staff demonstrated a good capability to manage the operations of the EOC. Control, leadership and the ability to make decisions were clearly demonstrated throughout the exercise.

ALLEGAN COUNTY

Elected officials in Allegan County demonstrated excellent support by participating in the exercise. County agency directors and assistant directors performed their functions as EOC staff in a highly professional manner. All participants displayed knowledge of the situation and their assigned responsibilities.

BERRIEN COUNTY

The ability to direct and control operations was well demonstrated at Berrien County. The EOC Director monitored communications and kept the EOC staff advised of the flow of events.

VAN BUREN COUNTY

Adequate emergency operations management, to include plans and procedures and support by elected officials, was demonstrated. Periodic briefings and staff updates were conducted. More staff updates and less frequent message announcements would be desirable. Rosters and some other areas of the plan are outdated. These plan deficiencies should be corrected promptly and revised plans and procedures forwarded for State and Federal evaluation as promised prior to the exercise.

SUMMARY IV

Public Alerting and Notification (Means of Notification - Sirens, Vehicles, or Other Systems)

STATE

The State did not demonstrate prompt alert and notification within the required 15 minute period as stated in NUREG-0654. It took approximately 42 minutes from when the State received the initial message until the sirens were sounded (simulated). The initial message content from the facility was incomplete and confusing regarding the emergency and the protective actions that should to recommended.

ALLEGAN COUNTY

The four sirens in the Allegan County part of the EPZ would be activated by Van Buren County. This was not observed. Although the PIO had listings of EBS (radio and TV stations) and newspapers in the area with phone numbers, the media contact would be through the JPIC.

BERRIEN COUNTY Not observed

VAN BUREN COUNTY

The siren system was not demonstrated during this exercise. The system was tested May 14, 1983 and a copy of the test report is included in this report. This system has not been certified by FEMA. ALL JURISDICTIONS

(Ref. E.6.) The criteria to provide notification and prompt instruction to the public in the plume exposure pathway (EPZ) is placed in this section not because the State or County has failed, but because a test of this system has not been observed by FEMA. It is recognized that a system consisting of 84 voice capable sirens has been installed within the 10-mile EPZ and that there are 3 separate locations capable of activating the system, but until guidance on observing and testing siren systems has been developed, it will remain in this section of the report.

SUMMARY V

Public and Media Relations (Publications, Press Facilities, Media Briefings, Release Coordination)

STATE

The media facilities at the JPIC are considered first class and adequate for handling a large number of reporters.

It was not always clear who was in charge at the JPIC. The briefings were held on a timely basis. However, the people who conducted the briefings during the early hours of the exercise did not fully explain the conditions at the plant. There should have been more information given out from the start. The technical representative was weak in his answers to inquiries. A suggestion would be to have two persons on hand, in case one could not handle the questions, or one person with more expertise.

The State and local media spokespersons coordinated the news releases in a professional manner.

The rumor control phone was operational with the phone number announced to the media during the first briefing.

ALLEGAN COUNTY

The Allegan County representative appeared to perform his function adequately. Although he did not interact with the media in any way, he was present on the platform for all briefings, but made no statement or comments.

It was evident that the representative was in direct contact with County officials on a regular basis.

It is recommended that future representatives provide status reports to the media regarding the situation in the County.

BERRIEN COUNTY The Berrien County Public Information Officers performed their job well. Information was well coordinated and questions from reporters were addressed promptly and fully.

VAN BUREN COUNTY Van Buren County public information representatives performed their duties very well. Information was well coordinated and questions from reporters were addressed. The JPIC is located at Lake Michigan Community College. Facilities are excellent in all aspects. Background materials are excellent and included video capes available as footage for news media stories.

Accident Assessment (Staff & Field Operations, Monitoring, SUMMARY VI Equipment, Technical Calculations, Use of PAGs)

> STATE Because of the small scale exercise participation by the State in a supportive role, responding to the County EOCs, JPIC and the EOF, the Rad Health representative demonstrated an excellent capability to do calculations based on data received from the utility and to recommend PAGs from these calculations.

> ALLEGAN COUNTY This is a State function. Not observed in Allegan County.

> BERRIEN COUNTY This is a State function. Not observed in Berrien County.

VAN BUREN COUNTY This is a State function. Not observed in Van Buren County.

Actions to Protect the Public (Sheltering, Evacuation, SUMMARY VII Reception & Care, Transportation)

> STATE All dairy farmers in affected area were notified to put cows on stored feed and to shelter them. Milk must be monitored for contamination.

The two relocation centers are both 20 miles from the facility. The resources of the relocation centers could not be observed from the State EOC.

ALLEGAN COUNTY

There was an adequate deponstration of capability to protect the public through reception and care as demonstrated at the Fennville Middle and High Schools in Allegan County at Fennville, Michigan. This was accomplished through the opening and staffing of primary relocation and decontamination centers at the aforementioned schools. The staffing was accomplished through the combined efforts of the Fennville Public School system, the Allegan County Health, Mental Health, and Social Services Departments, the American Red Cross, and County police.

BERRIEN COUNTY Not observed

VAN BUREN COUNTY

In Van Buren County, there was an adequate demonstration of reception and care of evacuees. The affected sectors and mileage descriptions of the evacuation/shelter areas were quickly converted to easily recognizable physical features for dissemination to the public.

Staffing for reception centers and shelters outside the 20 mile radius were altered to become operational. At the reception center at Paw Paw High School, ten Senior Citizens from a South Haven Senior Citizens Home were monitored for possible radiological contamination, processed through registration, checked for illness and transported to a shelter at the United Methodist Church. This transpired through the combined efforts of local governmental officials at the EOC, public school authorities; State and County employees of the Health and Social Services Departments; the American Red Cross; and the Black River Amateur Radio Club.

SUMMARY VIII

Health, Medical, and Exposure Control Measures (Access Control, Adequacy of Equipment, Use of KI)

STATE Because this was & small scale exercise for the State, the response of many activities was not demonstrated.

In the course of the exercise a discrepancy was noted in the policies of the State and Van Buren County about dispensing KI to the general population. The State plan states that KI is to be given out upon a decision to do so by the State Division of Radiological Health. The County plan states that the responsibility lies with the County Health Department. This discrepancy must be corrected.

ALLEGAN COUNTY

The EOC staff did not control access to evacuated areas on all roads southbound through Allegan County, which is a significant deficiency. A number of health-related matters and protective actions were not appropriate to this exercise. The EOC staff was aware of KI availability and the need to distribute KI to their emergency workers if dispatched into the 5-mile EPZ.

Additional formal training of EOC staff is recommended in two instances in this area, e.g., adequacy of control of access to evacuated areas, and demonstration of adequate and frequent emergency worker dosimeter readings and maintenance of dosage records.

BERRIEN COUNTY

Not observed.

VAN BUREN COUNTY

There was a good demonstration of exposure control procedures. KI was ordered by the State Health Department for emergency workers who may have been in the plume. KI was also prescribed for the public who may have been in the plume by the County Health Department. This is in accordance with the procedures in the County plan; however, in retrospect, this may not have been necessary. Access control was well simulated with a sophisticated traffic control system, although some actual demonstration would have been desirable. Both self-reading, high and mid-range dosimeters and TLDs were distributed, additional supplies are recommended. Good track was kept of emergency worker exposure levels. More frequent reading of dosimeters would be appropriate.

In the course of the exercise, an important discrepancy was noted in the policies of the State and Van Buren County regarding dispensing KI to the general population. The State plan (pg Q 17) states that KI is to be given out, upon a decision to do so, by the County Health Department but that the State Division of Radiological Health is to give advice on this question. In contrast, Tab I, the detailed explanation of the responsibilities of the Division of Radiological Health says (pg 17) that KI is administered at the direction of the Director of the Department of Public Health. Meanwhile, the Van Buren County plan (pg 169) states that it is the responsibility of the County Health Officer to decide this question, and does not say either that the County Health Officer must seek the State's advice before making this decision, or that this is a matter to be decided by the Director of the State Department of Public Health.

Since this aspect of the State response was not included as an objective of this small-scale exercise, the State did not play any role in deciding to give out KI to the general public. However, the confusion evident in the differences discovered between these three formulations of the Michigan and Van Buren County KI distribution policies must be resolved promptly by appropriate plan amendments.

SUMMARY IX

Recovery and Reentry Operations (Adequacy of Plans and Procedures)

STATE

The State demonstrated an acceptable capability for recovery and reentry procedures. The Governor issued an order stating that the State of Emergency was over. Department of Natural Resources, Department of Agriculture, and Department of Public Health were to continue monitoring and to advise Counties on Reentry. However, advisories should have also included recommendations such as the washing of fresh fruits and vegetables, security for evacuated areas, maintaining traffic control points, continued use of JPIC for periodic announcements of status of protective actions, menitoring of returning population, providing transportation, close out of congregate care centers, and the close out of EOCs.

ALLEGAN COUNTY

It was apparent that the players knew that this exercise would be terminated at 2:00 p.m. and had made previous commitments for shortly thereafter. As a result, with only 18 minutes remaining when the situation began to de-escalate, little serious consideration was given to reentry and recovery. Primary attention was focused on termination of the exercise. Exercise play degenerated. Consequently, little capability in this area was demonstrated. Because recovery and reentry was a primary objective of the exercise, this was a significant deficiency.

BERRIEN COUNTY Not observed.

VAN BUREN COUNTY

This was a good demonstration of simulated recovery and reentry. At the time reentry was authorized, security at the 5 mile evacuation limit was released and the units undertook patrol in the area. Security was maintained at the 10 mile shelter limit to control access to the shelter and evacuation areas to only those persons living there. Shelters were closed in phases to avoid traffic jams. The Covert Fire Department moved back

to Covert from its secondary headquarters in South Haven. Dosimeters were collected and read. County personnel remained in the EOC after the announcement was made that the exercise had ended in order to complete their reentry procedures.

SUMMARY X

Relevance of the Exercise Experience (Benefit to Participants, Adequacy of the Scenario)

STATE

The plume exposure pathway, as presented by the scenario and as identified to the State prior to the exercise, did not tax the State and local governments to fully utilize their resources and capabilities. Simulated actions detracted from demonstration of field activities. Evaluators had difficulty identifying the off-site actions that were to be demonstrated from those which would be simulated by participants. A coordinated effort by the State and the Utility must be devoloped to insure that all locations will be actively engaged during the exercise. To insure this coordination will occur, it is recommended by FEMA that a meeting be conducted between the NRC, FEMA, State and the Utility, to occur at least 90 to 100 days in advance of the exercise to agree upon the exercise objectives and scenario events in the plume exposure pathway. Actions to be demonstrated and those to be simulated should be clearly defined.

ALLEGAN COUNTY

Weaknesses in the scenario, as described above, delacted from the County's opportunity to demonstrate capabilities and develor new proficiencies. Consequently, the exercise was of limited benefit to the participants. Deficiencies in this area are attributable to the scenario.

BERRIEN COUNTY

Berrien County personnel took excellent advantage of the training opportunity offered by the exercise, performing functions and capabilities beyond those required by their exercise objectives.

VAN BUREN COUNTY

The participants exhibited a commitment and enthusiasm that could only indicate they benefitted considerably from the exercise.

The scenario was adequate to test the mobilization of Van Buren County for response to an emergency at the Palisades nuclear facility. The evaluators were unable, however, to observe staff alerting because the alerting function took place during the first day of the exercise when evaluators were not assigned. While emergency vehicles were not dispatched, FOC response managers demonstrated an understanding of activities that would be required to implement the necessary protective measures to protect the public. Supplementary problems introduced at the Van Buren County EOC by the State controller served to eliminate dead time and keep all players interested.

PART III

Marrative Description and Summary Listing

STATE EOC

SUMMARY I Emergency Operations Facilities and Resources (Space, Internal Comm., Displays, Security)

The EOC was a well-lighted, well-ventilated room and was adequate for the exercise. The communications with local EOCs, EOF and JPIC was by HOTLINE and LEIN (Law Enforcement Information Network) with radio backup. The internal communications, displays and equipment were adequate, however, it is suggested the status board be placed so it can be observed by all participants in the EOC. During a full scale exercise or actual emergency over-crowding could be a problem.

F.1.b. Adequacy of Communications Systems (Primary and Backup)
with Contiguous State/Local Governments Within the EPZs

The primary communications with the local EOCs within the EPZ was by Hot Line and LEIN with radio being the backup. The communications room is located adjacent to the operations room, which makes for a good working environment. Communications with contiguous State government was not observed at the State level.

F.1.c. Adequacy of Communications, as Appropriate, with Federal Emergency Response Organizations

Not observed

F.1.d. Adequacy of Communications Systems Between the Nuclear Facility and Near-Site EOF, and State and for Local EOCs

There is contact with the local EOCs and the utility by Hot Line and LEIN (hard copy) with the State Police radio network as backup.

C.1.c. Adequacy of Specific State or Local Resources Needed to Support Federal Response

Not observed

Adequacy of EOC Working Space and Amenities

The EOC is a good facility; however, it could become somewhat crowded in a full scale exercise. It is a welllighted facility, good acoustics, and ample telephones. They have a large status board, but the location is such that it would be hard for the operations coordinator to see. It is suggested the status board be placed at the end of the room and the operations coordinator moved to a vantage point.

Adequacy of EOC Internal Communications, Including Equipment, Displays, and Message-Handling Procedures

The internal communications for the exercise were adequate. The hard copy messages and hot line messages were handled in an efficient manner. The maps were displayed so they could be seen and used by all participants.

- H.3. Overall Adequacy of the Emergency Operating Center (EOC)

 The EOC was adequate for this exercise. (See above for further comment.)
- J.10.a. Adequate Maps Displayed Showing Evacuation Routes, Sampling Points, Relocation Centers and Shelter Areas

 All maps were displayed except sampling point locations for radiological monitoring teams.
- J.10.b.

 Adequate Maps Displayed Showing Population Distribution
 Near Nuclear Facility by Evacuation Areas

A map showing population distribution by sector evacuation areas was posted.

SUMMARY II Alerting and Mobilization of Officials and Staff (Staffing, 24-Hour Capability, Alerting Timeliness)

The scenario did not call for alerting and mobilization of staff at the State EOC. Alerting can be accomplished by the State Police network which is manned 24-hours per day.

A.l.e. Capability for 24-Hour Initial Emergency Response and Manning of Communications

A 24-hour communications capability exists by use of the Michigan State Police communications network.

A.4.	Capability for 24-Hour Continuous Emergency Response Operations
	The scenario did not call for a shift change at the State EOC.
E.1.	Adequacy of Procedures Used for Notif. of Emer. Response Organizations Including Means for Verification of Messages
	Not observed .
E.2.	Adequacy of Procedures Used for Alerting, Notifying and Mobilizing Emergency Response Personnel
	Not observed
C.2.a.	If Appropriate, Timely Dispatch of a Representative to Licensees Near-Site EOF
	Not observed
F.1.a.	Adequacy of Emergency Response Communications Equipment Used with Prompt Activation
	Not observed
F.1.e.	Adequacy of Communications Equipment Used for Alerting and Activating Emergency Response Personnel
	Not observed
F.2.	Capability to Communicate with Fixed and Mobile Medical Support Facilities
	Not observed
н.4.	Demonstration of Tirely and Efficient Activation and Staffing of EOCs and Other Facilities
	Not observed
SUMMARY III	Emergency Operations Management (Organization, Control, Leadership, Support by Officials, Decision Making)
	The EOC staff demonstrated a good capability to manage the operations of the EOC. Control, leadership and the ability to make decisions were clearly demonstrated through out the exercise.

A.1.a. Evidenc: That Specific Organizations Have Been Adequately Established as Part of Overall Response

The staff at the EOC included the State Director, Emergency Management, operations chief, Department of Agriculture, Radiological Health (Department of Public Health), Department of Transportation, State Police (message/controller), Hot Line operator for Allegan and Berrien (one person), Van Buren (one person) EOF (one person) and JPIC (one person).

A.1.d. Demonstration That a Specific Individual, by Title, was
Effectively in Charge of Emergency Response

The Assistant Director of Emergency Services was in charge of the operations room. He served as Operation's Coordinator.

A.2.a. Demonstration that Primary & Support Functions & Responsibilities Have Been Assigned to Specific Organizational Elements

Responsibility was defined and carried out by the appropriate organization.

C.l.a. Evidence That a Specific Person Has Been Authorized to Request Federal Assistance (State Only)

A member of the executive group was designated to request Federal assistance. This was simulated in this exercise.

D.3. An Emergency Classification System was Effectively Used and was Consistent with that of the Utility

An emergency classification system was effectively used and was consistent with that used at the facility per NUREG-0654.

D.4. Adequate Written Procedures are used for Emergency Actions
Consistent with Facility Recc. and Local Offsite Conditions

The written procedures were adequate and consistent with facility and local offsite conditions.

Demonstration of Effective Coord. Between Emergency Response Dir. & Staff, Thru Oral Briefings, Staff Meetings, etc.

There were ample briefings to the staff and feedback from the departments represented in the EOC.

Adequacy of Support and/or Participation by Elected Officials

Elected officials were not present in the EOC, however, the operation's coordinator was in contact with the Governor.

SUMMARY IV. Public Alerting and Notification (Means of Notification - Sirens, Vehicles, or Other Systems)

The State did not demonstrate prompt alert and notification within the required 15 minute period as stated in NUREG-0654. It took approximately 42 minutes from when the State received the initial message until the sirens were sounded (simulated). The initial message content from the facility was incomplete and confusing regarding the emergency and the protective actions that should be recommended. Following is the time schedule.

- 9:18 Plant informs State of "General Emergency" at the plant.
- 9:30 Health Department confirms release.
- 9:32 Utility calls State and confirms the "General Emergency" at the plant and informs State followup information will be provided later.
- 9:40 Governor declares State of Emergency.
- 9:43 Utility provided followup information to the State on "General Emergency."
- 9:45 State EOC Coordinator informs State EOC staff the utility declared "General Emergency" at 9:18 a.m. and reported followup information.
- 9:52 State informed County of "General Emergency" at Palisades.
- 10:00 Siren Sounded (simulated).
- E.5. Evidence of a Reliable System for Dissemination to the Public of Appropriate Info Received from the Licensee, e.g. EBS

Not observed

E.6. Adequacy of Means Used for Notification & Prompt Instruction to the Public in the Plume EPZ (Within 15 Minutes)

The State did not demonstrate prompt notification within the required 15 minute period. Messages from the utility were time-consuming and unclear. Following is the time schedule observed for the alerting and notification.

9:18 - Plant informs State of "General Emergency" at the plant.

- E.6. 9:30 Health Department confirms release.
 - 9:32 Utility calls State and confirms the "General Emergency" at the plant and informs State followup information will be provided later.
 - 9:40 Governor declares State of Emergency.
 - 9:43 Utility provided followup information to the State on "General Emergency."
 - 9:45 State EOC Coordinator informs State EOC staff the utility declared "General Emergency" at 9:18 a.m. and reported followup information.
 - 9:52 State informed County of "General Emergency" at Palisades.
 - 10:00 Siren sounded (simulated).
- E.7. Effective Use of Instructional Messages for the Public in Affected Areas

Not observ d

J.10.c. Adequacy of Means Used for Notifying all Segments of Transient and Resident Population

Not observed

SUMMARY V Public and Media Relations (Publications, Press Facilities, Media Briefings, Release Coordination)

The media facilities at the JPIC are considered first class and adequate for handling a large number of reporters.

It was not always clear who was in charge at the JPIC. The briefings were held on a timely basis. However, the people who conducted the briefings during the early hours of the exercise did not fully explain the conditions at the plant. There should have been more information given out from the start. The technical representative was weak in his answers to inquiries.

The State and local media spokespersons coordinated the news releases in a professional manner.

The rumor control phone was operational with the phone number announced to the media during the first briefing.

G.1. Evidence of Dissemination of Information to the Public Within the Last Year

A flyer has been mailed to persons in the 10 mile EPZ in the last six months. Evidence of receipt or use was not observed. Utility staff also appear on talk shows during the year to explain their emergency plans.

G.2. Evidence of a Public Info Program for Permanent & Transient Pop in the Plume EPZ, Such as Posted Notices, etc.

Not observed

G.3.a. Appropriate Points of Contact for the Media Have Been Designated

The media representatives from the State and local units of government were named prior to the exercise and were present in the JPIC and were well organized.

Adequacy of Joint Media Facility, Where Appropriate

The JPIC is an excellent facility with appropriate phones, typewriters, lighting, etc. Video taping facilities were also used, allowing late-coming reporters to see replays of briefings. Background materials were excellent as were the graphics.

Adequacy of Issued Press Releases

The 13 releases were attractive, neat, well-written and free of contradictory information. The people who conducted the briefings during the early hours of the exercise did not fully explain the conditions at the plant. There should have been more information given out from the start. The technical representative was weak in his answers to inquiries. A suggestion would be to have to persons on hand, in case one could not handle the questions, or one person with more expertise.

G.4.a. A Media Spokesperson Has Been Designated Who Has Access to all Necessary Information

It was not always clear who was in charge at the JPIC. All spokespersons were named well in advance of activities and received information on a timely basis.

G.4.b. Adequacy of Arrangements for Exchange of Information Among Spokespersons

The media staff double-checked all their facts among each other prior to release to the media.

G.4.c. Adequacy of Coordinated Arrangements for Rumor Control
Measures

Rumor control was set up and operating. Calls were taken and handled by a power company representative. The rumor control phone number was announced to the media during the first briefing at 8:40 a.m.

SUMMARY VI Accident Assessment (Staff & Field Operations, Monitoring, Equipment, Technical Calculations, Use of PAGs)

Because of the small scale exercise participation by the State in a supportive role, responding to the County EOCs, JPIC and the EOF, the Rad-Health representative demonstrated an excellent capability to do calculations based on data received from the utility and to recommend PAGs from these calculations.

H.7. Adequacy of Offsite Radiological Monitoring Instruments

Not observed. Not demonstrated.

H.12 An Adequate Central Point Has Been Established for Receipt and Analysis of Field Monitoring Data and Sample Media

Not observed. Not demonstrated.

I.7. Adequacy of Capability and Resources for Field Monitoring
Within the Plume EPZ

Not observed. Not demonstrated.

I.8. Adequate Capability to Make a Rapid Assessment of Magnitude & Location of Liquid or Gaseous Radiological Hazards

Not observed. Not demonstrated.

I.9. Capability for Measurement of Radioiodine Concentrations in Plume EPZ Under Field Conditions to 10 F-7 (State Only)

Not observed. Not demonstrated.

I.10. Capability for Relating Measured Parameters to Dose Rates and Estimated Integrated Doses (State Only)

The Michigan Public Health representative for Rad Health, although not participating fully as a player, demonstrated an excellent capability to estimate dose rate from measured parameters and plant data.

1.11.	Capability for Locating and Tracking Airborne Radioactive Plume with Aid of Federal and/or State Resources (State Only)
	Not observed. Not demonstrated.
J.10.m.	Capability to recommend, Protective Action, Based on PAGs in Plume EPZ (State Only)
	The Rad Health representative demonstrated an acceptable capability to recommend protective actions based on PAGs in the plume EPZ.
C.3.	Evidence of Availability & Capability of Radiological Laboratories (State Only)
	Not observed. Not demonstrated.
SUMMARY VII	Actions to Protect the Public (Sheltering, Evacuation, Reception & Care, Transportation)
	All dairy farmers in affected area were notified to put cows on stored feed and to shelter them. Milk must be monitored for contamination and if found to be contami- nated, not sent for processing.
	The two relocation centers are both 20 miles from the facility. The resources of the relocation centers could not be observed from the State EOC.
J.2.	Coordination with Utility for Movement of Onsite Individuals to Offsite Locations
	Not observed
J.9.	Capability for Implementation of Protective Measures
	Not observed
J.10.d.	Adequacy of Methods Used for Protecting Mobility Impaired Persons, Including Institutionally Confined
	Not observed
J.10.g.	Adequacy of Methods Used for Implementing Relocation of Populace
	Not observed
J.10.k.	Adequacy of Organizations Identification of and Means for Dealing with Potential Impediments to Evacuation

Not observed

J.11.

Adequacy of Protective Measures in Ingestion EPZ,

Including Dairy Facilities, Food Processing Plants, Etc.

(State Only)

Dairy farmers in the affected area were notified out to 10 miles that herds should be sheltered and placed on stored feed. Milk should be monitored and, if found to be contamined, should not be sent to processing plants.

J.10.h. Adequate Relocation Centers Have Been Established at Least 5 Miles & Preferably 10 Miles Outside the Plume EPZ

There were two relocation centers, both 20 miles from the facility. Adequacy of the relocation centers were not observed at the State EOC.

Adequacy of Facilities, Supplies & Equipment at Relocation and/or Mass Care Centers

Not observed

Adequacy of Staffing at Relocation and/or Mass Care Centers

Not observed

J.12 Adequacy of Procedures for Processing Evacuees in Relocation Ctrs, Including Health Care, Decon & Rad Monitoring, etc.

Not observed

SUMMARY VIII Health, Medical, and Exposure Control Measures (Access Control, Adequacy of Equipment, Use of KI)

Because this was a small scale exercise for the State, the response of many activities was not demonstrated.

In the course of the exercise a discrepancy was noted in the policies of the State and Van Buren County about dispensing KI to the general population. The State plan states that KI is to be given out upon a decision to do so by the State Division of Radiological Health. The County plan states that the responsibility lies with the County Health Department. This discrepancy must be corrected.

J.10.e. Adequacy of Provisions for Use of KI for Emergency Workers and Institutionalized Persons in Plume EPZ

KI was recommended, distributed and taken by emergency workers (simulated).

J.10.f.	Adequacy of Methods Used in Making Decisions to Administer KI to Central Population
	No decision was made for KI to be administered to the general population. Evacuation was ordered for general population.
J.10.j.	Adequacy of Control of Access to Evacuated Areas
	Not observed
K.3.a.	Adequacy of a 24-Hour a Day Capability to Determine Dose Received by Emergency Workers
	Not observed
K.3.b.	Demonstration of Adequate and Frequent Emergency Worker Dosimeter Readings & Maintenance of Dosage Records
	Not observed
K.4.	Evidence That an Adequate Decision Chain Has Be Stablished to Authorize Exposure for Emer Workers in Excess PAGS
	Not observed
K.5.a.	Evidence That Appropriate Action Levels Have Been Specified for Determining Need for Decontamination
	Not observed
K.5.b.	Adequacy of Measures for Decontamination of Emergency Personnel, Supplies, and Equipment, and for Waste Disposal
	Not observed
L.1.	Adequate Capability Demonstrated by Local and/or Backup Hospital and Medical Services for Handling Personnel
	Not observed
L.4.	Adequate Capability Demonstrated for Transportation of Radio- logical Accident Victims to Medical Support Facilities
	Not observed
M. 4.	Capability for Periodic Estimation of Total Population Exposure (State Only)
	Not observed, not demonstrated.

SUMMARY IX Recovery and Reentry Operations (Adequacy of Plans and Procedures)

The State demonstrated an acceptable capability for recovery and reentry procedures. The Governor issued an order stating that the State of Emergency was over. Department of Natural Resources, Department of Agriculture, and Department of Public Health were to continue monitoring and to advise Counties on Reentry. However, advisories should have also included recommendations such as the washing of fresh fruits and vegetables, Security for evacuated areas, maintaining traffic control points, continued use of JPIC for periodic announcements of status of protective action guides, monitoring of returning population, providing transportation, close out of congregate care centers, and the close out of EOCs.

M.3. Adequacy of Established Means for Informing Response Org that Recovery and Reentry Can Be Initiated (State Only)

The Governor removed evacuation order and ordered sheltering for affected area. Highways, railroads, airports and Lake Michigan boating all were reopened. Long term monitoring was ordered.

M.1. Adequacy of Procedures Demonstrated for Reentry and Relaxation of Protective Measures Allowing Reentry

Recovery and reentry procedures were adequate. The Governor declared that the State of Emergency was over. Sheltering will replace evacuation. Monitoring teams from Department of Natural Resources, Department of Agriculture and Department of Public Health will continue and make advisory recommendations to Counties for reentry procedures. The State showed a good capability for recovery/reentry.

SUMMARY X Relevance of the Exercise Experience (Benefit to Participants, Adequacy of the Scenario)

The plume exposure pathway, as presented by the scenario and as identified to the State prior to the exercise, did not tax the State and local governments to fully utilize their resources and capabilities. Simulated actions detracted from demonstration of field activities. Evaluators had difficulty identifying the off-site actions that were to be demonstrated for those which would be simulated by participant. A coordinated effort by the State and the Utility must be developed to insure that all locations will be actively engaged during the exercise. To insure this coordination will occur, it is recommended by FEMA that a meeting be conducted between the NRC, FEMA, State and the Utility, to occur at least 90 to 100 days

in advance of the exercise to agree upon the exercise objectives and scenario events in the plume exposure pathway. Actions to be demonstrated and those to be simulated should be clearly defined.

N.1.b. Adequacy of Scenario to Test Capability to Mobilize State and Local Personnel and Resources

The plume exposure pathway, as presented by the scenario and as identified to the State prior to the exercise, did not tax the State and local governments to fully utilize their resources and capabilities. Simulated actions detracted from demonstration of field activities. Evaluators had difficulty identifying the off-site actions that were to be demonstrated for those which would be simulated by participants. A coordinated effort by the State and the Utility must be developed to insure that all locations will be actively engaged during the exercise. To insure this coordination will occur, it is recommended by FEMA that a meeting be conducted between NRC, FEMA, State and the Utility, to occur at least 90 to 100 days in advance of the exercise to agree upon the exercise objectives and scenario events in the plume exposure pathway. Actions to be demonstrated and those to be simulated should be clearly defined.

N.1.a. Adequacy of Ex. to Test Integrated Capabilities & Major Portions of the Basic Existing Response Elements in Affected Org

The affected organizations were tested in this exercise. The Department of Agriculture, Department of Transportation and Department of Public Health worked well together.

Benefit of Exercise to Participants

The exercise allowed the participants to use their judgment and expertise on how to handle the normal problems of an exercise and also a real mechanical problem with the Law Enforcement Information Network equipment.

Allegan County

SUMMARY I Emergency Operations, Facilities & Resources (Space, Internal Comm. Displays, Security)

The EOC was spacious, well-lighted, and well arranged. Staff working space was convenient. Map displays were adequate except the population distribution map was not available. Population data shown in the County plan should be updated as it reflected 1970 Census figures. A backup communication link between the EOF and Allegan County EOC is not currently in place and would be advisable.

F.1.b. Adequacy of Communications Systems (Primary and Backup)
With Contiguous State/Local Governments Within the EPZs

The County EOC had LEIN (Law Enforcement Information Network) teletype and telephone hotline to the State EOC plus radio link through the police network. They had police radio, commercial telephone and a liaison representative exchange with Van Buren County.

F.1.c. Adequacy of Communications, as Appropriate, with Federal Emergency Response Organizations

Not applicable

F.1.d. Adequacy of Communications Systems Between the Nuclear Facility and Near-Site EOF, and State and for Local EOCs

The County had telephone link to the facility/EOF and both phone and the LEIN computer phone link to the State EOC and Van Buren and Berrien Counties EOCs. There was no backup communication link between the EOF and Allegan County EOC.

C.1.c. Adequacy of Specific State or Local Resources Needed to Support Federal Response

Not applicable

Adequacy of EOC Working Space and Amenities

The EOC was spacious, with low noise level and desk seating for the staff. The County Board Chairman and assistants had elevated cesks at the front of the room. There were extra tables for books and temporary use. Telephones were near each work station.

Adequacy of EOC Internal Communications, Including Equipment, Displays, and Message-Handling Procedures

The message log was projected on a screen. The "runners" had a distance of 300' between the EOC and the communications center (which was in another building). Time delay with "runners," when added to other communication time lags, could create serious problems for the EOC staff.

Adequacy of EOC Security Measures

There were uniformed police with sign-in and sign-out rosters at the entrance. This seemed very adequate to control security, given the number of other uniformed officers present. The security guard required IDs of all persons not personally recognized by her.

- H.3. Overall Adequacy of the Emergency Operating Center (EOC)

 The EOC appeared very adequate in equipment, space, and personnel.
- J.10.a. Adequate Maps Displayed Showing Evacuation Routes, Sampling Points, Relocation Centers and Shelter Areas

The required maps were mounted on plywood stands and were readily visible to all of the EOC staff.

J.10.b. Adequate Maps Displayed Showing Population Distribution Near Nuclear Facility by Evacuation Areas

Population redistibution map was not displayed or readily available. Outdated (1970 Census) information is in the County plan and needs to be updated and correlated to the map.

SUMMARY II Alerting and Mobilization of Officials and Staff (Staffing, 24-Hour Capability, Alerting Timeliness)

The Allegan County communications Center is operated daily on a 24-hour basis. Alerting and mobilization of the EOC staff was not demonstrated; it was an exercise objective. Call lists were current and procedures appeared adequate. A shift change demonstrated 24-hour staffing capability for the EOC, but the County Board Chairman and PIO remained on duty through the exercise.

A.1.e. Capability for 24-Hour Initial Emergency Response and
Manning of Communications

The Sheriff's office communications center is operated on a 24-hour basis as normal operations. They have 24-hour monitoring of LEIN and radio communication systems.

A.4. Capability for 24-Hour Continuous Emergency Response
Operations

During the exercise, a shift changes was demonstrated for all positions in the EOC except the PIO and County Board Chairman. County Board Vice-Chairman is in the hospital.

E.1. Adequacy of Procedures Used for Notif. of Emer. Response Organizations Including Means for Verification of Messages

These procedures were not demonstrated, although the exercise scenario/objectives specified that this was to be done. A complete demonstration of this capability should be made at the next exercise.

E.2. Adequacy of Procedures Used for Alerting, Notifying and Mobilizing Emergency Response Personnel

Not demonstrated. The EOC was staffed at the start of the exercise. A complete demonstration of this capability should be made at the next exercise.

C.2.a. If Appropriate, Timely Dispatch of a Representative to Licensees Near-Site EOF

Not applicable.

F.1.a. Adequacy of Emergency Response Communications Equipment Used with Prompt Activation

There is a 24-hour LEIN computer-phone tie to the State and other Counties; there are 24-hour commercial phone lines and the capability to notify local staff through radio pagers (HEARN). The capabilities of this equipment was not demonstrated as specified in the exercise objectives. A complete demonstration of this function should be made during the next exercise.

F.1.e. Adequacy of Communications Equipment Used for Alerting and Activating Emergency Response Personnel

They have the capability for contacting personnel in volunteer fire departments through HEARN, other staff through phone lines. Equipment was present and appeared adequate, but this was not demonstrated for alerting and activating emergency response personnel. The exercise objectives specified that this activity was to be demonstrated. A complete demonstration of this function should be made during the next exercise.

F.2. Capability to Communicate with Fixed and Mobile Medical Support Facilities

There is a capability to communicate with fixed and mobile medical support facilities through the use of radio pagers (HEARN).

H.4. Demonstration of Timely and Efficient Activation and Staffing of EOCs and Other Facilities

Not demonstrated. This was one of the exercise objectives but was carried out at the "Alert" status the day before. This function should be demonstrated during the next exercise.

SUMMARY III Emergency Operations Management (Organization, Control, Leadership, Support by Officials, Decision Making)

Elected officials in Allegan County demonstrated excellent support by participating in the exercise. County agency directors and assistant directors performed their functions as EOC staff in a highly professional manner. All participants displayed knowledge of the situation and their assigned responsibilities.

A.1.a. Evidence That Specific Organizations Have Been Adequately Established as Part of Overall Response

The following organizational departments were represented by personnel on the staff: fire service, law enforcement, public information, road engineering, mental health, medical health, school support, Red Cross shelters, damage assessment, social services, Radiological Defense Officer, the Utility and the Michigan State Police.

A.1.b. Demonstration that a Specific Individual, by Title, was
Effectively in Charge of Emergency Response

The Chairman of the County Board was effectively in charge of the EOC; the County Emergency Services Coordinator ably assisted.

A.2.a. Demonstration that Primary & Support Functions & Responsibilities Have Been Assigned to Specific Organizational Elements

> Periodic briefings by individual EOC staff members relative to their agency's accomplished and projected functions demonstrated knowledge of assigned responsibilities.

C.1.a. Not applicable

D.3. An Emergency Classification System was Effectively Used and
Was Consistent with that of the Utility

The emergency classification system was consistent and progressed from "Alert" through "Site Area Emergency" to "General Emergency," and de-escalated to "Site Area Emergency."

L.4. Adequate Written Procedures are Used for Emergency Actions
Consistent with Facility Recc and Local Offsite Conditions

The staff used the Allegan County plan which has been revised but has not been submitted for RAC review, plus individual agency SOPs.

Demonstration of Effective Coord. Between Emergency Response Dir. & Staff, Thru Oral Briefings, Staff Meetings, Etc.

The staff held numerous briefings (approximately 1/hour, or when announcements needed to be made) during which each organizational representative would report to the group and the County Board Chairman and/or State Police representative would make announcements.

Adequacy of Support and/or Participation by Elected Officials

The EOC was run by the Chairman of the County Board of Commissioners. The Sheriff was present during part of the exercise; further elected official support was evidenced by participation of appointed agency heads of other County departments.

SUMMARY IV Public Alerting & Notification (Means of Notification - Sirens, Vehicles, or Other Systems)

The four sirens in the Allegan County part of the EPZ would be activated by Van Buren County. This was not observed. The PIO had listings of EBS (radio and TV stations) and newspapers in the area, with phone numbers; however, media contact would be through the JPIC. Because the scenario was constructed so that Allegan County was not significantly affected, evaluators felt unable to assign a rating to public alerting and notification.

E.5. Evidence of a Reliable System for Dissemination to the Public of Appropriate Info Received from the Licensee, e.g. EBS

PIO in the EOC had telephone contact with the County spokesperson in the JPIC.

E.6. Adequacy of Means used for Notification & Prompt Instruction to the Public in the Plume EPZ (Within 15 Minutes)

Not observed - this was done by Van Buren County through the warning system.

E.7. Effective Use of Instructional Messages for the Public in Affected Areas

Messages released through JPIC - not observed

J.10.c. Adequacy of Means Used for Notifying all Segments of Transient and Resident Population

Outdoor warning system is activated by Van Buren County - not observed.

SUMMARY V Public and Media Relations (Publications, Press Facilities, Media Briefings, Release Coordination)

The Allegan County representative appeared to perform his function adequately. Although he did not interact with the media in any way, he was present on the platform for all briefings, but made no statements or comments.

It was evident that the representative was in direct contact with County officials on a regular basis.

It is recommended that future representatives provide status reports to the media regarding the situation in the County.

G.1. Evidence of Dissemination of Information to the Public,
Within the Last Year

A brochure has been mailed to persons in the 10-mile EPZ in the last 6 months. Evidence of receipt or use was not observed. Utility staff has made appearances on radio stations explaining drills.

G.2. Evidence of a Public Info Program for Permanent & Transient Pop in the Plume EPZ, such as Posted Notices, Etc.

Not observed

G.3.a. Appropriate Points of Contact for the Media Have Been Designated

Contact points were worked out in advance. Communications appeared adequate although there was no interaction with the media.

Adequacy of Joint Media Facility, Where Appropriate

The JPIC is an excellent facility. It is entirely adequate for a large number of reporters. The graphics, lighting and facilities are excellent for the TV cameras and equipment.

Adequacy of Issued Press Releases

The releases (joint) were well done and timely.

G.4.a. A Media Spokesperson Has Been Designated Who Has Access to All Necessary Information

A media spokesperson was present for all briefings.

G.4.b. Adequacy of Arrangements for Exchange of Information Among Spokespersons

Prior to each release, the players conferred and compared notes.

G.4.c.	Adequacy of Coordinated Arrangements for Rumor Control Measures
	Rumor control was not observed at the County level.
SUMMARY VI	Accident Assessment (Staff & Field Operations, Monitoring, Equipment, Technical Calculations, Use of PAGs)
	With the exception of Allegan County monitoring instruments, all items in this section are State responsibilities and not demonstrated during this exercise.
н.7.	Adequacy of Offsite Radiological Monitoring Instruments
	Some civil defense monitoring instruments are available in the County, including 200 low-level dosimeters. The EOC had 55 TLDs available for issuance to emergency workers.
H.12.	An Adequate Central Point Has Been Established for Receipt and Analysis of Field Monitoring Data and Sample Media
	Not applicable - State responsibility.
1.7.	Adequacy of Capability and Resources for Field Monitoring Within the Plume EPZ
	Not applicable - State responsibility.
1.9.	Capability for Measurement of Radioiodine Concentrations in Plume EPZ Under Field Conditions to 10 F-7 (State Only)
	Not applicable - State responsibility.
1.10.	Capability for Relating Measured Parameters to Dose Rates and Estimated Integrated Doses (State Only)
	Not applicable - State responsibility.
1.11.	Capability for Locating and Tracking Airborne Radioactive Plume with Aid of Federal and/or State Resources (State Only)
	Not applicable - State responsibility.
J.10.m.	Capability to Recommend, Protective Action, Based on PAGs, in Plume EPZ (State Only)
	Not applicable - State responsibility.
C.3.	Evidence of Availability & Capability of Radiological Laboratories (State Only)
	Not applicable - State responsibility.

SUMMARY VII Actions to Protect the Public (Sheltering, Evacuation, Reception & Care, Transportation)

There was an adequate demonstration of capability to protect the public through reception and care as demonstrated at the Fennville Middle and High Schools in Allegan County at Fennville, Michigan. This was accomplished through the opening and staffing of primary relocation and decontamination centers at the aforementioned schools. The staffing was accomplished through the combined efforts of the Fennville Public School system, the Allegan County Health, Mental Health, and Social Services Departments, the American Red Cross, and County police.

J.2. Coordination with Utility for Movement of Onsite Individuals to Offsite Locations

Not observed - Van Buren County requirement.

J.9. Capability for Implementation of Protective Measures

Not demonstrated because the scenario did not bring the plume into this County. Not observed.

J.10.d. Adequacy of Methods Used for Protecting Mrtility Impaired Persons, Including Institutionally Confined

Not observed. The scenario did not call for this to be demonstrated.

J.10.g. Adequacy of Methods Used for Implementing Relocation of Populace

The scenario did not call for this to be demonstrated, however, the EOC did have map of relocation routes, with routes' capabilities (number of vehicles per hour, in summer and winter) and average travel times.

J.10.k. Adequacy of Organizations Identification of and Means for Dealing with Potential Impediments to Evacuation

Not observed

J.11. Adequacy of Protective Measures in Ingestion EPZ, Including Dairy Facilities, Food Processing Plants, Etc. (State Only)

Not appropriate - State only.

J.10.h. Adequate Relocation Centers Have Been Established at Least 5 Miles & Preferably 10 Miles Outside the Plume EPZ

There are adequate relocation centers established outside the ten mile EPZ as indicated in the written plan and as

J.10.h. (Cont'd) demonstrated by the opening and staffing of a relocation and evacuee decontamination center at the Fennville High and Middle Schools respectively.

Adequacy of Facilities, Supplies & Equipment at Relocation and/or Mass Care Facilities

The facilities of the Fennville Middle and High Schools are adequate for the reception and care of potential evacuees, including the equipment and supplies. Additional health care supplies were also on hand and were provided by the Allegan County Health Department.

Adequacy of Staffing at Relocation and/or Mass Care Centers

There was adequate staffing at the relocation center at the Fennville High School. Staffing at the center consisted of 3 nurses, 2 of which were from the Allegan County Health Department and the third from the Fennville Public Schools. There were 3 Registrars from the Department of Social Services, one of which was a co-manager of the center along with a Red Cross Shelter Manager. There were representatives from the 2 local ambulance services along with equipment and supplies from one of the services (Wayland Ambulance Co); one individual from the Van Buren County Mental Health Department for evacuee crisis counseling; several Red Cross Volunteers; and a County policeman for Security. It was explained by the center manager that the regular school cafeteria staff would handle the preparation of food and operation of the feeding.

J.12. Adequacy of Procedures for Processing Evacuees in Relocation Ctrs, Including Health Care, Decon & Rad Monitoring, Etc.

Procedures for processing evacuees into the relocation center were adequate through the use of a triplicate copy registration form; an orderly routine established for separating out contaminated evacuees from the rest of the evacuee population by using the Fennville Middle School as a drop off point for incoming evacuees for decontamination.

There was a team of two persons at the decontamination center for radiological monitoring and the direction and control of evacuees. There were three nurses at the relocation center (down the street from the decontamination center) with medical supplies and equipment to care for evacuees.

It is recommended that additional staffing of the decontamination center be provided if it is to be in a separate facility as was the case during this exercise.

SUMMARY VIII Health, Medical, and Exposure Control Measures (Access Control, Adequacy of Equipment, Use of KI)

The EOC staff did not control access to evacuated areas on all roads southbound through Allegan County, which is a significant deficiency. A number of health-related matters and protective actions were not appropriate to this exercise. The EOC staff was aware of KI availability and the need to distribute KI to any emergency workers dispatched into the EPZ.

Additional formal training of EOC staff is recommended in two instances in this area, e.g. adequacy of control of access to evacuated areas, and demonstration of adequate and frequent emergency worker dosimeter readings and maintenance of dosage records.

J.10.e. Adequacy of Provisions for Use of KI for Emergency Workers and Institutionalized Persons in Plume EPZ

KI is available at this EOC. The EOC staff was instructed to issue KI to any Allegan County personnel before they were dispatched into the EPZ.

J.10.f. Adequacy of Methods Used in Making Decisions to Administer
KI to Central Population

Not observed - not an appropriate action in this exercise. The decision would be made by the State and passed to the local EOC.

J.10.j. Adequacy of Control of Access to Evacuated Areas

Barricade materials were readied by the road commission. Law enforcement explained where traffic control points would be established if necessary. Control point and detour was established to divert southbound traffic on the interstate away from the plant. Other southbound roads were not covered, as required by the plan. This is a significant deficiency.

K.3.a. Adequacy of a 24 Hour A Day Capability to Determine Dose
Received by Emergency Workers

CDV low-level dosimeters were available in the EOC. A trained Radef Officer was present in the EOC during the exercise. Other staff, trained in radiological monitoring, are available on a 24-hour a day basis.

K.3.b. Demonstration of Adequate and Frequent Emergency Worker

Dosimeter Readings & Maintenance of Dosage Records

The EOC Radef Officer reported that they had trained the radiological monitors, who would check their dosimeters hourly. No on-going system of monitoring and maintaining records on emergency worker exposure levels was demonstrated during this exercise.

K.4. Evidence That an Adequate Decision Chain Has Been Established to Authorize Exposure for Emer Workers in Excess of PAGs

The decision chain is identified in the plan which was readily available to the EOC staff.

K.5.a. Evidence that Appropriate Action Levels Have Been Specified for Determining Need for Decontamination

Action levels for determining need for decontamination are not identified in the plan but would be given by Department of Public Health personnel who would be involved in an emergency situation.

K.5.b. Adequacy of Measures for Decontamination of Emergency
Personnel, Supplies, and Equipment, and for Waste Disposal

Watervliet Fire Department supported the decontamination station at I-94 exit in Allegan County. Sheriff's deputies are trained as radiological monitors and know how to use the equipment and supplies.

L.1. Adequate Capability Demonstrated by Local and/or Backup
Hospital and Medical Services for Handling Personnel

Not observed

L.4. Adequate Capability Demonstrated for Transportation of
Radiological Accident Victims to Medical Support Facilities

Not observed - not required in this exercise.

M.4. Capability for Periodic Estimation of Total Population Exposure (State Only)

Not appropriate - State responsibility.

SUMMARY IX Recovery and Reentry Operations (Adequacy of Plans and Procedures)

It was apparent that the players knew that this exercise would be terminated at 2:00 p.m. and had made previous

SUMMARY IX (Cont'd)

commitments for shortly thereafter. As a result, with only 18 minutes remaining when the situation began to de-escalate, little serious consideration was given to reentry and recovery. Primary attention was focused on termination of the exercise. Exercise play degenerated. Consequently little capability in this area was demonstrated. Because recovery and reentry was a primary objective of the exercise, this is a significant deficiency.

M. 3.

Adequacy of Established Means for Informing Response Org That Recovery and Reentry Can Be Initiated (State Only)

Not appropriate

M.1.

Adequacy of Procedures Demonstrated for Reentry and Relaxation of Frotective Measures Allowing Reentry

It was apparent that players knew that the exercise would be terminated at 2:00 p.m. and had made previous commitments for shortly thereafter. As a result, with only 18 minutes remaining when the situation began de-escalating, little serious consideration was given to reentry and recovery. Primary attention was focused on termination of the exercise. Exercise play degenerated. Consequently, little capability in this area was demonstrated. Because recovery and reentry was a primary objective of the exercise, this is a significant deficiency.

SUMMARY X

Relevance of the Exercise Experience (Benefit to Participants, Adequacy of the Scenario)

Weaknesses in the scenario detracted from the County's opportunity to demonstrate capabilities and develop new proficiencies. Consequently, the exercise was of limited benefit to the participants. Deficiencies in this area are attributable to the scenario.

N.1.b.

Adequacy of Scenario to Test Capability to Mobilize State and Local Personnel and Resources

The plume exposure pathway remained outside the area of jurisdiction and responsibility of this local EOC. Consequently, little opportunity was afforded the County to demonstrate their capabilities. This is a deficiency in the scenario.

N.1.a.

Adequacy of Ex. to Test Integrated Capabilities & Major
Portions of the Basic Existing Response Elements in Affected Org

The exercise did not require the EOC staff to use their integrated capabilities with other response organizations;

N.1.a. (Cont'd) nonetheless considerable interaction and communication with other response organizations were demonstrated. The exercise did not tax the professional capabilities of the EOC staff. This is a deficiency in the scenario.

Benefit of Exercise to Participants

It was reflected that the pre-exercise drills were of more benefit to the County EOC staff members than the actual exercise because the scenario of one of the drills was more demanding. The EOC staff had generated a state of readiness to effectively demonstrate their capability and were not given adequate opportunity which detracted from the benefit of the exercise. This deficiency is attributed to weaknesses in the scenario.

Berrien County - NOTE: This was a small-scale exercise for Berrien County because they will participate, full-scale, in the D.C. Cook

Nuclear Power Plant exercises. However, as a result,

Berrien County activities consisted of communications support to the State and other Counties, partial EOC staffing and limited direction and control activities, and public information in the JPIC. Other activities were accomplished for training and to develop proficiency but were superfluous to the requirements of the exercise. Observer ratings are limited to the four areas described in Sections I, III, V, and X.

SUMMARY I Emergency Operations, Facilities & Resources (Space, Internal Comm., Displays, Security)

Multiple communications systems link Berrien County with the State EOC and with Van Buren and Allegan Counties. Communications were successfully demonstrated during the exercise; when one system temporarily broke down, another was available as backup. Message content was examined and calls were made for clarification of unclear messages.

F.1.b.

Adequacy of Communications Systems (Primary and Backup) with Contiguous State/Local Governments Within the EPZs

Communications systems included LEIN, dedicated telephones and maps. When the State LEIN link broke down, the State Police liaison at the Berrien County EOC used his dedicated phone for backup. Commercial phone lines were also available.

F.1.c. Adequacy of Communications, as Appropriate, With Federal Emergency Response Organizations

Not observed

F.1.d. Adequacy of Communications Systems Between the Nuclear

Facility and Near-Site EOF, and State and for Local EOCs

The evaluator was told there is a dedicated phone line to

The evaluator was told there is a dedicated phone line to the EOF but did not see this link demonstrated.

C.1.c. Adequacy of Specific State or Local Resources Needed to Support Federal Response

Not observed. Not Exercise Objective.

Adequacy of EOC Working Space and Amenities

Limited scope of activities precluded evaluation of adequacy to support full-scale operations. However, the EOC appeared ample in terms of space and facilities. Bathrooms, showers, kitchen and bunks are available. This will be evaluated during the forthcoming D.C. Cook exercise.

Adequacy of EOC Internal Communications, Including Equipment, Displays, and Message-Handling Procedures

This was not an exercise objective and was not evaluated. It is noted, however, desk trays were provided for each staff person. Hard copy LEIN messages were passed around or read aloud by the EOC director. An ability to duplicate and distribute messages is recommended - copier currently is upstairs and down the hall.

Adequacy of EOC Security Measures

Not formally demonstrated. Will be demonstrated during the D.C. Cook Exercise.

H.3. Overall Adequacy of the Emergency Operating Center (EOC)

Not observed. Will be demonstrated during the D.C. Cook Exercise.

J.10.a. Adequate Maps Displayed Showing Evacuation Routes, Sampling Points, Relocation Centers and Shelter Areas

Not an objective. There was a sector map posted on which protective action areas and the evacuation route were written in - however, there were no maps posted showing evacuation routes or reception centers for the Palisades plant. Palisades maps should be readily available during Palisades exercises.

J.10.b. Adequate Maps Displayed Showing Population Distribution
Near Nuclear Facility by Evacuation Areas

Population distribution map was available for D. C. Cook but not Palisades. Palisades maps should be readily available for Palisades exercises.

SUMMARY II Alerting and Mobilization of Officials and Staff (Staffing, 24-Hour Capability, Alerting Timeliness)

Not observed. Items appearing in this section are not required by the scenario nor were they exercise objectives.

A.1.e. Capability for 24-Hour Initial Emergency Response and Manning of Communications

Not observed.

A.4. Capability for 24-Hour Continuous Emergency Response Operations

Not observed.

E.1. Adequacy of Procedures Used for Notif. of Emer. Response
Organizations Including Means for Verification of Messages

Not observed.

E.2. Adequacy of Procedures Used for Alerting, Notifying and Mobilizing Emergency Response Personnel

Not observed.

C.2.a. If Appropriate, Timely Dispatch of a Representative to Licensees Near-Site EOF

Not observed.

F.1.a. Adequacy of Emergency Response Communications Equipment
Used with Prompt Activation

Not observed

F.1.e. Adequacy of Communications Equipment Used for Alerting and Activating Emergency Response Personnel

Not observed

F.2. Capability to Communicate with Fixed and Mobile Medical Support Facilities

It was noted radio communication with ambulances is available through the Sheriff's Department communications center.

H.4. Demonstration of Timely and Efficient Activation and Staffing of EOCs and Other Facilities

Not observed

SUMMARY III Emergency Operations Management (Organization, Control, Leadership, Support by Officials, Decision Making

The ability to direct and control operations was well demonstrated at Berrien County. The EOC Director monitored communications and kept the EOC staff advised of the flow of events.

A.1.a. Evidence that Specific Organizations Have Been Adequately Established as Part of Overall Response

Not all organizations were involved due to the small scale of participation. Sheriff's deputy provided direction and control. A State Police liaison and representatives of the Red Cross, County Health Department and the Utility were there for training purposes.

A.1.d. Demonstration That a Specific Individual, by Title, Was Effectively in Charge of Emergency Response

The Deputy Director of Emergency Preparedness (a Sheriff's Deputy) was clearly in charge. In general, he did a good job of coordinating staff activities and keeping everyone informed of the situation.

A.2.a. Demonstration That Primary & Support Functions & Responsibilities Have Been Assigned to Specific Organizational Elements

See. A.l.a. above.

C.1.a.	Evidence That a Specific Person Has Been Authorized to	9
	Request Federal Assistance (State Only)	

Not applicable

D.3. An Emergency Classification System was Effectively Used and was Consistent with That of the Utility

Standard emergency classifications were used. Classification was posted and kept up-to-date.

D.4. Adequate Written Procedures are Used for Emergency Actions
Consistent with Facility Reco and Local Offsite Conditions

Not observed

Demonstration of Effective Coord. Between Emergency Response Dir. & Staff, Thru Oral Briefings, Staff Meetings, Etc.

The opportunity for coordination dic not arise formally, since departmental activities were all for training purposes only. However, things were well coordinated and the staff did a good job of anticipating (and preparing for) protective actions which might have been needed.

Adequacy of Support and/or Participation by Elected Officials

Due to the limited scope of the exercise, elected officials

did not participate.

SUMMARY IV Public Alerting & Notification (Means of Not fication - Sirens, Vehicles, or Other Systems)

Not observed. Items appearing in this section are not required by the scenario nor were they exercise objectives.

E.5. Evidence of a Reliable System for Dissemination to the Public of Appropriate Info Received From the Licensee, E.G. EBS

Not observed

E.6. Adequacy of Means Used for Notification & Prompt Instruction to the Public in the Plume EPZ (Within 15 Minutes)

Not observed

E.7. Effective Use of Instructional Messages for the Public in Affected Areas

Although not required by the scenario, a message was formulated concerning sheltering by residents of a small corner of the County which was affected by the plume. It described the affected area according to road boundaries, which was good. It was passed along to Van Buren County, which operates the EPZ siren system, with instructions to broadcast it (over the PA mode) on certain sirens which are in that corner of Berrien County.

Public and Media Relations (Publications, Press Facilities, SUMMARY V Media Briefings, Release Coordination) The Berrien County public information officers performed their job well. Information was well coordinated and questions from reporters were addressed promptly and fully. Evidence of Dissemination of Information to the Public, G.1. Within the Last Year Refer to State report - brochure mailed during last six months. Evidence of a Public Info Program for Permanent & Transient G. 2. Pop in the Plume EPZ, Such as Posted Notices, Etc. Not observed Appropriate Points of Contact for the Media Have Been Designated G. 3.a. The points of contact for the media was established in advance and communications were well coordinated at the JPIC located at the Lake Michigan Community College. Adequacy of Joint Media Facility, Where Appropriate Facilities at JPIC (Lake Michigan College) are first class and convenient to media and players. Equipment included video tapes of all briefings. Adequacy of Issued Press Releases See State report - releases prepared by State representatives. A Media Spokesperson Has Been Designated Who Has Access to G. 4.a. All Necessary Information The media person was present at the JPIC for all briefings. He had access to all information and presented his part well. Adequacy of Arrangements for Exchange of Information Among G.4.b. Spokespersons Prior to each release, the players conferred and compared notes. Adequacy of Coordinated Arrangements for Rumor Control Measures G. 4. c. Rumor control was not observed on a County level. Accident Assessment (Staff & Field Operations, Monitoring, SUMMARY VI Equipment, Technical Calculations, Use of PAGs) Not observed. Items appearing in this section are not

required by the scenario nor were they exercise objectives.

н.7.	Adequacy of Offsite Radiological Monitoring Instruments
	Not observed
H.12.	An Adequate Central Point Has Been Established for Receipt and Analysis of Field Monitoring Data and Sample Media
	Not observed
1.7.	Adequacy of Capability and Resources for Field Monitoring Within the Plume EPZ
	Not observed
1.8.	Adequate Capability to Make a Rapid Assessment of Magnitude & Location of Liquid or Gaseous Radiological Hazards
	Not observed
1.9.	Capability for Measurement of Radioiodine Concentrations in Plume EPZ Under Field Conditions to 10 F-7 (State Only)
	Not observed
1.10.	Capability for Relating Measured Parameters to Dose Rates and Estimated Integrated Doses (State Only)
	Not observed
1.11.	Capability for Locating and Tracking Airborne Radioactive Plume with Aid of Federal and/or State Resources (State Only
	Not observed
J.10.m.	Capability to Recommend, Protective Action, Based on PAGs, in Plume EPZ (State Only)
	Not observed
C.3.	Evidence of Availability & Capability of Radiological Laboratories (State Only)
	Not observed
SUMMARY VII	Actions to Protect the Public (Sheltering, Evacuation, Reception & Care, Transportation)
	Not observed. Items appearing in this section are not required by the scenario nor were they exercise objectives.
J.2.	Coordination with Utility for Movement of Onsite Individuals to Offsite Locations
	Not observed.

J.9.	Capability for Implementation of Protective Measures
	No protective measures (beyond sheltering in one small area) required.
J.10.d.	Adequacy of Methods Used for Protecting Mobility Impaired Persons, Including Institutionally Confined
	Not observed.
J.10.g.	Adequacy of Methods Used for Implementing Relocation of Popul
	Not an objective for Berrien County; one comment, however, the Sheriff's Department should be alert to the need for traffic control along evacuation routes that run through Berrien County (as did the one for this exercise).
J.10.k.	Adequacy of Organizations Identification of and Means for Dealing with Potential Impediments to Evacuation
	Not observed
J.11.	Adequacy of Protective Measures in Ingestion EPZ, Including Dairy Facilities, Food Processing Plants, Etc. (State Only)
	Not observed
J.10.h.	Adequate Relocation Centers Have Been Established at least 5 Miles & Preferably 10 Miles Outside the Plume EPZ
	The Red Cross representative checked on available relocation centers and offered this information to Van Buren County as support. He also simulated placing relocation center staff on standby.
	Adequacy of Facilities, Supplies & Equipment at Relocation and/or Mass Care Centers
	Not observed
	Adequacy of Staffing At Relocation and/or Mass Care Centers
	Not observed
J.12.	Adequacy of Procedures for Processing Evacuees in Relocation Ctrs, Including Hlth Care, Decon & Rad Monitoring, Etc.

Not observed

SUMMARY VIII	Health, Medical, and Exposure Control Measures (Access Control, Adequacy of Equipment, Use of KI
	Not observed. Items appearing in this section are not required by the scenario nor were they exercise objectives.
J.10.e.	Adequacy of Provisions for Use of KT for Emergency Workers and Institutionalized Persons in Plume EPZ
	Not an objective. KI is stockpiled for emergency workers according to the County Health Department.
J.10.f.	Adequacy of Methods Used in Making Decisions to Administer KI to Central Population
	Not observed.
J.10.j.	Adequacy of Control of Access to Evacuated Areas
	Not observed.
K.3.a.	Adequacy of a 24-Hour A Day Capability to Determine Dose Received by Emergency Workers
	Not an objective. The County has a stockpile of permanent record dosimeters, and the evaluator was told that they also have both high $(0-200~R)$ and low $(0-200~MR)$ range dosimeters. They also have dose record forms.
K.3.b.	Demonstration of Adequate and Frequent Emergency Worker Dosimeter Readings & Maintenance of Dosage Records
	Not observed.
K.4.	Evidence That an Adequate Decision Chain Has Been Established to Authorize Exposure for Emer Workers in Excess of PAGs
	Not observed.
K.5.a.	Evidence That Appropriate Action Levels Have Been Specified for Determining Need for Decontamination
	Not observed.
K.5.b.	Adequacy of Measures for Decontamination of Emergency Person Supplies, and Equipment, and for Waste Disposal

Not observed.

Adequate Capability Demonstrated by Local and/or Backup L.1. Hospital and Medical Services for Handling Personnel Not observed Adequate Capability Demonstrated for Transportation of L. 4. Radiological Accident Victims to Medical Support Facilities Not observed Capability for Periodic Estimation of Total Population M.4. Exposure (State Only) Not observed Recovery and Reentry Operations (Adequacy of Plans and SUMMARY IX Procedures) Not observed. Items appearing in this section are not required by the scenario nor were they exercise objectives. Adequacy of Established Means for Informing Response Org M. 3. That Recovery and Reentry Can Be Initiated (State Only) Not observed Adequacy of Procedures Demonstrated for Reentry and M. 1. Relaxation of Protective Measures Allowing Reentry Not an objective. When conditions warranted, a message relaxing the shelter recommendation was prepared and passed to Van Buren County for distribution via the PA mode on the sirens. Relevance of the Exercise Experience (Benefit to Participants, SUMMARY X Adequacy of the Scenario) Berrien County personnel took excellent advantage of the training opportunity offered by the exercise, performing functions and capabilities beyond those required by their exercise objectives. Adequacy of Scenario to Test Capability to Mobilize State N.1.b. and Local Personnel and Resources Not observed - not required. Adequacy of Ex. to Test Integrated Capabilities & Major N. 1. a. Portions of the Basic Existing Response Elements in Affected Org. Not observed - not required.

Benefit of Exercise to Participants

County personnel took excellent advantage of the training opportunity offered by the exercise, performing functions and capabilities not required by the objectives for Berrien County.

Van Buren County - NOTE: Palisades Nuclear Power Plant is located in Van Buren County

SUMMARY I Emergency Operations, Facilities & Resources (Space, Internal Comm., Displays, Security)

Emergency operations facilities in the Van Buren County EOC are good. The communications system is adequate with telephone and Law Enforcement Information Network (LEIN) as the primary systems and Utility Hot Line, radio, and NAWAS as backup. The EOC has adequate amenities. Security was good. Displays and maps were outstanding except for the population map. Incremental divisions of population should be completed through ten miles. Consideration should also be given to remoting the Sheriff's communications to an area closer to the operations room.

F.1.b. Adequacy of Communications Systems (Primary and Backup) with Contiguous State/Local Governments Within the EPZs

The principal means of communication is the telephone. Backup systems are the LEIN, sheriff, fire, ambulance radios and Plectron system to the schools. A possible drawback is the extended distance between the operations room and the communications center.

F.1.c. Adequacy of Communications, as Appropriate, with Federal Emergency Response Organizations

The County deals with the State and the State deals with the Federal organization.

F.1.d. Adequacy of Communications Systems Between the Nuclear Facility and Near-Site EOF, and State and for Local EOCs

A direct, open line telephone was established between the Utility and the County and between the County and the State EOC.

C.1.c. Adequacy of Specific State or Local Resources Needed to Support Federal Response

Not a County responsibility.

Adequacy of EOC Working Space and Amenities

The EOC is located in the Van Buren County Sheriff's Department Annex. It is always set up. It has a kitchen, restrooms, excellent lighting and good acoustics. The arrangement of adjoining large rooms fit nicely into the EOC staff arrangement.

Adequacy of EOC Internal Communications, Including Equipment, Displays, and Message-Handling Procedures

The emergency classifications status was displayed correctly at all times. Messages were handled well internally with multiple copies prepared for records. Runners were used for message distribution - the only area for improvement is that the message board could not be seen by about half of the operations group, including the Health Department Director and Road Commission representative.

Adequacy of EOC Security Measures

Security measures were good. All persons entering the EOC were required to sign in and show photo ID. Operational personnel continued to wear their badges/IDs throughout the exercise.

H.3. Overall Adequacy of the Emergency Operating Center (EOC)

The EOC generally was good. The only important area for improvement is the need for centralizing backup communications equipment closer to the EOC proper. The relocation of or an additional message board would be desirable.

J.10.a. Adequate Maps Displayed Showing Evacuation Routes, Sampling Points, Relocation Centers and Shelter Areas

Maps showing sampling points, relocation centers, shelter areas, evacuation routes and access control points were displayed and used in the EOC. A USGA topographic map and an aerial photo of the immediate plant area were displayed. There was also a diagram of the plant.

J.10.b. Adequate Maps Displayed Showing Population Distribution Near Nuclear Facility by Evacuation Areas

A map showing population distribution by evacuation area was displayed.

SUMMARY II Alerting and Mobilization of Officials and Staff (Staffing, 24-Hour Capability, Alerting Timeliness)

Alerting and mobilization was one of the objectives of this exercise. It was not demonstrated. A complete shift change was not demonstrated. Both of these functions should be demonstrated during the next exercise. A.1.e. Capability for 24-Hour Initial Emergency Response and Manning of Communications

This function is carried out by the Sheriff's Department which operates on a 24-hour basis.

A.4. Capability for 24-Hour Continuous Emergency Response
Operations

During this exercise, a partial shift change was demonstrated. A full shift change should be demonstrated during the next exercise.

E.1. Adequacy of Procedures Used for Notif. of Emer. Response Organizations Including Means for Verification of Messages

These procedures were not demonstrated, although the exercise scenario/objectives specified that this was to be done. A complete demonstration of this capability should be made at the next exercise.

E.2 Adequacy of Procedures Used for Alerting, Notifying and Mobilizing Emergency Response Personnel

These procedures were not demonstrated although the exercise scenario/objectives specified that this was to be done. A complete demonstration of this capability should be made at the next exercise.

C.2.a. If Appropriate, Timely Dispatch of a Representative to Licensees Near-Site EOF

The County does not send a representative to the EOF.

F.1.a. Adequacy of Emergency Response Communications Equipment Used with Prompt Activation

This was not demonstrated. The exercise objectives specified that this activity was to be demonstrated. A complete demonstration of this function should be made during the next exercise.

F.1.e. Adequacy of Communications Equipment Used for Alerting and Activating Emergency Response Personnel

This was not demonstrated. The exercise objectives specified that this activity was to be demonstrated. A complete demonstration of this function should be made during the next exercise.

F.2. Capability to Communicate with Fixed and Mobile Medical Support Facilities

The Sheriff's dispatch center dispatches all County ambulance services. They can talk to the hospitals via the ambulance radio system but use telephone as their primary system.

H.4. Demonstration of Timely and Efficient Activation and Staffing of EOCs and Other Facilities

Not demonstrated. This was one of the exercise objectives but was carried out at the "Alert" status the day before. This function should be demonstrated during the next exercise.

SUMMARY III Emergency Operations Management (Organization, Control, Leadership, Support by Officials, Decision Making)

Adequate emergency operations management, to include plans and procedures and support by elected officials, was demonstrated. Periodic briefings and staff updates were conducted. More staff updates and less frequent message announcements would be desirable. Rosters and some other areas of the plan are outdated. These plan deficiencies should be corrected promptly. Revised plans and procedures should be forwarded to FEMA Region V with sufficient time for evaluation and distribution to RAC agencies before the exercise.

A.1.a. Evidence That Specific Organizations Have Been Adequately Established as Part of Overall Response

A complete representation of organizations necessary to protect the public was present. The representative from the County schools was not present because his location has been changed to the school headquarters. The plan should be updated to reflect this change. In addition, the rosters in the plan are outdated.

A.1.d. Demonstration that a Specific Individual, by Title, was

Effectively in Charge of Emergency Response

The County Chairperson/Vice-Chairperson was effectively in charge of the emergency response.

A.2.a. Demonstration that Primary & Support Functions & Responsibilities Have Been Assigned to Specific Organizational Elements

Primary and support functions and responsibilities have been assigned to specific organizational elements.

C.l.a. Evidence that a Specific Person Has Been Authorized to Request Federal Assistance (State Only)

Not a County responsibility.

D.3. An Emergency Classification System Was Effectively Used and Was Consistent With That of the Utility

The emergency classification system used by the County conforms with that described in NUREG-0654. It is consistent with that of the Utility and was used effectively.

D.4. Adequate Written Procedures are Used for Emergency Actions
Consistent with Facility RECC and Local Offsite Conditions

Each member of the EOC staff had at his/her work station, and was familiar with, a copy of the County plan.

Demonstration of Effective Coord. Between Emergency Response Dir. & Staff, Thru Oral Briefings, Staff Meetings, Etc.

Briefings were good, with frequent announcement of messages and some staff meetings. This area could be improved by having more staff meetings, limiting message announcements to important messages (the announcements were so frequent they sometimes interrupted the staff), and making the explanations of radiological conditions more thorough and understandable.

Adequacy of Support and/or Participation by Elected Officials

The County Board Chairperson and members of the County Board were present in the EOC and active at other emergency operations areas, Allegan County and the JPIC.

SUMMARY IV Public Alerting & Notification (Means of Notification - Sirens, Vehicles, or Other Systems)

The siren system for Public Alerting & Notification was not demonstrated during the exercise. The system was tested May 14, 1983, and a copy of the test report is included in this report. This system has not been certified by FEMA.

(Ref. E-6.) The criteria to provide notification and prompt instruction to the public in the plume exposure pathway (EPZ) is placed in this section not because the State or County has failed, but because a test of this system has not been observed by FEMA. It is recognized that a system consisting of 84 voice capable sirens has been installed within the 10-mile EPZ and that there are 3 separate locations capable of activating the system but, until guidance on observing and testing siren systems has been developed, it will remain in this section of the report.

E.5. Evidence of a Reliable System for Dissemination to the Public of Appropriate Info Received from the Licensee, eg. EBS

Not observed

E.6. Adequacy of Means Used for Notification & Prompt Instruction to the Public in the Plume EPZ (Within 15 Minutes)

This system was not demonstrated during this exercise. However, a siren system is in place. The siren units have a loud speaker capability. It can be activated from three locations, the County Sheriff's Department in Paw Paw, the Covert Fire Department and the South Haven Police Department. Van Buren County received notice of "General Emergency" conditions via telephone at 9:52 a.m. The EOC staff quickly converted sector/mileage descriptions of the evacuation/shelter areas to easily recognizable boundaries. They sounded the sirens (simulated) and released the descriptions of the hazard areas at 10:00 a.m.

E.7. Effective Use of Instructional Messages for the Public in Affected Areas

Speakers on sirens are among the systems to be used. Local and State authorities established (simulated) water control in the off-shore EPZ area adjacent to the plant. The speaker on the siren at the County park would be used to provide information to campers and others in the park. The JPIC and Emergency Broadcast System are other means available.

J.10.c. Adequacy of Means Used for Notifying all Segments of Transient and Resident Population

See E.7. above.

SUMMARY V Public and Media Relations (Publications, Press Facilities, Media Briefings, Release Coordination)

Van Buren County Public Information representatives performed their duties very well. Information was well coordinated and questions from reporters were addressed. The JPIC is located at Lake Michigan Community College. Facilities are excellent in all aspects. Background materials are excellent and included video tapes available as footage for new media stories.

G.1. Evidence of Dissemination of Information to the Public, Within the Last Year

Brochures were distributed to residents within the 10 mile EPZ within the last 6 months. Evidence of use or receipt is not available.

	Evidence of a Public Info Program for Permanent & Transient
G.2.	Pop in the Plume EPZ, Such as Posted Notices, Etc.
	Not observed
G.3.a.	Appropriate Points of Contact for the Media Have Been Designated
	Contact points were well worked out in advance. Also, communications were well-coordinated.
	Adequacy of Joint Media Facility, Where Appropriate
	Facilities at the College are first class and convenient to the media. Equipment included video taping of all briefings.
	Adequacy of Issued Press Releases
	13 well-prepared releases were presented to the media. They were clear and concise with no contradictions noted.
G.4.a.	A Media Spokesperson Has Been Designated Who Has Access to All Necessary Information
	The County dispatched a County Board member to act as the spokesperson. The Spokesperson was present for all briefings. The spokesperson answered all inquiries in a timely manner.
G.4.b.	Adequacy of Arrangements for Exchange of Information Among Spokespersons
	Prior to each media release, the players conferred and compared notes. The PIO in the County EOC had telephone communications with the JPIC and was aware of all media releases
G.4.c.	Adequacy of Coordinated Arrangements for Rumor Control Measur
	Rumor control was not observed on the County level.
SUMMARY VI	Accident Assessment (Staff & Field Operations, Monitoring, Equipment, Technical Calculations, Use of PAGs
	This is a State function. Not observed in Van Buren County.
н.7.	Adequacy of Offsite Radiological Monitoring Instruments
	Not observed
н.12.	An Adequate Central Point Has Been Established for Receipt and Analysis of Field Monitoring Data and Sample Media

Not observed

	Adequacy of Capability and Resources for Field Monitoring
1.7.	Within the Plume EPZ
	Not observed
1.8.	Adequate Capability to Make a Rapid Assessment of Magnitude & Location of Liquid or Gaseous Radiological Hazards
	Not observed
1.9.	Capability for Measurement of Radioiodine Concentrations in Plume EPZ Under Field Conditions to 10 F-7 (State Only)
	Not observed
1.10.	Capability for Relating Measured Parameters to Dose Rates and Estimated Integrated Doses (State Only)
	Not observed
1.11.	Capability for Locating and Tracking Airborne Radioactive Plume with Aid of Federal and/or State Resources (State Only
	Not observed
J.10.m.	Capability to Recommend, Protective Action, Based on PAGs, in Plume EPZ (State Only)
	Not observed
c.3.	Evidence of Availability & Capability of Radiological Laboratories (State Only)
	Not observed
SUMMARY VII	Actions to Protect the Public (Sheltering, Evacuation, Reception & Care, Transportation
	In Van Buren County, there was an adequate demonstration of reception and care of evacuees. The affected sectors and mileage descriptions of the evacuation/shelter areas were quickly converted to easily recognizable physical

Staffing for reception centers and shelters outside the 20 mile radius were alerted to become operational. At the reception center at Paw Paw High School, ten Senior Citizens from a South Haven Senior Citizens Home were monitored for possible radiological contamination, processed through registration, checked for illness and transported to a

SUMMARY VII (Cont'd) shelter at the United Methodist Church. This transpired through the combined efforts of local governmental officials at the EOC, public school authorities; State and County employees of the Health and Social Services Departments; the American Red Cross; the Black River Amateur Radio Club.

J.2. Coordination with Utility for Movement of Onsite Individuals to Offsite Locations

Not observed

J.9. Capability for Implementation of Protective Measures

Evacuation and sheltering in the affected areas were ordered promptly. The boundaries of the areas where protective actions were required was explained clearly in terms understandable to the ordinary citizens.

J.10.d. Adequacy of Methods Used for Protecting Mobility Impaired Persons, Including Institutionally Confined

There appears to be no adequate plans or methods used for the protection of mobility impaired persons. The hospitals and nursing homes are reported to have plans for protecting the institutionally confined.

J.10.g. Adequacy of Methods Used for Implementing Relocation of Populace

There was an adequate demonstration of methods used for implementing relocation of the populace. Ten (10) Senior Citizens were transported via school bus from South Haven to a reception and care and shelter locations at the Paw Paw High School and the United Methodist Church also located in Paw Paw. Discussion with EOC staff suggested that considerable thought had been given to how traffic would move over designated evacuation routes, buses that would be available, etc.

J.10.k. Adequacy of Organizations Identification of and Means for Dealing with Potential Impediments to Evacuation

The County Road Commission has considerable experience in handling adverse weather conditions and would be prepared either to clear clogged roads or recommend sheltering as an alternative for evacuation if the situation becomes unmanageable.

J.11. Adequacy of Protective Measures in Ingestion EPZ, Including Dairy Facilities, Food Processing Plants, Etc. (State Only)

Not observed

J.10.h. Adequate Relocation Centers Have Been Established at Least

5 Miles & Preferably 10 Miles Outside the Plume EPZ

There are adequate relocation centers established outside the 10 mile EPZ per the written plans and as demonstrated during this exercise. The locations as observed during this exercise were at the Hartford Middle and High Schools, Hartford, Michigan; the Paw Paw High School, and the United Methodist Church, which is also at Paw Paw, Michigan.

Adequacy of Facilities, Supplies & Equipment at Relocation and/or Mass Care Centers

The relocation and mass care facilities at both locations (Paw Paw High School and the Paw Paw United Methodist Church) demonstrated as part of this exercise were adequate, as well as the cafeteria type equipment and supplies for feeding and sheltering of potential evacuees.

Adequacy of Staffing at Relocation and/or Mass Care Centers

There was adequate staffing at the Paw Paw High School reception center and the congregate care facility at the United Methodist Church also at Paw Paw, Michigan. The staffing at the congregate care center consisted of several food preparers and servers; an American Red Cross (ARC) shelter manager; one ARC nurse and three ARC shelter registrars/helpers. Staffing at the reception center (Paw Paw High School) consisted of four nurses for evacuee care from the Van Buren County Health Department; two teams, consisting of two persons each for radiological monitoring and one additional person for direction and control of incoming evacuees, also from the Van Buren County Health Department; three evacuee registrars from the Van Buren County Department of Social Services; one shelter coordinator from the ARC and two members of the Black River Amateur Radio Club for radio communications between the reception center and the Van Buren County EOC, and four staff persons from the Van Buren Mental Health Department for crisis counseling with evacuees.

J.12. Adequacy of Procedures for Processing Evacuees in Relocation Ctrs, Including Hith Care, Decon & Rad Monitoring, Etc.

There was an adequate demonstration of procedures for processing evacuees at the reception center and for shelter through the use of a triplicate copy registration form; there were two teams of radiological monitors (from the Van Buren County Health Department) with equipment to monitor incoming reception center evacuees for radiological contamination; an orderly routine established for separating out contaminated evacuees from the rest of the evacuee

J.12. (Cont'd)

population; isolated showering and storage areas for decontamination and remonitoring of evacuees, and a professional nursing staff (from the Van Buren Health Department and Red Cross) with medical supplies and equipment to care for evacuees.

SUMMARY VIII

Health, Medical, and Exposure Control Measures (Access Control, Adequacy of Equipment, Use of KI)

There was a good demonstration of exposure control procedures. Was ordered by the State Health Department for emergency workers who may have been in the plume. KI was also prescribed for the public who may have been in the plume by the County Health Department. This is in accordance with the procedures in the County plan; however, in retrospect, this may not have been necessary. Access control was well simulated with a sophisticated traffic control system, although some actual demonstration would have been desirable. Both self-reading, high and mid-range dosimeters and TLDs were distributed, additional supplies are recommended. Good track was kept of emergency worker exposure levels. More frequent reading of dosimeters would be appropriate.

In the course of the exercise, an important discrepancy was noted in the policies of the State and Van Buren County regarding dispensing KI to the general population. The State plan (pg Q 17) states that KI is to be given out, upon a decision to do so, by the County Health Department but that the State Division of Radiological Health is to give advise on this question. In contrast, Tab I, the detailed explanation of the responsibilities of the Division of Radiological Health, says (pg 17) that KI is administered at the direction of the Director of the Department of Public Health. Meanwhile, the Van Buren County plan (pg 169) states that it is the responsibility of the County health officer to decide this question, and does not say either that the County health officer must seek the State's advice before making this decision, or that this is a matter to be decided by the Director of the State Department of Public Health.

Since this aspect of the State response was not included as an objective of this small-scale exercise, the State did not play any role in deciding to give out KI to the general public. However, the confusion evident in the differences discovered between these three formulations of the Michigan and Van Buren County KI distribution policies must be resolved promptly by appropriate plan amendments.

J.10.e.

Adequacy of Provisions for Use of KI for Emergency Workers and Institutionalized Persons in Plume EPZ

KI was available, should the need arise, from a central store and was distributed to key locations within the EPZ during the "Site Area Emergency." The decision to simulate J.10.e. (Cont'd) administering KI to emergency workers was correctly made when it became apparent that some workers would be dispatched into the EPZ.

J.10.f. Adequacy of Methods Used in Making Decisions to Administer
KI to Central Population

The decision to administer KI to all people emerging from the evacuation area was correctly made by the County Health Director, who is an M.D. An ample supply was available at the reception centers, where the drug would be administered by nurses. Anyone experiencing an adverse reaction would have been sent to a hospital, where physicians were aware of the possibility of such patients.

J.10.j. Adequacy of Control of Access to Evacuated Areas

Law enforcement forces, County, local, and State, established access control points, first at the 2 and five mile perameters, and later at the 5 and 10 mile limits. Security at the 5 mile ring was maintained throughout the emergency to prevent persons who had evacuated the area from returning. Stay-times for these emergency workers were coordinated with Rad Health people at the State. Recommend that traffic control be demonstrated in a future exercise.

K.3.a. Adequacy of a 24-Hour a Day Capability to Determine Dose
Received by Emergency Workers

An adequate capability exists to track doses received by emergency workers. Self-reading dosimeters and TLDs were simulated to be distributed to emergency workers. Sufficient dosimetry apparently was not available locally and it would have taken up to three hours to obtain additional instruments from the State.

K.3.b. Demonstration of Adequate and Frequent Emergency Worker

Dosimeter Readings & Maintenance of Dosage Records

The Radef staff requested hourly dosimeter readings from all emergency workers and, in addition, sent two mobile teams equipped with chargers and survey meters to double check the police at traffic control points nearest the plume. The hourly readings, which are specified in the plan, should have been more frequent for those most threatened. None of the three dosimeters which were hanging in the EOC were zeroed properly, indicating either a possible need for more training or defective instruments.

K.4. Evidence That an Adequate Decision Chain Has Been Established to Authorize Exposure for Emer Workers in Excess of PAGS

Not observed

J.10

K.S.a. Evidence That Appropriate Action Levels Have Been Specified for Determining Need for Decontamination

Not observed

K.5.b. Adequacy of Measures for Decontamination of Emergency Personnel, Supplies, and Equipment, and for Waste Disposal

There was a demonstration of measures to capably decontaminate equipment as demonstrated by the fire department at Hartford, Michigan. This demonstration was performed on a bus which had transported ten (10) Senior Citizens from South Haven to the decontamination location at Hartford. Firement utilizing monitoring equipment for detection of radiological contamination of the bus exterior, hosed the bus down with water and remonitored it before allowing it to proceed to the Reception Center at Paw Paw. The participating firement were fully suited with rubber gear and gloves.

Facilities at the Hartford Middle and High Schools (2) are adequate for receiving and decontaminating workers in addition to evacuees arriving from within the nearby 10 mile EPZ. This capability was explained through a walk-through of the facilities.

L.1. Adequate Capability Demonstrated by Local and/or Backup
Hospital and Medical Services for Handling Personnel

Not observed. Recommend this be demonstrated in a future exercise.

L.4. Adequate Capability Demonstrated for Transportation of Radiological Accident Victims to Medical Support Facilities

Not observed. Recommend this be demonstrated in a future exercise.

M.4. Capability for Periodic Estimation of Total Population Exposure (State Only)

Not observed.

SUMMARY IX Recovery and Reentry Operations (Adequacy of the Plans and Procedures)

This was a good demonstration of simulated recovery and reentry. At the time reentry was authorized, security at the 5 mile evacuation limit was released and the units undertook patrol in the area. Security was maintained at the 10 mile shelter limit to control access to the shelter and evacuation areas to only those persons living there. Shelters were closed in phases to avoid traffic jams. The Covert Fire

SUMMARY IX (Cont'd) Department moved back to Covert from its secondary headquarters in South Haven. Dosimeters were collected and read. County personnel remained in the EOC after the announcement was made that the exercise had ended in order to complete their reentry procedures.

M. 3.

Adequacy of Established Means for Informing Response Org That Recovery and Reentry Can Be Initiated (State Only)

Not observed.

M.1.

Adequacy of Procedures Demonstrated for Reentry and Relaxation of Protective Measures Allowing Reentry

This was a good demonstration of simulated recovery and reentry. At the time reentry was authorized, security at the 5 mile evacuation limit was released and the units undertook patrol in the area. Security was maintained at the 10 mile shelter limit to control access to the shelter and evacuation area to only those persons living there. Shelters were closed in phases to avoid traffic jams. The Covert Fire Department moved back to Covert from its secondary headquarters in South Haven. Dosimeters were collected and read. County personnel remained in the EOC after the announcement was made that the exercise had ended in order to complete their reentry procedures.

SUMMARY X

Relevance of the Exercise Experience (Benefit to Participants, Adequacy of the Scenario)

The participants exhibited a commitment and enthusiasm that could only indicate they benefitted considerably from the exercise.

The scenario was adequate to test the mobilization of Van Buren County for response to an emergency at the Palisades nuclear facility. The evaluators were unable, however, to observe staff alerting because the alerting function took place during the first day of the exercise when evaluators were not assigned. While emergency vehicles were not dispatched, EOC response managers demonstrated an understanding of activities that would be required to implement the necessary protective measures to protect the public. Supplementary problems introduced at the Van Buren County EOC by the State controller served to eliminate dead time and keep all players interested.

N.1.b.

Adequacy of Scenario to Test Capability to Mobilize State and Local Personnel and Resources

The scenario was adequate to test the mobilization of Van Buren County for response to an emergency at the Palisades nuclear facility. The evaluators were unable, however, to observe staff alerting because the alerting function took place during the first day of the exercise when evaluators were not assigned.

N.1.a. Adequacy of Ex. to Test Integrated Capabilities & Major
Portions of the Basic Existing Response Elements in
Affected Org

While emergency vehicles were not dispatched, EOC response managers demonstrated an understanding of activities that would be required to implement the necessary protective measures to protect the public. Supplementary problems introduced at the Van Buren County EOC by the State controller served to eliminate dead time and keep all players interested.

Benefit of Exercise to Participants

The participants exhibited a commitment and enthusiasm that could only indicate they benefitted considerably from the exercise.

PART IV Summary Listing of Significant Deficiencies

State

E.6. The State did not demonstrate prompt alert and notification within the required 15-minute period. It took approximately 42 minutes from the time the State received the initial message until the sirens were sounded (simulated). The initial message content from the facility was incomplete and confusing regarding the emergency and the protective actions that should be recommended.

See also general statement (ALL JURISDICTIONS) on page 5 of Part II, Executive Summary.

N.1.b. The scenario was not developed sufficiently to properly exercise State and local governments, or identify the offsite actions that were to be demonstrated and/or simulated by the participants. It is recommended that a meeting be conducted between NRC, FEMA, State and the utility to occur at least 90 to 100 days prior to the exercise to agree upon the exercise objectives and scenario events.

Allegan County

- J.10.j. Control points and detours were established to divert southbound traffic on the interstate, away from the plant. Other southbound roads, such as U.S. 12, were not covered as required in the plan.
- J.10.b. The population distribution map by evacuation areas was not displayed. Information in the County plan is outdated (1970 Census figures) and needs to be revised and correlated to the map.
- E.1. These procedures were not demonstrated although the exercise scenario/objectives specified that this was to be done. A complete demonstration of this capability should be made at the next exercise.
- E.2. This was not demonstrated. The EOC was staffed at the start of the exercise. A complete demonstration of this capability should be made at the next exercise.
- F.1.a. The capabilities of the equipment was not demonstrated as specified in the exercise objectives. A complete demonstration of this function should be made during the next exercise.
- F.1.e. The equipment used for alerting and activating emergency response personnel was present and appeared adequate but was not demonstrated. A complete demonstration of this function should be made during the next exercise.

- H.4. The timely and efficient activation and staffing of EOCs and other facilities were not demonstrated. This was one of the exercise objectives but was carried out at the "Alert" status the day before. This function should be demonstrated during the next exercise.
- M.1. It was apparent the staff knew when the exercise was to be terminated, consequently, little effort was made in the reentry/ recovery process.

Berrien County - None

Van Buren County

- E.7. Instructional messages for the public in affected areas through the use of the JPIC, EBS and speakers on sirens should be demonstrated during the next exercise.
- J.10.c. See E.7. above.
- J.10.d. Adequate plans must be developed for protecting the mobility impaired.
- E.1. The procedures used for notification of emergency response organizations and means for verification of messages were not demonstrated during this exercise.
- E.2. The procedures for alerting, notifying, and mobilizing emergency response personnel should be demonstrated during the next exercise.
- F.l.a. The emergency response communications equipment used with prompt activation should be demonstrated during the next exercise.
- F.1.e. A complete demonstration of communications equipment used for alerting and activating personnel should be made during the next exercise.
- H.4. A timely and efficient activation and staffing of EOCs and other facilities should be demonstrated during the next exercise.

PART V Summary Listing of Minor Deficiencies

State

Resources:

- G.4.a. It is suggested that two people be on hand to answer questions in case one could not, or one person with more expertise be assigned that could take full charge.
- H.3. The status board is located around the corner from the coordinator who could not see it easily. It is suggested the status board be moved to one end of the room and the coordinator to the other end of the room.
- J.10.a. Sampling point locations map should be displayed.

Allegan County

Plans:

D.4. The EOC staff used revised plans. These plans must be submitted to FEMA Region V for RAC review.

Training:

K.3.b. There was no on-going system for monitoring and maintaining the records on emergency worker exposure levels demonstrated. Additional formal training is recommended.

Resources:

- A.4. It is suggested other personnel could have been used for a complete shift change.
- F.1.d. Backup communications should be provided or plan should explain system's compatability as required by this criteria item.
- G.3.a. Communications appeared adequate but there should be more interaction with the media.

Berrien County - None

Van Buren County

Plans:

A.1.a. The plan should be updated to reflect the representative from the County schools is now reporting to the school headquarters. The rosters in the plan need to be updated.

- J.10.b. The population distribution map increments should be carried out to include all areas to 10 miles. They should not be consolidated for the 5 to 10 mile population.
- J.10.f. Differences in the formulation of the Michigan State and Van Buren County KI distribution policies must be resolved by appropriate plan amendments.

Training:

- K.3.b. The hourly readings, which are specified in the plan, should have been taken more frequently for those most threatened. The three dosimeters, hanging in the EOC were not zeroed properly, indicating a need for more training.
- J.10.j. It is recommended that traffic control be demonstrated in a future exercise.

Resources:

- A.4. A partial shift change was demonstrated. A full shift change should be demonstrated during the next exercise.
- F.1.b. A possible drawback to the communications system could be the extended distance between the operations room and the communications center.
- K.3.a. Sufficient dosimetry is not available locally. It would be appropriate to acquire more dosimetry as it would take approximately three (3) hours to obtain this from the State.

PART VI

Schedule for Correction of Significant Deficiencies

A schedule for the correction of significant deficiencies listed for the State of Michigan, Allegan and Van Buren Counties is to be provided the Chairman, Regional Assistance Committee, Federal Emergency Management Agency Region V, by October 28, 1983.

PALISADES PUBLIC WARNING SYSTEM ACTIVITY REPORT

(Complete form for each initiated system or unit "send" action)

DATE 5	/14/83 TIME 12:00 ACTION Monthly Test
WEATHER	Overcast Foggy WIND SPEED 7 FROM West TEMPERATURE 50 degrees I
AUTHORI	ZATION OEP ACTIVATING AGENCY South Haven
NOTIFIC	
METHOD (OF UNITS ACTIVATED All
OPERATOR	R (Print) Glenn Pullian, So. Haven P.D. (Sign)
	Coordinator
OPERATIO	N COMMENTS/PROBLEMS Page _ of
11.30	Hot line/party line phone system did not work calling out from So. Haven,
	Covert had to call So. Haven to establish hot line communications.
11:40	Tape precheck - no operator relief at Sheriff's Dept. to run pre-check.
	Tape precheck OK at Covert and South Haven.
	Siren test activation by So. Haven OK; however, So. Haven display panel
	did not light up, apparently did not receive Covert radio signal.
	RECOMMENDATION FOR LOCAL: Not written in the manual but we should be
	testing the radio signal each time from Paw Paw and So. Haven; without
t	tape, encode home station, 5001, 5002, or 5003, push "Home Stat" and then
	Double Send" buttons This will be
1	Double Send" buttons. This will let us know if station receiving unit s functioning.
	iren monitoring #39 at So. Haven P.D. worked well
	#83 reported as garbled sound (Mrs. Clauser - 621-4633)
	#8 No PA
, No	#87 No PA or siren sound reports from Berrien County