

JUN 17 1987.

Docket No. 50-266
Docket No. 50-301

Wisconsin Electric Power Company
ATTN: Mr. C. W. Fay
Vice President
Nuclear Power Department
231 West Michigan, Room 308
Milwaukee, WI 53201

Gentlemen:

We have received the enclosed Federal Emergency Management Agency (FEMA) letter dated April 21, 1987, and associated final exercise evaluations on the offsite Emergency Preparedness Exercise conducted on September 9, 1986. This was a full participation exercise for Kewaunee County, Manitowoc County and a partial participation exercise for the State of Wisconsin.

FEMA identified no deficiencies, however, seven areas observed required corrective action. As a result of the evaluation of the exercise and the schedule for corrective actions, the FEMA approval for offsite planning and preparedness under 44 CFR 350 remains in effect.

We fully recognize that the recommendations 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 Point Beach Nuclear Power Plant 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,

"Original signed by W.D. Shafer"

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PDR ADDCK 05000266
F PDR

W. D. Shafer, Chief
Emergency Preparedness and
Radiological Protection Branch

Enclosure: As stated

See Attached Distribution

RIII *some 6/16/87*
Christoffer/ib

RIII *WGS for*
Foster
yes

RIII
WGS
Snell
yes
6/16/87

RIII
RCIK
DeFayette
yes
6/16/87

RIII
Shafer

IE 205
1/1
IE49

Wisconsin Electric Power
Company

2

JUN 17 1987

Distribution

cc w/enclosure:

J. J. Zach, Plant Manager

DCS/RSB (RIDS)

Licensing Fee Management Branch

Resident Inspector, RIII

Virgil Kanable, Chief

Boiler Section

Mary Lou Munts, Chairperson

Wisconsin Public Service

Commission

Collette Blum-Meister (SLO),

WI Div. of Emergency Government

Lawrence J. McDonnell, Chief

Radiation Protection Section

WI Department of Health and

Social Services, Division

of Health

cc w/o enclosure:

D. Matthews, NRR, EPB



Federal Emergency Management Agency

Washington, D.C. 20472

APR 21 1987

PRIORITY ROUTING

First	Second
RA	
PA	
PO	
✓ TSS	
WMA	

FILE X

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

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

Subject: Exercise Report of the September 9, 1986, Exercise of the Wisconsin Offsite Radiological Emergency Preparedness Plans for the Point Beach Nuclear Power Plant.

This is to transmit a copy of the Exercise Report of the September 9, 1986, joint exercise of the Wisconsin offsite radiological emergency preparedness plans for the Point Beach Nuclear Power Plant, in the Town of Two Rivers, Wisconsin. Participants included the State of Wisconsin (partial participation), Kewaunee County (full), Manitowoc County (full) and the Wisconsin Electric Power Company (full). These two counties are impacted by the Point Beach plume exposure 10-mile Emergency Planning Zone (EPZ). The date of the final report prepared by the Federal Emergency Management Agency (FEMA) Region V was March 4, 1987.

In the September 9, 1986 exercise conducted by FEMA Region V, there were no Deficiencies observed; however, there were seven areas observed as requiring corrective action (ARCA's). On January 8, 1987, the Region transmitted to the State of Wisconsin a copy of the exercise report and the State responded February 27, 1987 to the ARCA's cited by FEMA. The FEMA Region V memorandum of March 17, 1987, reviewing the Wisconsin response is attached. The proposed corrective actions contained in the memorandum are acceptable to FEMA and will be evaluated at the next biennial exercise.

Based on the results of the exercise and the schedule for corrective action for the ARCA's, FEMA considers that offsite radiological emergency preparedness is adequate to provide reasonable assurance that appropriate measures can be taken offsite to protect the health and safety of the public living in the vicinity of the site in the event of a radiological emergency. Therefore the FEMA approval for offsite planning and preparedness under 44 CFR 350 remains in effect.

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PDR ADOCK 05000266
F PDR

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MAY 12 1987

- 2 -

If you have any questions, please contact Mr. Robert S. Wilkerson, Chief,
Technological Hazards Division, at 646-2861.

Attachment
As Stated



Federal Emergency Management Agency

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

March 17, 1987

Mr. David Speerschneider, Director
Bureau of Plans and Preparedness
Division of Emergency Government
Post Office Box 7865
Madison, Wisconsin 53707

Dear Mr. Speerschneider:

We have reviewed the schedule of corrective action dated February 27, 1987 for the exercise weaknesses identified during the September 9, 1986 Point Beach exercise. Our evaluation of the proposed corrective action is discussed below.

State of Wisconsin: F.1

The proposed corrective action is acceptable. We will evaluate this activity during the June 1987 Zion exercise.

State of Wisconsin: 0.4.1

The proposed corrective action is acceptable. We will evaluate State/local information procedures during the June 1987 Zion exercise and during future exercises involving Kewaunee and Manitowoc Counties.

State of Wisconsin: 0.5

The proposed corrective action is acceptable. We will evaluate this State activity during the June 1987 Zion exercise.

State of Wisconsin: J.10.e

The proposed corrective action is acceptable. We will be evaluating the Department of Agriculture milk sampling team during the June 1987 Zion exercise.

State of Wisconsin: J.10.1

The proposed corrective action is acceptable. We will expect revisions, concerning air traffic control, to be included in the annual update of the State and county plans scheduled for August 1987.

Mr. David Speerschneider, Director
Bureau of Plans and Preparedness
Division of Emergency Government
Page -2-

Manitowoc County: E.7

The proposed corrective action is acceptable. We will be evaluating messages during the October 1987 Kewaunee exercise.

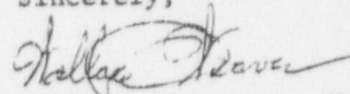
Manitowoc County: L.1

We are pleased to note that Manitowoc County, Two Rivers Hospital, and the utility staffs are working together to correct the weaknesses identified during the exercise. We will evaluate this activity during future REP exercises as appropriate.

A copy of the revised cover and title pages for the final exercise report are enclosed. These are the only changes to the draft exercise report which was provided to you earlier. Please replace these two pages in the copies of the report which you, Manitowoc and Kewaunee Counties currently possess. The exercise report may now be considered final.

The final exercise report and your schedule of corrective action are being provided FEMA HQ for transmittal to the NRC. If you have any questions, please contact me.

Sincerely,



Wallace J. Weaver, Chairman
Regional Assistance Committee

Enclosure

Tommy G. Thompson
Governor
James R. Klauser
Secretary



Mailing Address:
Post Office Box 7865
Madison, WI 53707-7865
Phone: 608/266-3232

State of Wisconsin Department of Administration

4802 Sheboygan Avenue, Room 99A • Madison, Wisconsin

February 27, 1987

Mr. Wallace J. Weaver, Chief
Technological Hazards Branch
Federal Emergency Management Agency, Region V
300 South Wacker Drive, 24th Floor
Chicago, IL 60606

Dear Mr. Weaver:

Enclosed is the State of Wisconsin's response to the draft report of the Point Beach Exercise. We look forward to your favorable reply to these corrective actions.

If you have any questions, contact Garrett Nielsen at (608) 266-3115 or Lawrence Reed at (608) 266-3169.

Sincerely,

A handwritten signature in dark ink, appearing to read "David Speerschneider".

David Speerschneider, Director
Bureau of Plans and Preparedness
Division of Emergency Government

DS:jlr:3457A

Enclosure

cc: BG Richard I. Braund (Ret.), Administrator,
Division of Emergency Government (DEG)
Rick Anthony, Federal Emergency Management Agency (FEMA),
Battle Creek
Garrett Nielsen, DEG
Lawrence Reed, DEG
Gary Gylund, DEG
Kenneth O'Brien, Department of Health and Social Services (DHSS)
Elmer Alexander, Department of Agriculture, Trade, and
Consumer Protection (DATCP)
Nancy Crowley, Manitowoc County
Lyle Schmiling, Kewaunee County
David Stevens, Wisconsin Electric Power Company

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UTILITY: Point Beach Nuclear Power Plant
Summary Listing of Exercise Findings

2. Areas Requiring Corrective Action

Wisconsin
(State)

September 9, 1986
(Date)

Wisconsin
(Community)

<u>NUREG Item</u>	<u>Narrative Statement of Weakness</u>	<u>Corrective Action Proposed</u>	<u>Scheduled Date</u>	<u>Actual Date</u>
F.1	The Department of Agriculture emergency field workers must be provided reliable means of communications.	State Patrol squad cars will be used to provide transportation and communications for Department of Agriculture field workers.	6/87	
0.4,j	Additional training must be conducted concerning information handling procedures to ensure information is distributed promptly between the State and local government.	Information handling procedures between the State and local government will be reviewed and additional training will be conducted to stress the prompt transmission of information.	6/87	
0.5	Training must be provided to all agriculture personnel who will or may be called to assist in radiological emergencies, particularly those who may be assigned to agriculture sampling teams. The training must include dosimetry, exposure control, protective gear and personnel and equipment decontamination.	The Division of Emergency Government, the State Radiological Coordinator, and personnel from the Department of Agriculture, Trade and Consumer Protection have held two meetings to discuss these issues, and Agriculture personnel will be included in existing training programs.	6/87	

UTILITY: Point Beach Nuclear Power Plant
Summary Listing of Exercise Findings

2. Areas Requiring Corrective Action

Wisconsin
(State)

Wisconsin
(Community)

September 9, 1986
(Date)

<u>NUREG</u> <u>Item</u>	<u>Narrative Statement</u> <u>of Weakness</u>	<u>Corrective Action</u> <u>Proposed</u>	<u>Scheduled</u> <u>Date</u>	<u>Actual</u> <u>Date</u>
J.10,e	The Department of Agriculture milk sampling team should be issued KI and provided instructions for its use.	Department of Agriculture milk sampling teams will be issued KI and provided instructions for its use in future exercises.	6/87	
J.10,j	County plans must be amended to define the responsibility for halting or diverting air traffic over the risk area.	State and County plans will be revised to more clearly define the responsibility for halting or diverting air traffic over the risk area.	8/87	

UTILITY: Point Beach Nuclear Power Plant
Summary Listing of Exercise Findings

2. Areas Requiring Corrective Action

Wisconsin
(State)

September 9, 1986
(Date)

Manitowoc County
(Community)

NUREG Item	Narrative Statement of Weakness	Corrective Action Proposed	Scheduled Date	Actual Date
E.7	The evacuation message did not include information for the public of actions to be taken with respect to school children.	An evacuation message in future exercises will include actions to be taken with respect to school children.	10-20-87	
L.1	The utility and the State Department of Health must work with the County and the Hospital to attain a greater understanding of methods for minimizing the possible spread of radiological contamination.	Meetings have already been held between staff of Two Rivers Hospital, the Utilities, and Manitowoc County Emergency Government to stream-line the response role of Hospital, ambulance, and Utility personnel should radiological contamination occur to Plant personnel. There is a need for further discussion and interpretation as to the direction all parties must take in planning, etc. with regard to the intent of Guidance Memorandum MS-1 (Medical Services). There is also a need for interpretation of FEMA's role in evaluating hospital exercises as they relate to County function. To date, the responsibility for hospital involvement in response has been the direct responsibility of the Utilities.		

EXERCISE REPORT
POINT BEACH NUCLEAR POWER PLANT
WISCONSIN ELECTRIC POWER COMPANY,
JOINT EXERCISE

Location of the Plant: Located in the State of Wisconsin, Manitowoc County, in the Town of Two Rivers, Wisconsin.

Exercise Date: September 9, 1986

Draft Report Date: January 8, 1987

Final Report Date: March 4, 1987

Participants Included: The State of Wisconsin (partial), Kewaunee County (full), Manitowoc County (full), and the Wisconsin Electric Power Company Point Beach Nuclear Power Plant.

PREPARED BY THE
FEDERAL EMERGENCY MANAGEMENT AGENCY, REGION V
NATURAL AND TECHNOLOGICAL HAZARDS DIVISION
TECHNOLOGICAL HAZARDS BRANCH
300 SOUTH WACKER DRIVE, 25TH FLOOR
CHICAGO, ILLINOIS 60606

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EXERCISE SUMMARY

State of Wisconsin

The State staff demonstrated the ability to mobilize staff and activate facilities at the State EOC in Madison and the Joint Public Information Center in Two Rivers, Wisconsin. Facilities were fully staffed and around the clock staffing was demonstrated through the use of a shift change for all but one staff member. The State EOC staff demonstrated its ability to make decision and to coordinate emergency activities. Some messages coming into the EOC were not reviewed and distributed promptly. The personal computer system experienced delays in processing information and messages between the State, the JPIC and Kewaunee and Manitowoc Counties. Periodic briefings were held to keep the EOC staff informed of what each department was doing. It would have been helpful if more radiological information had been provided by the radiological health staff such as dose rates at various distances during the release. The adequacy of maps and displays to support emergency operations was demonstrated.

The staff, using primary and back-up means of communications, demonstrated the ability to communicate with all appropriate locations and field personnel except for the Department of Agriculture, Trade and Consumer Protection food inspector.

The staff demonstrated the ability to project dosage to the public via plume exposure pathway based on plant and field data. They determined appropriate protective measures, based on PAGs, available shelter, evacuation time estimates and other appropriate factors. The staff used this exercise to shelter and evacuate all sectors rather than use the key-hole concept defined in the plan. This process will be evaluated by the staff for possible inclusion in their plan. Public alerting and instruction started at the State EOC when, at 1129, it received notice from the Point Beach EOF that the utility had classified "General Emergency" at 1118. Review of messages and logs after the exercise did not clearly indicate when the "General Emergency" was declared. The first protective action, at 1135, was to shelter people in all sectors 0-5 miles from the Point Beach plant and to put animals in shelter, use stored feed and covered water in all sectors out to ten miles. At 1208, the staff implemented an evacuation of all people within 10 miles of Point Beach Nuclear Power Plant. Animals were to be sheltered, fed stored feed and given covered water. This protective action applied to animals out to 20 miles in all sectors.

The staff demonstrated the ability to continuously monitor and control State emergency worker exposure. There was no discussion of policies or procedures allowing reentry into the evacuated area for essential services. The emergency workers had proper dosimetry. The staff demonstrated the ability to make the decision, based on predetermined criteria to issue KI to emergency workers. They also demonstrated the ability to supply and administer KI once a decision was made.

Deployment of two State radiological field teams was demonstrated. Their equipment was calibrated in July 1986. The team used their equipment properly. Soil samples were taken. State radiological health field teams are aware of decontamination procedures.

The Agr/cultural field team collecting milk samples was not equipped with checklists or SOPs. The milk sampling team was not aware of decontamination procedures but did use proper protective clothing and proper milk collecting equipment. The milk sampling team was not issued KI nor aware of the procedures for its use. The only way the person on the milk sampling team could communicate with his counterparts was through the use of pay or private telephones. The milk samples collected reflected excellent sampling procedures.

The staff did not demonstrate the ability to identify for, request, and obtain Federal assistance. They did keep FEMA Region V informed of exercise activities.

The Joint Public Information Center (JPIC) is in the Two Rivers Community Center and has adequate space and other amenities for the conduct of extended operations. The JPIC was staffed with Public Information Officers from the State, Manitowoc County, Kewaunee County and the utility. Shift changes were demonstrated. Twenty-four-hour staffing capabilities were evident and communications links between designated areas were operable.

Kits containing background information were available for the media.

State and County personnel exchanged information and State, County and utility spokespersons coordinated their activities prior to each briefing and before distribution of press releases.

There is a need for additional clerical and/or administrative support, both in the State and County JPIC PIO functions. In addition to the utility diagrams, maps of the State, Counties and, perhaps the Townships, should be displayed in the media briefing room for the duration of the situation. A media work area equipped with desks or tables and similar amenities is also recommended.

The utility rumor control function operating at the JPIC must be more perceptive and responsive to the need of the caller, as opposed to referring the caller to other telephone numbers.

State staff demonstrated the ability to determine and implement appropriate measures for controlled recovery and reentry. Recovery and reentry procedures were discussed by the State EOC staff. Topics discussed by the EOC staff included removal of road blocks, monitoring reentry traffic, deactivation of reception and congregate care centers, field monitoring and sampling, and washing fruits and vegetables.

Manitowoc County

The County EOC was activated at the "Alert" classification level, received via NAWAS at 0803. Calling of the EOC staff began at 0808 and was completed at 0825. The EOC was activated a few minutes after 0808 by the Under Sheriff and was fully staffed at 0854. Two shifts actually manned the EOC, in the reverse order that they would normally staff it.

The County Board Chairman and Vice-Chairman were in charge of emergency operations. General staff briefings were conducted periodically. Operational department representatives were involved in the decision making process. They coordinated their activities. Copies of the County plan and departmental checklists were available and consulted. The message handling procedure was well organized. Messages were reproduced and distributed as necessary and a detailed message log was maintained.

The County EOC has been reconfigured since the last exercise. The former dining area is now the operations room. This provides more than twice as much space for operations. Maps showing the plume EPZ, evacuation routes, reception centers and congregate care facilities, access control points, radiological monitoring points and population by evacuation area were posted in the EOC and used by the staff. A status board, visible to all operations room staff, was kept up to date on significant events.

Communications capabilities at the County EOC and warning center include several means of back-up. All means were demonstrated, including county radio, commercial telephone, computers and teletypes. Amateur radio systems (RACES) were operated by volunteers. Conference calls to key organizations are possible at the warning center through the NAWAS system and in the EOC by special telephone.

An EBS message was prepared at 1136 upon receipt of instructions to shelter people in all sectors to five miles. A partially prescribed message was used. This message was actually transmitted to the EBS station from the EOC. Additional messages were prepared whenever the alerting system was activated for changes in protective actions. All EBS messages and alerting system activations were coordinated with Kewaunee County. Hard copy of each EBS message was transmitted to the JPIC.

Six traffic/access control points were observed to evaluate the organizational ability and resources available to control access to an evacuated area. Changes in the traffic control activities that resulted from a simulated truck accident were also observed.

During the field activities, three County Highway Department workers were interviewed at two traffic/access points. They were familiar with the evacuation routes and the location of the reception/care center. They had two-way radio to contact the local EOC, through the County Highway Department, and other emergency workers in the field.

A relocation center was activated and staffed at Roncalli High School. Volunteer evacuees from a local senior citizen home were bused to the high school, monitored for radioactivity and processed into the center. All personnel at the center exhibited knowledge of their programs.

The public health nurse and Human Services staff have records of the mobility impaired and other people needing special assistance in event of evacuation. This corrected a weakness noted during the last exercise. Busses and other transportation are available for special evacuation.

The Two Rivers Community Hospital demonstrated their procedures for handling a radiologically contaminated injured person. The hospital staff demonstrated excellent medical treatment of the patient. Improvement is needed in control of the radiological contamination. The ability to continuously monitor and control radiological exposure was demonstrated. Emergency workers read and reported their dosimeter readings every half hour. They were also aware of their maximum allowable dosage without special authorization. The emergency workers also had a supply of potassium iodide and were familiar with the procedures for its use.

3700 doses of KI are stored at the Manitowoc County Health Care Pharmacy. The issuing procedures were demonstrated during the exercise. The "release of claims" form provides those taking KI with proper information. By dispersing both KI and dosimeters at the Two Rivers Police Station, the demonstrated procedures avoided the need for emergency workers to go to two locations to get protective materials. This procedure should be included in the plan.

All contact with the media is planned to take place at the Joint Public Information Center. The information officer at the EOC was in constant contact with his counterparts at the JPIC and Kewaunee County to insure that material to be released was accurate and coordinated. This corrected a weakness noted during the previous exercise. Emergency Broadcast System messages were transmitted to the JPIC.

The Mishicot Ambulance Service was dispatched to the Point Beach Nuclear Plant at 0817 to pick up an injured radiologically contaminated person. The ambulance was equipped with a survey meter and the crew had dosimeters. The crew demonstrated the use of the survey meter. The crew had coveralls and rubber gloves. Because of security restrictions at the plant, the evaluator was not able to observe the ambulance crew's handling of the patient at the site. The ambulance equipment and crew were not checked for contamination after the patient was removed at the hospital.

The Two Rivers Hospital was notified at 0850 that a radiologically contaminated injured person was being brought to the hospital. This notification was confirmed by the hospital staff. The hospital staff expected a health physicist to arrive before the ambulance to help them with dosimeters and to verify their setup. When the HP failed to arrive, the hospital staff, with the help of an observer from the plant, zeroed the dosimeters. The observer also advised them of the use of and helped set up the herculite. Once the patient arrived, he was decontaminated and medically treated very rapidly. Problems exist in contamination control.

Kewaunee County

Kewaunee County staff demonstrated their capability to activate the EOC in a prompt manner as specified in the County plan. The EOC was fully staffed with the necessary response agencies in order to carry out the emergency plan and to maintain operations around the clock. They demonstrated their ability to make decisions and coordinate the activities of all agencies involved. The facilities were ample and all the necessary amenities were in place in order for the response organizations to carry out their respective tasks. The capability to communicate with all response organizations was demonstrated.

The control of access to the evacuated area was demonstrated by the implementation of county resources to establish both a traffic control point and an access control point. The County Highway Department activated the access control point and the County Sheriff, with the assistance of the State Police, activated the traffic control point. Personnel at both locations were familiar with their responsibilities and procedures.

Emergency workers located at the traffic control point and the access control point were provided with the required dosimetry equipment including TLDs. They were not familiar with decontamination procedures and were not aware of the maximum allowed dose without authorization.

KI was distributed along with dosimetry equipment to the emergency worker at the access control point.

The ability to alert the public within 15 minutes was demonstrated and accomplished within the required time period. The simulated evacuation of school children was demonstrated at Algoma High and Elementary Schools where they were registered and monitored. The emergency workers at both schools performed their respective tasks in an orderly fashion. The County staff demonstrated their ability to handle the recovery and reentry procedures in a professional manner.

EXERCISE REPORT

Introduction

1. Exercise Background

This was the third full participation exercise for Kewaunee County and Manitowoc County resulting from a simulated accident at the Point Beach Nuclear Power Plant. The first exercise was on March 9, 1982. The second exercise, September 11, 1984, was a full participation for the State, Kewaunee County and Manitowoc County.

On January 21, 1981, and on November 1, 1983, Kewaunee County and Manitowoc County participated in full participation exercises with the Kewaunee Nuclear Power Plant. Communications drills with the Point Beach Plant were conducted August 10, 1983 and September 10, 1985, and involved both Counties. Communications drills have been conducted with the Kewaunee Nuclear Power Plant during the years (1982 and 1983) that exercises involving Point Beach Nuclear Power Plant were conducted.

2. Participating and Non-participating State and Local Governments

The Emergency Planning Zone (EPZ) of the Point Beach Nuclear Power Plant impacts on both Kewaunee and Manitowoc Counties in Wisconsin. In addition to the principal Counties, Kewaunee and Manitowoc, there are ten Counties, all in Wisconsin, that are in the ingestion EPZ. These Counties (Brown, Calumet, Door, Fond du Lac, Marinette, Oconto, Outagamie, Sheboygan, Shawano and Winnebago) did not participate in this exercise as the scenario developed did not require participation in the ingestion EPZ.

3. List of Evaluators

For this exercise there was a total of fifteen evaluators observing offsite exercise activities. Onsite activities were evaluated by a separate team from the Nuclear Regulatory Commission (NRC). Of the offsite evaluators, seven, including the Evaluation Team Chief, were FEMA Region V staff. The balance of the team was composed of a representative from the United States Department of Agriculture (USDA), one from the Environmental Protection Agency (EPA), one from the Public Health Service (PHS) and five contract evaluators from the Argonne National Laboratory (ANL). The evaluator assignments were as follows:

Exercise Director

Rick Anthony, FEMA

State EOC, Madison, and State Field Activities

Dan Bement, FEMA
Anna Hart, USDA
Ed Sears, ANL
Les Johnson, EPA

Joint Public Information Center, Two Rivers

Patricia Buckley, FEMA

Manitowoc County, EOC and Field Activities

Ray Kellogg, FEMA

Dan Santini, ANL

Arvind Teotia, ANL

Walter O'Keefe, FEMA (Red Cross)

Kent Jaffe, PHS

Kewaunee County, EOC and Field Activities

Ed Robinson, FEMA

Bill Knoerzer, ANL

Bill Gasper, ANL

Dick Meyer, FEMA

4. Evaluation Criteria

The State and County plans being evaluated during this exercise were developed using the "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (NUREG-0654, FEMA REP-1, Revision 1). Therefore, these criteria, and the exercrit based on these criteria, "Modular Format for Uniformity of Radiological Emergency Preparedness Exercise Observations and Evaluation" dated June 1983 were used for exercise evaluation.

5. Exercise Objectives

Objectives for this exercise were selected from among the FEMA thirty-five (35) standard objectives listed in Tab "M" of the "Modular Format for Uniformity of Radiological Emergency Preparedness Exercise Observations and Evaluations," dated June 1983. The objective numbers listed below correlate to Tab "M".

The State of Wisconsin selected the following twenty-two objectives, excluding those applicable to the JPIC, to be demonstrated during the exercise.

1. Demonstrate ability to mobilize staff and activate facilities promptly.
2. Demonstrate ability to fully staff facilities and maintain staffing around the clock.
3. Demonstrate ability to make decisions and to coordinate emergency activities.
4. Demonstrate adequacy of facilities and displays to support emergency operations.
5. Demonstrate ability to communicate with all appropriate locations, organizations, and field personnel.

6. Demonstrate ability to mobilize and deploy field monitoring teams in a timely fashion.
7. Demonstrate appropriate equipment and procedures for determining ambient radiation levels.
8. Demonstrate appropriate equipment and procedures for measurement of airborne radioiodine concentrations as low as 10^{-7} uCi/CC in the presence of noble gases.
9. Demonstrate appropriate equipment and procedures for collection, transport and analysis of samples of soil, vegetation, snow, water and milk.
10. Demonstrate the ability to project dosage to the public via plume exposure, based on plant and field data, and to determine appropriate protective measures, based on PAGs, available shelter, evacuation time estimates and all other appropriate factors.
11. Demonstrate ability to project dosage to the public via ingestion pathway exposure, based on field data, and to determine appropriate protective measures, based on PAGs and other relevant factors.
12. Demonstrate ability to implement protective actions for ingestion pathway hazards.
13. Demonstrate ability to alert the public within the 10-mile EPZ, and disseminate an initial instructional message, within 15 minutes.
20. Demonstrate ability to continuously monitor and control emergency worker exposure.
21. Demonstrate the ability to make the decision, based on predetermined criteria, whether to issue KI to emergency workers and/or the general population.
22. Demonstrate the ability to supply and administer KI, once the decision has been made to do so.
26. Demonstrate ability to establish and operate rumor control in a coordinated fashion.
27. Demonstrate adequacy of procedures for registration and radiological monitoring of evacuees.
29. Demonstrate adequate equipment and procedures for decontamination of emergency workers, equipment and vehicles.
32. Demonstrate ability to identify need for, request and obtain Federal assistance.
34. Demonstrate ability to estimate total population exposure.
35. Demonstrate ability to determine and implement appropriate measures for controlled recovery and reentry.

The following seven objectives were selected for demonstration at the Joint Public Information Center:

1. Demonstrate ability to mobilize staff and activate facilities promptly.
2. Demonstrate ability to fully staff facilities and maintain staffing around the clock.
3. Demonstrate ability to make decisions and to coordinate emergency activities.
4. Demonstrate adequacy of facilities and displays to support emergency operations.
5. Demonstrate ability to communicate with all appropriate locations, organizations, and field personnel.
24. Demonstrate the ability to brief the media in a clear, accurate and timely manner.
25. Demonstrate ability to provide advance coordination of information released.

Manitowoc County selected the following twenty objectives to be demonstrated during the exercise.

1. Demonstrate ability to mobilize staff and activate facilities promptly.
2. Demonstrate ability to fully staff facilities and maintain staffing around the clock.
3. Demonstrate ability to make decisions and to coordinate emergency activities.
4. Demonstrate adequacy of facilities and displays to support emergency operations.
5. Demonstrate ability to communicate with all appropriate locations, organizations, and field personnel.
13. Demonstrate ability to alert the public within the 10-mile EPZ, and disseminate an initial instructional message, within 15 minutes.
14. Demonstrate ability to formulate and distribute appropriate instructions to the public, in a timely fashion.
15. Demonstrate the organizational ability and resources necessary to manage an orderly evacuation of all or part of the plume EPZ.
16. Demonstrate the organizational ability and resources necessary to deal with impediments to evacuation, as inclement weather or traffic obstructions.

17. Demonstrate the organizational ability and resources necessary to control access to an evacuated area.
20. Demonstrate ability to continuously monitor and control emergency worker exposure.
21. Demonstrate the ability to make the decision, based on predetermined criteria, whether to issue KI to emergency workers and/or the general population.
22. Demonstrate the ability to supply and administer KI, once the decision has been made to do so.
24. Demonstrate ability to brief the media in a clear, accurate and timely manner.
25. Demonstrate ability to provide advance coordination of information released.
27. Demonstrate adequacy of procedures for registration and radiological monitoring of evacuees.
28. Demonstrate adequacy of facilities for mass care of evacuees.
30. Demonstrate adequacy of ambulance facilities and procedures for handling contaminated individuals.
31. Demonstrate adequacy of hospital facilities and procedures for handling contaminated individuals
35. Demonstrate ability to determine and implement appropriate measures for controlled recovery and reentry.

Kewaunee County selected the following nineteen objectives to be demonstrated during this exercise:

1. Demonstrate ability to mobilize staff and activate facilities promptly.
2. Demonstrate ability to fully staff facilities and maintain staffing around the clock.
3. Demonstrate ability to make decisions and to coordinate emergency activities.
4. Demonstrate adequacy of facilities and displays to support emergency operations.
5. Demonstrate ability to communicate with all appropriate locations, organizations, and field personnel.
13. Demonstrate the ability to alert the public within the 10-mile EPZ, and disseminate an initial instructional message, within 15 minutes.

14. Demonstrate ability to formulate and distribute appropriate instructions to the public, in a timely fashion.
15. Demonstrate the organizational ability and resources necessary to manage an orderly evacuation of all or part of the plume EPZ.
16. Demonstrate the organizational ability and resources necessary to deal with impediments to evacuation, as inclement weather or traffic obstructions.
17. Demonstrate the organizational ability and resources necessary to control access to an evacuated area.
19. Demonstrate the organizational ability and resources necessary to effect an orderly evacuation of schools within the plume EPZ.
20. Demonstrate ability to continuously monitor and control emergency worker exposure.
21. Demonstrate the ability to make the decision, based on predetermined criteria, whether to issue KI to emergency workers and/or the general population.
22. Demonstrate the ability to supply and administer KI, once the decision has been made to do so.
24. Demonstrate ability to brief the media in a clear, accurate and timely manner.
25. Demonstrate ability to provide advance coordination of information released.
27. Demonstrate adequacy of procedures for registration and radiological monitoring of evacuees.
28. Demonstrate adequacy of facilities for mass care of evacuees.
35. Demonstrate ability to determine and implement appropriate measures for controlled recovery and re-entry.

6. Summary of Scenario

The Point Beach Nuclear Power Plant radiological emergency preparedness exercise objectives and scenario for the September 9, 1986 joint exercise were developed by exercise planners from the Point Beach Nuclear Power Plant and the State of Wisconsin Division of Emergency Government. A review of previous exercise weaknesses was conducted by the scenario writers in order to develop a scenario that would allow demonstration of past exercise weaknesses as well as allow demonstration of exercise objectives selected by the exercise participants. FEMA Region V reviewed the draft objectives prior to development of the scenario and suggested changes, which were adopted by the scenario writers.

Submission of the scenario was according to deadlines outlined in NRC and FEMA guidelines. Westinghouse Idaho Nuclear Company, Incorporated reviewed the offsite portion of the scenario for FEMA.

Abstract of the 1986 Point Beach Nuclear Scenario

An earthquake causes tremors which are felt at the plant site. At 0700, the utility notifies the Wisconsin Division of Emergency Government (DEG) duty officer of the "Unusual Event". The earthquake epicenter is located in Lake Michigan, northeast of the plant at longitude 86 degrees, 38 minutes and latitude 45 degrees, 15 minutes. Magnitude of the quake is 4 points on the 10-point Richter scale.

The Wisconsin DEG Duty Officer verifies the incident with the Point Beach NPP via commercial phone and then notifies the State DEG Administrator and the Department of Health and Social Services duty officer. The DHSS duty officer is requested to notify the State Radiological Coordinator.

About 0715, at the plant, a primary-to-secondary tube leak is initiated in the "B" steam generator. The Leak Rate is slightly greater than 50 gpm. This results in an "Alert" EAL and notification to Wisconsin DEG.

The State DEG Administrator orders activation of the State, Area, Kewaunee County and Manitowoc County EOCs and the Joint Public Information Center. The SRC alerts field monitoring teams and they are put on stand-by. The State PIO is dispatched to the JPIC.

At the plant, the earthquake tremors caused the first spring hanger east of the flow transmitter for the "B" feedline to break. By 1000, the tube leak on the Unit 2 "B" steam generator worsens to greater than SI pump capacity. This is a "Site Area Emergency" and results in plant evacuation, although no offsite protective actions are required.

Also at the plant, a previously contaminated operator sent to inspect earthquake detection equipment becomes seriously injured. Transportation to the Two Rivers Community Hospital is required.

The Wisconsin DEG verifies the EAL, dispatches field teams and the mobile radiological laboratory (prepositioned for exercise purposes) and advises Kewaunee and Manitowoc Counties of possible protective action requirements. Wisconsin DEG recommends to the Counties that they coordinate siren sounding and EBS activation. The Counties and the JPIC are advised that the emergency may be lengthy and shift changes should be arranged.

About 1045, fuel clad failure begins. This is the first of three conditions that can result in "General Emergency" EAL. The second occurs when the Unit 2 "B" feedline breaks upstream of the second off check valve. An unmonitored liquid and gaseous release to the environment, then, is in progress. The third condition involves the first off check valve and the second off check valve sticking open. Auxiliary feedwater, therefore, cannot reach the steam generator; but exits to the turbine hall through the feedline break. Wholebody dose rates at one mile exceed 50 mr/hour. Offsite dose projections for Mishicot, Wisconsin are 1 to <5 rem, whole body

or 5 to <25 rem, thyroid. If conditions allow, evacuation of school children and portions of the resident population should be implemented based on EPA PAGs.

Wisconsin EOC staff are working with the Counties and the JPIC to take actions to protect the public. About 1200, the Counties are notified to begin distribution of potassium iodide to emergency workers. The Counties are also notified of the protective measures to be carried out in the Ingestion Pathway Zone.

A truck accident at CTH "B" south of Shoto, Wisconsin, blocks a Manitowoc County evacuation route.

At the plant, the second off check valve is reseated due to maintenance activities. Primary system release path is therefore secured, however the release continues due to off-gassing of the primary coolant spilled on the turbine building floor.

By 1350, radiation levels at the site boundary (1 mile) allow deescalation to "Site Area Emergency". Onsite and offsite reentry and recovery operations can be initiated.

At 1400, exercise play is interrupted and a briefing of State and County EOC staffs is conducted to inform them of events that took place during a simulated 24-hour time jump. Exercise play resumes at 1430, focusing primarily on recovery and reentry considerations until exercise termination.

. Description of State and Local Resources Planned To Be Used In The Exercise

During this exercise the State planned to staff and demonstrate response activity at the State Emergency Operations Center in Madison and the Joint Public Information Center at Two Rivers. The East Central Area Emergency Operations Center at Fond du Lac was used as a communications relay point. The field monitoring teams from Manitowoc and Kenosha were to be used during the exercise, but only the Manitowoc team was to be evaluated. The Kenosha team used the exercise for training. The necessary communications systems were to be used to alert and mobilize the staff, conduct emergency operations and disseminate emergency warning and information to the public. Backup communications to the JPIC was to be provided by RACES volunteers.

Manitowoc County planned to staff and demonstrate response activity at the County EOC. Necessary communications equipment was to be demonstrated. The County, also, planned to demonstrate its ambulance and hospital facilities and procedures for handling contaminated individuals during the exercise. An aircraft mounted speaker system was to be used to supplement the siren system. A group of about 25 people from the Two Rivers Senior Citizen's Center was to be used as simulated evacuees, being picked up in Algoma and transported by bus to Roncalli High School to be registered and monitored and then transported to the congregate care center at the River View School. Manitowoc County was to set out one roadblock and signs to mark the evacuation routes. Kewaunee County planned to staff and demonstrate response

The following exercise objectives have not yet been demonstrated for evaluation during the current exercise cycle:

The State of Wisconsin has demonstrated all 35 objectives as they pertain to Point Beach Nuclear Power Plant in this exercise cycle.

Manitowoc County has not demonstrated objective 23 as it pertains to Point Beach Nuclear Power Plant in this exercise cycle.

Kewaunee County has not demonstrated objective 30 as it pertains to Point Beach Nuclear Power Plant in this exercise cycle.

There has not been an off-hours exercise or an unannounced exercise involving these jurisdictions and the Point Beach Nuclear Power Plant during this exercise cycle.

Narrative

1. State of Wisconsin

Activation and Staffing

The State of Wisconsin staff demonstrated the ability to mobilize and activate facilities promptly at the State EOC and the Joint Public Information Center. The Point Beach Nuclear Power Plant notified the State of the "Unusual Event" via NAWAS at 0713. The duty officer verified the call and subsequent changes in emergency accident classification levels. The duty officer used written procedures to notify key staff of the "Unusual Event". The utility, State and local plans have procedures where the utility calls on NAWAS and phone to communicate plant status and emergency accident classification levels. The State and local links are monitored on a 24 hour basis. Point Beach notified the duty officer at 0812 that the plant declared an "Alert" at 0805. Initial activation of the EOC started at 0820. The EOC was fully operational at 0900. The EOC was staffed by personnel from the Division of Emergency Government; the Public Service Commission; Department of Health and Social Services; Department of Agriculture, Trade, and Consumer Protection; Department of Natural Resources; Department of Military Affairs; Highway Department; Emergency Police; State Patrol; Department of Health Radiological Health; and Public Information staff.

Around the clock staffing has been demonstrated during previous exercises and was again demonstrated in this exercise for most positions through the use of shift change. One position that did not demonstrate a shift change during this exercise was the State Radiological Coordinator.

AREA RECOMMENDED FOR IMPROVEMENT:

The shift change for the State Radiological Coordinator should be demonstrated during the next exercise.

The second shift EOC staff was briefed prior to assuming duties. Both shifts demonstrated adequate training and knowledge.

Liaison to the utility's EOF was effected at 0925.

Emergency Operations Management

The State EOC staff demonstrated ability to make decisions and to coordinate emergency activities. The EOC was managed by the person designated in the plan. Plans and procedures were available and used by the EOC staff. Periodic briefings were conducted to keep the EOC staff apprised of actions taken by each agency representative in the EOC. The EOC briefings did not include details behind protective action guide decisions by the State. For example, the briefings did not mention dose rates at various distances offsite. This information was computed by the Department of Health, Radiological Health staff through out the exercise.

AREA RECOMMENDED FOR IMPROVEMENT

It is recommended briefings by the Radiological Health staff to the EOC staff be more detailed as to plant status, dose rates at various distances, etc.

The EOC was notified of the "Unusual Event" at 0713, the "Alert" at 0805, the "Site Area Emergency" at 1129. The DEG Administrator briefed the Governor and a State of Emergency was declared at 1144. The Shelter PAG was implemented at 1132 and the evacuation PAG was implemented at 1208. The State radiological field teams were deployed at 0845.

Facilities

The State EOC is located in the Hill Farms Office Building, Madison, Wisconsin. The operations room provides the necessary space, lighting, furniture and telephones to support emergency response personnel and their respective activities.

Appropriate visual displays were posted, including EPZ sector maps, evacuation routes and highway maps, congregate care locations, as well as population density maps. The emergency status board was clearly visible and key events were posted throughout the exercise. Emergency classification levels were clearly posted in a timely manner. In addition, protective actions data and access control points were monitored, kept current and prominently displayed.

Access to the EOC was controlled.

Communications

The State staff demonstrated ability to communicate with all appropriate locations and field personnel using primary and back-up means of communications. The one exception was the Department of Agriculture food inspector. The only way this person could communicate with the EOC was by private or pay telephone..

AREA REQUIRING CORRECTIVE ACTION

The Department of Agriculture emergency field workers must be provided reliable means of communications. (NUREG-0654 criteria item F1)

The primary means of communications at the State EOC was commercial telephone. Back-up communication was NAWAS, the Transaction of Information for the Management of Enforcement (TIME) Police system, datafax, personal computer, radio and RACES and the Federal teletype machine.

The State telephone system has conference capability. An individual can immediately establish a conference call among six people. The system can, with prior arrangement, conference up to 24 people through the centrex attendant.

Communication was demonstrated between the State EOC, the Joint Public Information Center, Kewaunee and Manitowoc County, State field teams, Point Beach Emergency Operations Facility, contiguous States and FEMA Region V.

Hard copy capability between the JPIC and the State EOC was available through datafax, a microcomputer system and RACES radios.

Commercial telephone service was used between the State Radiological Coordinator and the JPIC to exchange information. Hard copy was used three or four times to test equipment and when exact and specific information was needed.

The microcomputer was down for extensive periods and when it did function, operation of the system was difficult at best. Back-up communications were used.

AREA RECOMMENDED FOR IMPROVEMENT

It is recommended that the State review the use of micro-computer systems during REP exercises. If it is to be used in the future, additional operator training will have to take place on how to operate the equipment and when the system should be used.

Message logs were maintained and written messages were reproduced and distributed to the EOC staff. Information handling was slow and needs to be improved. For example, one message (JPIC release #1) came into the EOC via fax at 0843, but wasn't noticed until 0920. Another example was at 1530 when Point Beach reduced the emergency accident classification from a "General Emergency" to an "Alert". The State did not confirm and act on this until 1645 when it de-escalated from a "General Emergency" to an "Alert" accident classification.

AREA REQUIRING CORRECTIVE ACTION

Additional training must be conducted concerning information handling procedures to ensure information is distributed promptly between the State and local government. (NUREG 0654 criteria item 04j)

AREA RECOMMENDED FOR IMPROVEMENT

It is recommended that messages/ log forms be revised so that time can be accurately depicted.

The radiological field team initially had trouble communicating with the State mobile van for approximately one hour.

AREA RECOMMENDED FOR IMPROVEMENT

It is recommended the State take action to correct the communication problem initially experienced by the State radiological field team.

Dose Assessment and Protective Action Recommendations

a. Field Teams

Deployment of the two State radiological field teams was demonstrated. The field teams were equipped with a G-M Counter, range 0.05-100 mr/hr, an ionization chamber, 0-5 R/hr, with alpha detecting capabilities, an air pump calibrated for proper air flow rate and operated on vehicular battery. The team also had scoops, plastic collection bags, plastic containers, writing materials and identification labels. The equipment was calibrated in July 1986. The team did not use hand held instruments to monitor ground and air readings.

AREA RECOMMENDED FOR IMPROVEMENT

It is recommended field teams check gamma readings at one meter and ground level.

The team had protective suits, boots, gloves, respirators and KI blocking agent. Team members were given an advisory during the exercise at 1142 to take the KI. The team had all the required dosimeters and dosimeter chargers. They were aware of decontamination procedures.

They sampled air with vehicle driven pump for ten minute intervals using charcoal cannisters and silver zeolite method. A Reuter Stokes Pressurized Ion Chamber with a capability of measuring 0-600 micro R/hr was operated throughout the exercise and checked frequently by a member of the team who took notes on the tape print out. Soil samples were also taken. The Agricultural field team collecting milk samples reflected excellent sampling procedures. There are no checklists and SOPs relating to agricultural sampling equipment.

AREA RECOMMENDED FOR IMPROVEMENT

It is recommended that checklists and SOPs relating to agricultural field team sampling procedures be developed.

No actual water sample was taken.

AREA RECOMMENDED FOR IMPROVEMENT

It is recommended that an actual water sample be taken during the next exercise.

Because of the evaluator/sampling team logistics, arrangements were made to observe the agriculture sampling team the day after the exercise. Field team mobilization procedures were demonstrated and deployment was simulated.

The SRC requested sampling of dairy and food processing plants to the State Department of Agriculture. The Department of Agriculture notified the Regional Office which in turn contacted the Agriculture Sampling Team to be on stand-by.

Milk and carrot samples were collected by the agriculture sampling team. Scooping techniques were demonstrated for both samples using appropriate equipment for each. Skill, knowledge and ability was observed during both sample collections. The samples were placed in an ice chest for transport. Formaldehyde was not used, but available. Should transporting the milk sample take a long period of time, it would be added to the milk sample for preservation. This is based on FDA guidelines used during dairy sampling when transport to labs for analysis is not immediate and ice and an ice chest may not prevent spoilage.

The sampling team successfully demonstrated the ability to collect and transport milk and vegetation samples using proper equipment and procedures.

The Agriculture Sampling Team had clothing which is used during routine inspection functions and which could be used as protective clothing. No formal instructions or training had been received relating to the functions of protective clothing. In addition, the team did not know how to record their dosimeters readings or how frequently to read them, the maximum dose allowed without authorization or what to do if an excessive dose is received. The team was not aware of decontamination procedures. Gloves, plastic bags, sampling equipment and other items were put into a large plastic trash bag and closed with a twist on tie. These items were taken to the mobile lab for proper disposal.

AREA REQUIRING CORRECTIVE ACTION

Training must be provided to all agriculture personnel who will or may be called to assist in radiological emergencies, particularly those who may be assigned to agriculture sampling teams. The training must include dosimetry, exposure control, protective gear and personnel and equipment decontamination. (NUREG-0654 criteria item 0,5)

b . Dose Projection

The State of Wisconsin demonstrated it's ability to project dosage to the public via plume exposure pathway based on plant and field data and to determine appropriate protective measures, based on PAGs, available shelter, evacuation time estimates and all other appropriate factors.

As defined during exercise planning, the State used this exercise to shelter and evacuate all sectors rather than use the key-hole concept defined in their plan. The State Radiological Health and Division of Emergency Government planners are evaluating this "bull's-eye" concept for implementing protective actions. State and local plans may be amended to reflect these procedures.

The State Radiological Coordinator and Department of Agriculture worked together to project dosage to the public via ingestion pathway exposure based on field data and determined protective measures. Discussion between the State Radiological Coordinator and the Department of Agriculture achieved an effective result. Doses were projected by Texas Instrument Programmable Calculator and confirmed by either hand or instrument computations.

The maps and status board were staffed by a plotter and assistant plotter.

The entire staff was involved when messages were written or recommendations were made. The staff continuously supplied information to the SRC while he talked on the telephone.

Public Alerting and Instruction

Public alerting and instruction started at the State EOC when, at 1129, the Point Beach EOF notified them that the utility classified the situation as a "General Emergency" at 1118. The State declared a "General Emergency" at 1135 and issued a protective action recommendation to the Counties to shelter people in all sectors 0-5 miles from Point Beach and to put animals in shelter, use stored feed and covered water in all sectors out to 10 miles from Point Beach. The EOC status board indicated Kewaunee and Manitowoc Counties sounded the sirens and activated EBS at 1150. The DEG Administrator log indicates the Governor declared a "State of Disaster" at 1220. The siren and EBS was again activated at 1208 when the State implemented an evacuation of all people within 10 miles of Point Beach and to place animals in shelter and on stored feed and water out to 20 miles from Point Beach.

Oral information was provided to the Joint Public Information Center by the State Radiological Coordinator and the public information staff located in the State EOC. This information was detailed and timely. Prescribed messages in the plans were inappropriate during this exercise for the protective action of sheltering and ,later, evacuation of all sectors. The prescribed messages were developed for shelter/evacuation of the ten mile plume exposure pathway zone (key-hole concept).

AREA RECOMMENDED FOR IMPROVEMENT

In event the "bull's-eye" concept is adapted, it will be necessary to amend the prescribed messages.

Protective Action

The staff demonstrated ability to make the decision, based on predetermined criteria, to issue KI to emergency workers. They also demonstrated the ability to supply and administer KI once the decision was made. The Department of Agriculture milk sampling team was not issued KI nor were they aware of the procedures for it's use.

AREA REQUIRING CORRECTIVE ACTION

The Department of Agriculture milk sampling team should be issued KI and provided instructions for it's use. (NUREG 0654, criteria item J10e)

State Health teams conducted radiological monitoring of evacuees at the reception center.

State Radiological Health field teams were aware of decontamination procedures. The Department of Agriculture milk sampling team was not aware of decontamination procedures. The team used proper protective clothing and proper milk collecting equipment. They indicated they would ask about decontamination when they delivered their samples to the State mobile laboratory.

The State staff did not demonstrate the ability to identify a need for, request, and obtain Federal assistance, which was an exercise objective. Wisconsin did keep FEMA Region V informed of exercise activities. Ingestion, recovery and reentry procedures and requirements were discussed by the EOC staff.

State staff were unsure of who was responsible to initiate action to halt or divert rail, air and water traffic from the risk area. The Kewaunee County plan provides for notification of rail dispatchers and the U. S. Coast Guard. The Manitowoc County plan provides for the notification of the the U. S. Coast Guard.

AREA REQUIRING CORRECTIVE ACTION

County plans must be amended to define the responsibility for halting or diverting air traffic over the risk area. (NUREG 0654 criteria item J10j)

AREA RECOMMENDED FOR IMPROVEMENT

State staff should become familiar with the content of County plans.

Current information was available on dairy farms, food processing plants and water intake points. Preventive and emergency protective actions were made concerning ingestion pathway protective actions. These recommendations were based on plant and field sampling data, as well as FDA guidelines. These PARs included: sheltering dairy animals and placing them on stored feed; washing, cleaning and peeling fruits and vegetables prior to consumption; dairy sampling to monitor milk and milk products and; vegetable sampling and monitoring for radiological contamination.

There is a staff available to work with farmers and food workers to implement protective actions.

The State SRC and Department of Agriculture worked effectively together to project dosage to the public and ingestion pathway exposure, based on field data and determined appropriate protective measures.

AREA RECOMMENDED FOR IMPROVEMENT:

Ingestion pathway activities should involve more of the State EOC emergency response personnel, particularly the Director and Officer-in-charge. It was noted that ingestion pathway discussions were between the SRC and Department of Agriculture. This achieved an effective result, however, participation and coordination among all EOC emergency personnel would enhance implementation of ingestion pathway decisions.

Radiological Exposure Control

Calculation of total population exposure was performed periodically during the exercise by the State radiological health staff and the State Radiological Coordinator. Consequently, Wisconsin demonstrated its ability to estimate total population exposure.

Information was transmitted by the SRC, to the JPIC as soon as data could be recorded on map or status board and processed by technical staff. The JPIC technical staff is responsible for converting the information into a usable form for the media and public in the plume areas.

Media Relations

a. State EOC

State policy in regard to media policy was reviewed.

b. Joint Public Information Center

The Joint Public Information Center (JPIC) is in the Two Rivers Community Center and has adequate space and other amenities for the conduct of extended operations. The JPIC was staffed with Public Information Officers from the State, Manitowoc County, Kewaunee County and the utility. Shift changes were demonstrated. Twenty-four-hour staffing capabilities were evident and communications links between designated areas were operable.

Kits containing background information were available for the media.

State and County personnel exchanged information and State, County and utility spokespersons coordinated their activities prior to each briefing and before distribution of press releases.

There is a need for additional clerical and administrative support, both in the State and County JPIC PIO functions. Maps of the State, Counties and, perhaps, the Townships along with the utility diagrams were used during briefings, but were removed from the briefing room after each presentation.

AREA RECOMMENDED FOR IMPROVEMENT

Additional clerical and administrative support personnel will improve the JPIC operation.

AREA RECOMMENDED FOR IMPROVEMENT

Maps and other briefing materials should remain in the briefing room throughout emergency operations.

The utility rumor control function must be more perceptive and responsive to the need of the caller, as opposed to referring the caller to other telephone numbers.

Recovery and Reentry

State staff demonstrated the ability to determine and implement appropriate measures for controlled recovery and reentry. Recovery and reentry procedures were discussed by the State EOC staff. Topics discussed by the EOC staff included removal of road blocks, monitoring reentry traffic, deactivation of reception and congregate care centers, field monitoring and sampling, and washing fruits and vegetables. The EOC emergency personnel did participate in recovery and reentry briefings by providing updates of each organization's activities.

AREA RECOMMENDED FOR IMPROVEMENT

Discussions during recovery and reentry should have included public preception and response to human reentry with animal sheltering. Based on this, discussions should also have included the possibility of financial losses of the dairy and processing plant industries.

Scenario

The dosage data provided by the scenario successfully drove the inhalation EPZ activities. Radiation levels to drive ingestion zone activities must, necessarily, be more intense. The State emergency response personnel demonstrated they had the necessary skills and ability to have responded to a more serious accident. The radiological data and its analysis did not fully develop ingestion pathway play.

AREA RECOMMENDED FOR IMPROVEMENT

When ingestion pathway zone objectives are to be demonstrated, the scenario should provide radiation considerations severe enough to drive the activities. It may be necessary to develop initial dosage data to drive inhalation EPZ activities and, later, change the data to drive the ingestion zone activities.

2 Manitowoc County

Activation and Staffing

The direct communications link to the Point Beach Nuclear Power Plant is the NAWAS telephone which is located in the dispatch center of the Sheriff's office. The dispatch center is continuously staffed, so the NAWAS line is continuously monitored. The initial call notifying the plant was at "Unusual Event" status was received at 0803 from the Point Beach Nuclear Power Plant and verified by telephone call-back. At both the "Unusual Event" and "Alert" stages, the two communications officers on duty used written call-down lists to notify individuals and organizations, designated in the plan, of the plant's status. The calling procedures were effective and rapid and the numbers on the list were current. After receipt of notification of "Alert" status at 0803, the call-down was initiated at 0808 and completed at 0833. All EOC staffers were notified at 0825. The EOC was fully staffed at 0854.

The first group of EOC staff at this exercise were predominantly second-shift personnel being trained to handle first-shift conditions. They used written procedures effectively and performed their duties professionally. Each first shift staffer briefed his second-shift counterpart as the individual second-shift staffers arrived. The transfer of responsibility went very smoothly. The second shift, during this exercise, also performed their duties very well. There was not apparent difference in first and second-shift capabilities.

With the exception of the PIO, all positions were double-shifted. The Emergency Government Director would obtain additional experienced PIO staff in a real emergency. Organizations represented included the Emergency Government Director, the Office of Public Safety, the PIO, the County Board, Sheriff, Fire and Rescue, County Highway Department, Human Services, Public Health Nursing, County Extension Agents, Radiological Officers, and DEG Liaisons.

A Sheriff's deputy was dispatched to the EOC. Emergency Operations Management

The County Board Chairman and Vice Chairman were in charge of emergency operations as provided for in the County plan. General staff briefings were held periodically. Operational Department representatives were involved in the decision making process. They coordinated their activities. Copies of the County plan and departmental checklists were available and consulted. The message handling procedures was well organized. Messages were reproduced and distributed as necessary and a detailed message log was maintained. The County received notice of the "Alert" at 0804 and "Site Area Emergency" at 1040. The County was notified "General Emergency" had been declared at 1118. This notification was received at 1136. The protective action recommendation for sheltering out to five miles in all sectors was received at 1136 and the PA to evacuate in all sectors out to ten miles was received at 1215. The staffs of the reception center and congregate care center were activated at 0925.

Facilities

Since the last exercise, the County has reconfigured their EOC. The former dining area is now the operations room more than doubling the size of the operations area. Maps showing the Plume EPZ, Evacuation routes, reception centers and congregate care facilities, access control points, radiological monitoring points and population by evacuation area were posted in the EOC and used by the staff. This corrects a weakness from the last exercise. A status board, visible to all operation room staff, was kept up to date on significant events.

Communications

The Sheriff's dispatch center is the "warning point" for Manitowoc County. There were two Motorola radio consoles, which were both manned at the time of the exercise. A veteran of past exercises and a new trainee were present to operate them. They handled their responsibilities very well and demonstrated excellent teamwork when calling EOC staff, emergency services, schools and hospitals at the "Alert" stage. The plant status information was received over the single NAWAS line located in the upstairs communications center. NAWAS calls from the utility were confirmed by call-back on telephone lines. A hard copy teletype device, the TIME system, is available in the upstairs warning center. In the event this unit is not functional, another one is available about two blocks away at the Manitowoc Police Department.

The downstairs communications room in the EOC has two communications stations in a Motorola Centercom 2 system available and, during EBS broadcasts, both were simultaneously used. Incoming calls on the NAWAS line were monitored but no NAWAS outgoing communications was possible at this location. A micro-computer with modem was the hard-copy device used to communicate with the State EOC, Kewaunee EOC and the JPIC. Volunteers operated several RACES systems, including voice, computer and hard copy device capable of using radio to transmit text messages. RACES provided a back-up to Police radio and was used to communicate with local emergency and social services personnel. A new siren activation and tracing system was almost completed for the exercise. This system uses an IBM PC to select all or specific sirens and record the form of activation of the siren (or failure of a siren). Both the old and new systems were simulated as being activated.

Dose Assessment and Protective Action Recommendations

Dose Assessment and protective action recommendations are a responsibility of the State.

Public Alerting and Instruction

Upon receipt of instructions to shelter people in all sectors to five miles at 1136, an EBS message was prepared. A partially prescribed message was used. That part of the message that identified the area to be sheltered in familiar land marks and boundaries was prepared and inserted into the prescribed message. This message was actually transmitted to the EBS stations from the EOC. The message was to be broadcast following the

activation of the Prompt Alert System at 1150. The prompt alert system includes sirens, tone alert radios, and an aircraft for overwater alerting and for land areas not covered by sirens. Should weather prohibit the use of the aircraft cars would be used for the land areas and the Coast Guard would cover the water areas. The activation of the alert system, content of the EBS messages and the broadcast of the message was coordinated with Kewaunee County. Additional messages were prepared and coordinated with Kewaunee County when the system was activated for evacuation.

AREA REQUIRING CORRECTIVE ACTION

The evacuation message did not include information for the public of actions to be taken with respect to school children. (NUREG 0654 criteria item E7)

The Manitowoc County Sheriff's Department provided an excellent demonstration of supplemental route alerting. Available equipment included a fixed wing aircraft with public address capability. The aircraft was flown over the Lake Michigan portion of the EPZ during the exercise.

Protective Action

a. Evacuation and Access Control

At 1201, a controller message was introduced at the EOC indicating that a truck accident had just occurred on County Trunk Highway (CTH) "B", South of Shoto Road. The message also indicated the road was completely blocked and would require 2 to 3 hours of work to clear. At 1226, a County Highway Department worker was observed at the intersection of CTH "B" and Johnson Drive. He placed road blocks and traffic signs to reroute evacuation traffic from CTH "B" to Johnson Drive.

The capabilities and resources were also demonstrated while controlling traffic for evacuation purposes. Among many traffic control activities, a staffed road block was set up at CTH "R" and State Highway 310.

County Highway Department workers were found to be familiar with the evacuation routes, and the location of reception/care center at Roncalli High School.

b. Reception Center

All reception center agencies participating in the exercise except the University of Wisconsin Radiological team responded on call. The call system and staffing patterns followed the plan.

Personnel exhibited training and knowledge of their assignments. Last moment changes of time and room were handled very well and no delay developed from these minor problems. All agencies worked well together.

Facilities at the Roncalli Catholic High School are clean and adequate for use as a reception and monitoring center.

The University of Wisconsin can field 17 trained monitors with equipment in 2 hours or less. The monitoring personnel on this exercise demonstrated their knowledge and training by monitoring twenty one evacuees in less than a half an hour. A contaminated person would be sent to Two Rivers or other designated Decontamination Center.

Reception Center staff knew the location of hospitals. Communications were handled by Outagamie County ham operators. They had computer/radio/hard copy capability with the State EOC in Madison, the Manitowoc County EOC, the Sheriff's Department and other units.

Social Services and Nursing Department personnel handled the registration. Forms for registration were available.

c. Congregate Care

Riverview School for Handicapped was the Congregate Care Center. The school is spacious and provides sanitary facilities and sleeping space for approximately 600 persons. The School Administrator and staff are willing contributors to the opening and staffing the center. d. Special Evacuation Problems

The Public Health Nurse and the Human Services staff personnel have records of the mobility impaired and other people needing special assistance with evacuation. This corrects a weakness identified during the last exercise. Buses and other transportation are available for this purpose.

Radiological Exposure Control

According to the RADEF Officer, the County has a supply of 45 CDV-138 low range 0-200 MR direct read dosimeters, 45 CDV-730 mid-range 0-20 R direct read dosimeters, 40 thermoluminescent dosimeters (TLDs), and 1000 copies of exposure record forms to keep records on emergency worker exposure. There should be more TLDs than DRDs because TLDs must stay with the exposed individual. Direct read dosimeters can be exchanged among shifts of workers, entering and leaving the plume, if they are traded outside the plume and re-zeroed. The State has provisions to supply additional dosimeters and KI as local supplies are exhausted. Given the relative amounts of dosimeters and KI, the State has time to get KI to Manitowoc County, but may not be able to get dosimeters there fast enough.

AREA RECOMMENDED FOR IMPROVEMENT:

The County should carefully estimate its worst case requirements for dosimeters and TLDs and, with State assistance, acquire adequate supplies.

According to the Public Health Nurse at the EOC, a supply of 3700 doses of current KI pills are available. The KI authorization forms provided detailed information on the reasons for taking KI and the side effects of taking KI.

AREA RECOMMENDED FOR IMPROVEMENT:

A space, on the form, for address and phone number of the person issued the KI would help the Public Health Nurses to keep track of personnel taking KI to be sure they took all doses required.

The plan does not specify disbursement locations for dosimeters. The EOC staff is considering disbursing dosimeters to fire and police stations for distribution. The procedures for issuing both the dosimeters and the KI at the Two Rivers Police station were demonstrated during this exercise. This avoided the need for emergency workers to go to two locations for dosimeters and KI. The separate lines of responsibility for KI and dosimeters could require emergency workers to go to two locations to get the materials. This would delay getting emergency workers into the field.

AREA RECOMMENDED FOR IMPROVEMENT:

A policy codified in the plan for issuance of dosimeters and KI should recognize that both are most conveniently issued at the same location.

Emergency workers were not aware of how or where their vehicles would be decontaminated.

AREA RECOMMENDED FOR IMPROVEMENT:

It is suggested the locations of decontamination stations be printed on the individual exposure record/instruction card.

Although EOC staff expressed concern about farmers reentering the EPZ to feed animals, they were unaware that the plans allowed farmers to be declared emergency workers and to be issued KI in the event that feeding or milking of livestock was necessary within the evacuated EPZ.

AREA RECOMMENDED FOR IMPROVEMENT:

EOC staff should become aware of all aspects of the County plan.

Three emergency personnel from the County Highway Department were interviewed in the field.

Each emergency worker had O-200 MR and O-20R direct reading dosimeters, a permanent record dosimeter (TLD) and instructions for their use. The emergency workers followed proper procedures in terms of checking dosimeters every half-an-hour. The workers were familiar with the maximum dose allowed without authorization.

As a protection against radioiodine, KI was supplied to all emergency field workers. These workers were familiar with the procedures for taking KI, and the daily dosage.

Media Relations

Media relations is a joint function with the State, Kewaunee County and Wisconsin Electric Power Company. All contact with the media is planned to take place at the Joint Public Information Center. The Information Officer in the EOC was in constant contact with his counterparts at the Joint information center and Kewaunee County to insure that material to be released was accurate and coordinated. This corrects a weakness from the previous exercise. EBS messages were transmitted to the JPIC in hard copy.

Evaluation of the Manitowoc County JPIC activity is included with the State of Wisconsin media relations discussion.

Medical Support

The Mishicot ambulance service was dispatched to the Point Beach Nuclear Power Plant to pick up an injured radiologically contaminated person. The ambulance was equipped with a survey meter and the crew had dosimeters. The crew demonstrated the use of the survey meter. The crew also had coveralls and rubber gloves. Because of security restrictions at the plant, the evaluator was not able to observe the ambulance crew handling of the patient at the site. The ambulance, equipment and crew were not checked for contamination after the patient was removed at the hospital.

Two Rivers hospital was notified at 0850 that a radiologically contaminated injured person was being brought to the hospital from the Point Beach Nuclear Plant. This notification was confirmed by the hospital staff. The set up by the hospital staff was not on par with other hospitals observed by the evaluator. The hospital staff was unaware of the yellow herculite until the observer from the plant told them about it. There were problems in contamination control, such as the doors leading to the outside being left opened, the Doctor using only one pair of gloves and no buffer room nurse being there. The Doctor zeroed his dosimeter in the treatment room after the patient was already there. The Lab Tech who came into the room to get blood samples didn't wear gloves and didn't have a dosimeter. The only Health Physicist (HP) that arrived, arrived with the patient in the ambulance. The HP failed to "gown up" until ten minutes after entering the room. By having only one HP the process of checking for contamination was slowed. The ambulance crew was not checked for release until after the patient had been treated and decontaminated and sent off to X-ray.

AREA REQUIRING CORRECTIVE ACTION:

The utility and the State Department of Health must work with the County and the Hospital to attain a greater understanding of methods for minimizing the possible spread of radiological contamination.
(NUREG 0654, criteria item L1)

Recovery and Reentry

Recovery and reentry was conducted in an orderly manner, with the County Board Chairman asking each agency representative what they were doing to help the public return to their homes. There was discussion about what routes were being used by people returning home, dairy animals and safety precautions for the general public. The last EBS message pertaining to recovery and reentry was drafted from a prescribed message and other information recieved by the PIO.

3. Kewaunee County

Activation and Staffing

The direct communication link with the utility is by NAWAS phone and is monitored by the Sheriff's personnel at the dispatch center in Kewaunee. A call from the utility was received at 0810, which required the dispatch center personnel to start mobilization procedures. The procedures listed in the plan were demonstrated satisfactorily and the EOC was operational at 0855, except for the Red Cross representative. The Red Cross representative was dispatched from Milwaukee and arrived at 0914. There is a system in place to call up the staff at any hour of the day. The first and second shift staffs are well trained and performed their respective tasks in a professional manner.

Emergency Operations Management

The County Board Chairman appointed the Kewaunee County Emergency Government Director as Operation's Director during the first shift. During the second shift a County Commissioner was in charge of the operations. In both cases, the person in charge was well versed on what was to be done and was in control of the situation at all times. Briefings were conducted frequently with the complete staff involved at each briefing. An up to date County plan was available within the EOC. The written procedures used by the EOC staff were according to the plan. A message log was kept and all messages were reproduced and distributed to the staff. The EOC staff was notified of the "Alert" status at 0810, "Site Area Emergency" status at 1034, and "General Emergency" status at 1118. Activation of the reception center and congregate care center, as planned for the exercise, was out of sequence with other events due to school being in session.

Facilities

The Kewaunee County Emergency Operations Center is located in the basement of the City Hall/Police Department Building in Algoma. The facility is set up and supplied to support and maintain emergency response activities. There is ample room, furniture and telephones available for use by the emergency staff. Security was established following the "Alert" emergency classification, as the EOC was becoming operational. A status board was utilized throughout the exercise and was updated promptly with significant events and information. All required maps and displays were posted in the EOC operations room. Maps pertaining to the Point Beach NPP and a population distribution map were displayed thereby correcting a previously identified weakness from an earlier exercise.

Communications

The Kewaunee County warning center is the day to day Sheriff's communication center at Kewaunee. The facility has sufficient work space for daily operations with enough adjacent space to expand for emergency communications operations. NAWAS is the primary communications link to the State EOC and the utility. All local EOCs and emergency personnel are contacted by voice pagers. Commercial phone lines are available and mutual-aid radio nets can be used as back-up. For the Kewaunee County townships of Carlton and Franklin, some emergency operations are provided by Manitowoc and Brown Counties. To communicate with these two counties, Kewaunee County uses a computer aided teletype system. Prior to this exercise certain communications equipments were duplicated and upgraded at the County EOC in Algoma.

AREA RECOMMENDED FOR IMPROVEMENT:

At the Sheriff's communication center, all three emergency radio operators packages should be maintained with typed up-to-date phone numbers and page codes (#601 was not listed). (NUREG 0654, criteria item F1e)

A message log was maintained. Messages were copied and distributed throughout the EOC. This corrected a weakness identified during the previous exercise.

The County PIO in the EOC indicated an amateur radio operator was available for emergency communications between the County EOC and the JPIC. This corrected a weakness identified during the previous exercise.

Dose Assessment and Protective Action Recommendations

Dose Assessment and protective action recommendations are a responsibility of the State.

Public Alerting and Instruction

Kewaunee County EOC has the primary role in alerting the public of an incident at Point Beach Nuclear Power Plant. A call was received from the utility at 1139 informing the County the plant was at "General Emergency". The County staff coordinated the activation of the Alert and Notification System with Manitowoc County. The sirens were activated and an Emergency Broadcast System message released at 1150. The Algoma High School was a designated reception center and was notified of the "General Emergency" at 1145 by commercial telephone.

The instructions to the public were drafted in the EOC and coordinated with the JPIC. The PIO in the County EOC used some prescribed messages which included familiar boundaries and landmarks for the areas of concern. The messages were clear and concise.

Protective Action

a. General: Protective actions are covered by various State and County agencies. The County Sheriff's Department staff traffic control points and survey evacuated areas. The County Highway Department set up access control points. Wisconsin Department of Health and Social Services (WDH&SS) supported the opening of reception centers. The Red Cross staffed and supported the reception/congregate care centers. Social Services monitored school activities but each school superintendent has separate plans for transportation and evacuation/dismissal. Special needs people are listed with Department of Health. Transportation for these people is provided by the County Highway Department.

b. Traffic Control/Access Control: Kewaunee County Sheriff's Department is responsible for establishing and maintaining traffic and access control points to facilitate the proper flow of traffic in the effected area. Traffic control is under the jurisdiction of the County Sheriff with back-up equipment and manpower being provided by the State Police. During the exercise one traffic control point was activated and staffed for demonstration purposes. An officer from the State Patrol was dispatched from Green Bay to assist the County with traffic control, following the receipt of the "Site Area Emergency" notification at 1034. He arrived at the traffic control point, Junction of Route 163 and Route 29, at 1155 after stopping at the County Annex in Kewaunee to pick up his dosimetry equipment. The officer's assignment was to direct and instruct traffic away from the area. He was familiar with the evacuation routes but did not know the location of the reception/congregate care centers. Communications were demonstrated by using the police radio to Green Bay and a portable radio unit issued to the officer by the County Sheriff. Using the portable unit, he was able to communicate directly with the Sheriff's dispatch in Kewaunee. The officer was equipped with the required dosimetry including a TLD. Proper procedures were demonstrated for reading and recording doses but the maximum allowable dose without authorization was not known. The officer was not informed on the procedures for decontamination.

AREA RECOMMENDED FOR IMPROVEMENT:

It is recommended that the maximum allowable dose and the location of decontamination stations be included on the individual's dosimeter instruction/exposure record card.

The County Highway Department activated and staffed one access control point for evaluation. The Highway Department's vehicle, equipment and personnel were at the designated control point prior to the arrival of the evaluator. The notification message to dispatch County resources from the Highway Department garage was transmitted from the EOC immediately following the "Site Area Emergency" declaration at 1034. The emergency worker approximated his arrival time at the access control point at 1115. The access control point was set up with traffic barricades placed on the shoulder of the highway at the intersection of Route 42 and County BB. The County worker at the access control point knew that his responsibilities included assisting traffic flow out of the area and preventing any traffic from entering the blocked off zones. He was familiar with the evacuation

routes and knew the locations of the reception/congregate care centers. Adequate resources in equipment and personnel are available to maintain clear evacuation routes around access control points.

The emergency worker was provided with a dosimetry kit which included a low and a mid range direct reading dosimeter and a TLD. Procedures for reading and recording dose readings were followed. KI was provided to the emergency worker and he was familiar with the procedures to use it.

c. Congregate Care

The relocation center was located more than five miles beyond the plume EPZ. A maximum of 2100 could have been accommodated at Algoma High School. There were sufficient toilets, drinking water, storage and parking. The Red Cross would furnish cots and blankets within 24 hours. Food supplies were available from the school kitchens and through Red Cross. The center was equipped to care for physically impaired individuals.

The School Principal/Shelter Manager and an Administrative Assistant, the County Health Nurse, Radiological Health Team, Red Cross volunteers, and Security Police were at the relocation center. The staff was alerted by phone at 0823 and put on standby basis. At 1039, they were told to open the reception and congregate care center. At 1055, the radiological team arrived and set up their monitoring equipment. The State Radiological Monitoring Team of 2 could monitor at least 60 persons per hour. Any contaminated evacuees would be decontaminated at the Algoma High School by shower and given new clothing from Red Cross. The staff was sufficient in numbers and trained to perform emergency functions. A roster was presented to show twenty four hour staffing capability.

A nursing station was established with quick access to hospitals. The shelter personnel were aware of how many evacuees were expected to arrive. Information regarding what was happening in the affected area was given out over the public address system.

The means of communication to the local EOC, State EOC and emergency medical facilities are commercial phone, and radio.

By 1118, the reception center/congregate care center at Algoma High School was simulated filled to capacity. Additional evacuees that arrived at 1119 were registered, tested for contamination, interviewed by the nurse, and sent to the alternate congregate care center at the Algoma Grade School. The transferring from the reception center to the congregate care center was done by school bus.

Algoma Grade School did an excellent job in handling the evacuees sent to their congregate care center. The school principal gave excellent orientation to the evacuees.

Radiological Exposure Control

Dosimeter packages for emergency workers includes low and mid-range dosimeters, instruction and record card, and TLDs. Supplies of dosimeters and KI are sufficient. There were not enough TLDs.

AREA RECOMMENDED FOR IMPROVEMENT:

The County should carefully estimate its worst case requirements for dosimeters and TLDs and, with State assistance, acquire adequate supplies.

Dose and KI regulations were available to EOC personnel.

During this exercise County Sheriff, County Board Member or USDA/ASCS could not describe the mechanism for allowing emergency workers into the restricted area as noted in the Kewaunee County plan (Tab E).

AREA RECOMMENDED FOR IMPROVEMENT:

EOC staff should become aware of all aspects of the County plan.

Media Relations

Media relations are a joint function with the State, Manitowoc County and Wisconsin Electric Power Company. Media relations are conducted at the JPIC. The Kewaunee County EOC management would direct all media inquiries to the JPIC. Individual interviews would be granted by the EOC Director and the PIO if requested by local news representatives. The interviews would be done in the library located in the same building as the EOC.

Recovery and Reentry

The Kewaunee EOC staff was able to handle the recovery and reentry phase very well under the direction of the operations manager. Several briefings were held to keep the staff up to date on what was being done to inform the workers in the field and the public of what actions they should be taking as they reentered the area. They were informed about low-level exposure and availability of compensation for financial losses. The staff was very busy communicating reentry and recovery decisions to the various response organizations.

SUMMARY LISTING OF EXERCISE FINDINGS

UTILITY: Point Beach Nuclear Power Plant
Summary Listing of Exercise Findings

1. Deficiencies

		<u>September 17, 1986</u> (Date)	
<u>Wisconsin</u> (State)	<u>Wisconsin</u> (Community)	<u>Scheduled</u> Date	<u>Actual</u> Date
<u>NUREG</u> Item	<u>Narrative Statement</u> of Deficiency	<u>Corrective Action</u> Proposed	
None			

UTILITY: Point Beach Nuclear Power Plant
Summary Listing of Exercise Findings

2. Areas Requiring Corrective Action

Wisconsin
(State)

Wisconsin
(Community)

September 9, 1986
(Date)

<u>NUREG Item</u>	<u>Narrative Statement of Weakness</u>	<u>Corrective Action Proposed</u>	<u>Scheduled Date</u>	<u>Actual Date</u>
F.1	The Department of Agriculture emergency field workers must be provided reliable means of communications.			
0.4, j	Additional training must be conducted concerning information handling procedures to ensure information is distributed promptly between the State and local government.			
0.5	Training must be provided to all agriculture personnel who will or may be called to assist in radiological emergencies, particularly those who may be assigned to agriculture sampling teams. The training must include dosimetry, exposure control, protective gear and personnel and equipment decontamination.			

UTILITY: Point Beach Nuclear Power Plant
Summary Listing of Exercise Findings

Wisconsin
(State)

Wisconsin
(Community)

September 9, 1986
(Date)

3. Areas Recommended For Improvement

1. The shift change for the State Radiological Coordinator should be demonstrated during the next exercise.
2. It is recommended briefings by the Radiological Health staff to the EOC staff be more detailed as to plant status, dose rates at various distances, etc.
3. It is recommended that the State review the use of micro-computer systems during REP exercises. If it is to be used in the future, additional operator training will have to take place on how to operate the equipment and when the system should be used.
4. It is recommended that messages/log forms be revised so that time can be accurately depicted.
5. It is recommended the State take action to correct the communication problem initially experienced by the State radiological field team.
6. It is recommended field teams check gamma readings at one meter and ground level.
7. It is recommended that checklists and SOPs relating to agricultural field team sampling procedures be developed.
8. It is recommended that an actual water sample be taken during the next exercise.

UTILITY: Point Beach Nuclear Power Plant
Summary Listing of Exercise Findings

1. Deficiencies

Wisconsin
(State)

Manitowoc County
(Community)

September 9, 1986
(Date)

<u>NUREG Item</u>	<u>Narrative Statement of Deficiency</u>	<u>Corrective Action Proposed</u>	<u>Scheduled Date</u>	<u>Actual Date</u>
None				

UTILITY: Point Beach Nuclear Power Plant
Summary Listing of Exercise Findings

2. Areas Requiring Corrective Action

Wisconsin
(State)

September 9, 1986
(Date)

Manitowoc County
(Community)

NUREG Item	Narrative Statement of Weakness	Corrective Action Proposed	Scheduled Date	Actual Date
E.7	The evacuation message did not include information for the public of actions to be taken with respect to school children.			
L.1	The utility and the State Department of Health must work with the County and the Hospital to attain a greater understanding of methods for minimizing the possible spread of radiological contamination.			

UTILITY: Point Beach Nuclear Power Plant
Summary Listing of Exercise Findings

3. Areas Recommended For Improvement

Wisconsin
(State)

September 9, 1986
(Date)

Manitowoc County
(Community)

1. The County should carefully estimate its worst case requirements for dosimeters and TLDs and, with State assistance, acquire adequate supplies.
2. A space, on the form, for address and phone number of the person issued the KI would help the Public Health Nurses to keep track of personnel taking KI to be sure they took all doses required.
3. A policy codified in the plan for issuance of dosimeters and KI should recognize that both are most conveniently issued at the same location.
4. It is suggested the locations of decontamination stations be printed on the individual exposure record/instruction card.
5. EOC staff should become aware of all aspects of the County plan.

UTILITY: Point Beach Nuclear Power Plant
Summary Listing of Exercise Findings

1. Deficiencies

<u>Wisconsin</u> (State)		<u>September 9, 1986</u> (Date)	
<u>Kewaunee County</u> (Community)			
<u>NUREG</u> <u>Item</u>	<u>Narrative Statement</u> <u>of Deficiency</u>	<u>Scheduled</u> <u>Date</u>	<u>Actual</u> <u>Date</u>
None			

UTILITY: Point Beach Nuclear Power Plant
Summary Listing of Exercise Findings

2. Areas Requiring Corrective Action

Wisconsin
(State)

Kewaunee County
(Community)

September 9, 1986
(Date)

<u>NUREG</u> <u>Item</u>	<u>Narrative Statement</u> <u>of Weakness</u>	<u>Corrective Action</u> <u>Proposed</u>	<u>Scheduled</u> <u>Date</u>	<u>Actual</u> <u>Date</u>
	NONE			

UTILITY: Point Beach Nuclear Power Plant
Summary Listing of Exercise Findings

3. Areas Recommended For Improvement

Wisconsin
(State)

Kewaunee County
(Community)

September 9, 1986
(Date)

1. At the Sheriff's communication center, all three emergency radio operator's packages should be maintained with typed up-to-date phone numbers and page codes (#601 was not listed).
2. It is recommended that the maximum allowable dose and the location of decontamination stations be included on the individual's dosimeter instruction/exposure record card.
3. The County should carefully estimate it's worst case requirements for dosimeters and TLDs and, with State assistance, acquire adequate supplies.
4. EOC staff should become aware of all aspects of the County plan.