

DMB

MAY 24 1984

Docket No. 50-282  
Docket No. 50-306

Northern States Power Company  
ATTN: Mr. C. E. Larson  
Director of Nuclear Generation  
414 Nicollet Mall  
Minneapolis, MN 55401

Gentlemen:

We have received the attached Federal Emergency Management Agency (FEMA) letter dated May 4, 1984, and associated final exercise evaluations on the offsite emergency preparedness exercise conducted on March 13, 1984, for Pierce and Dunn Counties in Wisconsin, Dakota and Goodhue Counties in Minnesota, the City of Red Wing in Minnesota, and the States of Minnesota and Wisconsin.

This final exercise evaluation lists one deficiency for Pierce County involving the failure to release information to the public via the Emergency Broadcast System when the order to expand the evacuation from 5 to 10 miles in sectors Q and R was acted upon. FEMA has identified this deficiency as one which affects public health and safety, and is performing an evaluation on the effect of this deficiency regarding the overall status of offsite preparedness.

This is to notify you that we will determine an appropriate course of action under our regulations for the Prairie Island facility after receiving the FEMA evaluation of offsite preparedness. We would expect that correction of this deficiency will be demonstrated during the next Prairie Island exercise which may be required within one year or sooner of the 1984 exercise.

In addition, this final exercise evaluation lists some recommendations (which are referred to in the FEMA evaluation as other deficiencies; e.g., those not affecting public health and safety) regarding the offsite agency responses. We fully recognize that the correction of the identified deficiency and implementation of the recommendations 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 Prairie Island Nuclear Power Station to be addressed by you as well as others.

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Mr. C. E. Larson

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MAY 24 1984

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.

Should you have any questions regarding this letter, please contact Mr. M. Phillips of my staff at (312) 790-5530.

Sincerely,

C. J. Paperfello, Chief  
Emergency Preparedness and  
Radiological Safety Branch

Enclosure: 1tr frm FEMA dtd 5/4/84

cc w/encl.:

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- DMB/Document Control Desk (RIDS)
- Resident Inspector, RIII Prairie Island
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EXERCISE REPORT

PRAIRIE ISLAND NUCLEAR POWER PLANT  
NORTHERN STATES POWER COMPANY

JOINT EXERCISE

Location of the Plant: Located in the State of Minnesota, Goodhue County, near the town of Red Wing, Minnesota

Exercise Date: March 13, 1984

Date of Report: April 17, 1984

Participants Included: The State of Minnesota (partial), Goodhue County/ City of Red Wing, MN (full), Dakota County, MN (full), the State of Wisconsin (partial), Pierce County, WI (full), and Dunn County, WI (full)

Those State and Local Governments that should have participated, but did not: None

PREPARED BY THE:  
FEDERAL EMERGENCY MANAGEMENT AGENCY, REGION V  
NATURAL & TECHNOLOGICAL HAZARDS DIVISION  
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I.

EXERCISE SUMMARY

A. STATE OF MINNESOTA

The initial warning was received at 0840, from the utility via DDD telephone to the State Duty Officer, informing the State that the plant was at "Alert" classification. The notification system was implemented, and the EOC was fully staffed by 0905. Initially, the Director of the Division of Emergency Services was in charge. As the exercise progressed, the Director designated the Deputy Director as the person in charge. Messages were logged and distribution was made to the required participants. The status boards and maps were kept updated as the exercise progressed. All necessary displays were available.

Dose calculations were demonstrated by the Health Department. Protective action recommendations were prompt and updated as conditions changed. The projected plume was defined and plotted on a map in the EOC. Radiation messages sent to county EOCs throughout the exercise indicated "no release reported".

The State directed the implementation of the Public Alerting and Notification System. Coordination messages were sent to the counties and the State of Wisconsin for the simultaneous sounding of sirens. Emergency Broadcast System messages were prepared and updated periodically. There is need for revision of the Goodhue County/City of Red Wing plan to align it with the State plan regarding the sounding of sirens (See State Plan, Annex D, Para. III A1).

Traffic control was coordinated with the counties. The Department of Agriculture advised counties relative to the protection of farm animals, in general, and milk producing animals in particular.

Public Information Officers from Minnesota and Wisconsin were available in the Joint Press Information Center (JPIC). The communication systems, internal and external, were tested for all PIO activities.

The evacuation reception center was activated to receive, monitor, and provide congregate care for the simulated evacuees from Goodhue and Dakota counties. Facilities to accommodate mobility impaired persons need further consideration. Additional radiac equipment to monitor evacuees and additional training is needed for the monitoring teams.

B. GOODHUE COUNTY/CITY OF RED WING

Activation and staffing was accomplished in less than one hour. The "Alert" classification message was received by the Sheriff's Dispatcher and relayed to the County EOC. A personnel directory list was used for notification rather than the call list in the plan. Key response organizations were represented in the EOC. The EOC staff displayed knowledge of their functions and responsibilities.

The County Emergency Director and the City Emergency Director appropriately shared the management responsibility. Briefings were held periodically to update the staff. Each agency represented, when called upon, updated their activities with the staff. In this manner the entire staff was involved in the decision making process. The county plan was available as were checklists and SOPs. Messages were logged, distributed and acted upon. The use of one common message format could help with the handling, numbering and determination of the proper routing of messages. Access to the EOC was controlled.

The EOC is a permanently established facility located in the basement of the City/County Law Enforcement Building. The Operations room, communications room, kitchen, adjoining offices and equipment rooms are finished and equipped with the necessary furnishings. Support materials and environmental control measures enhance the working conditions.

Primary means of communications was by commercial telephone. The backup system was radio. Dedicated telephone is used by the State EOC and both counties to provide simultaneous communication. Hard copy materials were received from the JPIC. These were prompt and legible.

Public alerting and notifications were substantially simulated. The record of the March 7, 1984 test of the sirens is included as a part of this report. The county emergency response personnel went through the steps which would normally be taken to apprise the public of the need to take protective action. The Goodhue County/City of Red Wing plan must coincide with the State plan to insure simultaneous sounding of sirens.

Protective actions were recommended by the State and, after appropriate consideration implemented by the county. Traffic control points were established and were plotted on maps in the EOC. There appears, according to the plan and discussion with the EOC staff, sufficient resources to cover all traffic control functions.

The media program is well organized. The Red Wing Mayor is the PIO. A room is designated for meeting with the media. The EOC Operations Chief discussed with the staff the actions which would be considered during reentry. A gradual phasing down of protective actions was instituted.

The scenario covered major points for show of capability and presented realism. There is a lack of information to the counties from the State on the status of the generating plant, interpretation of radiological readings, stay times, etc.

Personnel manning road blocks were knowledgeable in traffic control. They were trained in dosimeter use. They did not have record cards, nor were they asked to report dosimeter readings. They knew evacuation routes, relocation/congregate care locations, and procedures for direct communication with the EOC. Information pertinent to their function was forwarded from the EOC by radio.

Route alerting teams were dispatched on two separate occasions during the exercise. The teams were briefed on what announcements should be made. The routes utilized have been driven previously to determine the time needed to complete them. In addition, there are procedures and equipment available for the alerting of river traffic via police boat and helicopters. These resources would also be used to notify persons in the Wildlife Management area and other remote areas around the power plant.

C. DAKOTA COUNTY

The overall operations and objectives were met. Operation of the EOC was in accordance with established criteria. The response staff was knowledgeable of their duties, and activated the EOC in 30 minutes.

The new location, in the basement of the County Government Building, has the necessary amenities to support around the clock operations.

All evacuation and access control activities were demonstrated or simulated, as needed, in the affected areas of Dakota County. Evacuation was not demonstrated during this exercise. The Hastings' Fire Department and several surrounding fire departments have a mutual aid system to provide equipment and manpower to accomplish evacuation of the mobility impaired persons.

To augment the siren system and to cover areas outside the 5 mile EPZ, Sheriff's Department vehicles were actually driven on the



alerting routes.

A press briefing area was available in the County Government Building. A reporter who made inquiries about the exercise was encouraged to contact the JPIC.

Reentry/Recovery functions were coordinated within the EOC and implemented by appropriate field personnel.

Emergency personnel working in the evacuation zones each had a high range (0-200R) dosimeter and record card. Emergency personnel were not aware of maximum dosages allowed or of procedures and facilities to use in the event of a need for decontamination. Potassium Iodide (KI) was available. Additional training is recommended to improve understanding of exposure control for emergency teams.

D. STATE OF WISCONSIN

This was a partial participation exercise for the State of Wisconsin. The Department of Emergency Government personnel were used to simulate the involvement of other State agencies to support the activities in Pierce and Dunn Counties. The State Public Information response at the JPIC in St. Paul, Minnesota was fully staffed.

The capability of the mobile radiation laboratory was not demonstrated during this exercise. The lab was dispatched primarily to test its communications capability. Additional equipment, supplies and written procedures are necessary before the radiological analysis function of the Mobile Lab can be performed.

Activation and staffing of the Wisconsin State EOC was not an exercise objective; this was demonstrated during the November 1, 1983 Kewaunee exercise. Changes in emergency classification were verified and posted. Maps were sectorized according to NUREG-0654, and displayed evacuation routes, traffic control points, radiological monitoring points and population by sector area. All communication systems were tested. A temporary problem with the microcomputer at the JPIC caused use of the backup system until the microcomputer was returned to service.

The State Radiological Coordinator (SRC) and his staff maintained frequent telephone contact with the Northern States Power (NSP) communicators, Minnesota Radiation Control personnel, Nuclear Regulatory Commission (NRC) staff, County RDOs and the radiation monitoring field team coordinator. Hard copy communications were transmitted between the SRC, NSP's EOF and the Minnesota Radiation Protection staff.

The SRC, using plant release rates, was able to independently verify off-site whole body and thyroid dose projections. Since little of the State of Wisconsin was included in the plume center line, the SRC staff was able to project the percentage dose reduction at selected degrees from the plume center line. A computer program projects dose rates, total doses and dose contaminants; thus, allowing the SRC to recommend protective actions of sheltering, evacuation, human/animal food control and emergency worker exposure control. The SRC in conference calls with Minnesota and NSP officials, developed compatible protective action recommendations to be issued by the respective organizations. Despite these efforts, incomplete and conflicting sheltering and evacuation information was sent to Pierce County EOC that caused confusion that may have resulted in danger to public health and safety.

The relaxation of protective actions was made after evaluation of the field monitoring teams data and consideration of plant conditions. The relaxation of these protective actions was discussed with the State of Minnesota and NRC officials prior to implementation. The reentry decision was communicated promptly to the counties.

#### E. PIERCE COUNTY

The Pierce County EOC received the "Alert" notification at 0837 and, utilizing their call list, fully staffed the EOC within 30 minutes. At the initial briefing, the Chairman of the County Board indicated the County Emergency Government Coordinator would serve as the Operations Officer. Staff included: County Board, Sheriff Dept., Fire Dept., Health Services, Social Services, Red Cross, Agriculture (ASCS), RDO, Public Information and Wisconsin DEG (West Central). A complete shift change was demonstrated with continuity of operations maintained. The second shift was briefed as a group and by their individual counterparts. Message handling and logging was done in an efficient manner. Eight briefings were held throughout the course of the day. The EOC facilities were excellent and the services were adequate. EOC resources (maps and boards) were not utilized to the maximum extent possible. Communications with other EOCs, etc. were good and confirmation sought and received on all important messages. JPIC communications were not reliable during the exercise.

Access control points were activated at the proper time, moved as the evacuation areas changed, and these locations were monitored in the EOC. Not all access points were controlled; additional planning is required in this area.

Media briefings consisted of reading a message and answering questions. No press releases were provided.

F. DUNN COUNTY

The Dunn County EOC at Menominee was activated and staffed during the exercise through the participation of the County Board Chairman, County Highway Department, Human Services, Law Enforcement, Public Health, Fire Department, State DEG, and various State and volunteer agencies.

The status board in the Dunn County EOC showed indication that they were receiving and acting upon information from the Pierce County EOC.

There was a demonstrated evacuation of twelve senior citizen volunteers via bus from a Senior Citizens Center at Bay City. The evacuees were received at a reception center at the Dunn County Recreation Department. They were monitored for contamination, registered for housing at a Dunn County shelter location, provided lunch, and returned to Bay City.

The staff at the center consisted of a youth volunteer, registrars, nurses, a rad health monitoring team, and building maintenance personnel. They were knowledgeable of their respective assignments.

II.

EXERCISE REPORT

A. INTRODUCTION

1. Exercise Background

This is the fourth exercise of a simulated accident at the Prairie Island Nuclear Generating Plant operated by Northern States Power Company. The first exercise was October 14, 1980, involving the State of Minnesota and Goodhue County/City of Red Wing, MN, the State of Wisconsin and Pierce County, WI. The second exercise was December 8, 1981, with full participation of the State of Minnesota, Goodhue County/City of Red Wing, MN, Dakota County, MN, and Pierce County, WI. The State of Wisconsin chose limited participation in this exercise having demonstrated full activity in an earlier exercise that year. The third exercise was conducted October 14, 1982, with limited participation for the States of Minnesota and Wisconsin and full participation for Goodhue County/City of Red Wing, MN, Dakota County, MN and Pierce County, WI.

2. Participating and non-participating State and local Governments

The Emergency Planning Zone (EPZ) of the Prairie Island Nuclear Generating Plan impacts on Goodhue County, MN, Pierce County, WI and Dakota County, MN in the 5-10 mile range. In addition

to the principal counties, Goodhue, and Dakota, MN and Pierce County, WI, there are twelve counties in Minnesota and six counties in Wisconsin that are in the ingestion EPZ. These counties in Washington, Wabasha, Hennepin, Ramsey, Anoka, Scott, Carver, Rice, Steele, Dodge, Olmsted, and Winona Counties in Minnesota; Polk, Barron, St. Croix, Dunn, Pepin, and Buffalo Counties in Wisconsin did not participate in this exercise as the scenario developed did not require activities in the ingestion EPZ.

3. List of Evaluators

For this exercise there were a total of 15 evaluators and 3 persons being trained as evaluators. There were 8 from FEMA, including one trainee and the Exercise Evaluation Team Chief, 4 from the RAC agencies including one trainee and 6 contract evaluators from Argonne National Laboratory including one trainee. The evaluators were assigned as follows:

Exercise Evaluation Team Chief  
Rick Anthony, FEMA Region V

State of Minnesota Evaluation Team  
State EOC, St. Paul, Minnesota  
Ed Robinson, Team Leader, FEMA  
Gary Kozynski, Argonne  
James Opelka, Argonne  
Sheila Huff, DOI

Dakota County EOC, Hastings  
Bobbi Bailey, Team Leader, FEMA  
Wiley Howell, FEMA  
Bill Gasper, Argonne

Goodhue County/Red Wing EOC, Red Wing  
Gordon Wenger, Team Leader, FEMA  
Carolyn Herzenberg, Argonne  
Bill Gasper, Argonne

State of Wisconsin Evaluation Team  
State EOC, Madison  
Ray Kellogg, Team Leader, FEMA  
Jim Kraeger, FDA  
Steve Kouba, DOE  
Pete Tedeschi, EPA

West Central State EOC, Eau Claire  
No Evaluators

Pierce County EOC, Ellsworth  
Wallace Weaver, Team Leader, FEMA, RAC Chairperson  
Ken Lerner, Argonne  
Anthony Foultsman, Argonne

Dunn County, EOC Reception Center and Decontamination  
Woodie Curtis, FEMA

4. Evaluation Criteria

The State and County plans being evaluated by 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. Summary of Exercise Objectives

As a result of coordination between Northern States Power Company, Minnesota Division of Emergency Services and Department of Health, Wisconsin Division of Emergency Government and Department of Health and Social Services, objectives were developed to test the capabilities of the various participating organizations. The objectives were designed to test the capabilities of the various participating counties, with necessary support from the two States, to protect the public in the event of a major accident at the Prairie Island Nuclear Power Plant. The objectives were selected from the listing in Tab M of the Modular Format For Uniformity of Radiological Emergency Preparedness Exercise Observations and Evaluations, dated June, 1983. Twenty five of the thirty five objectives listed were selected. These include exercising the Minnesota State EOC, with full participation by the Division of Emergency Services, and appropriate State agencies, to provide information and support to the county EOCs, to determine projected doses to the public and to determine appropriate protective actions, to activate and staff the Relocation/Congregate Care Center, to mobilize field monitoring teams. The State of Minnesota activated and fully staffed the Joint Public Information Center (JPIC) to provide accurate and timely news releases and support for rumor control. The JPIC developed information for the counties to be released to the Emergency Broadcast Stations.



The EOCs for Dakota and Goodhue/City of Red Wing Minnesota and Pierce County Wisconsin were fully exercised to test their ability to mobilize and activate their facilities, to make decisions and coordinate emergency activities, to activate and support emergency workers, to alert the public within the 10 mile EPZ, and disseminate an initial instruction message, within 15 minutes, to manage an orderly evacuation of recommended areas and to control access to evacuated areas.

The State of Wisconsin demonstrated only limited participation. The EOC was activated by The Division of Emergency Government staff and The Department of Health and Social Services staff. The radiological health monitoring teams and the radiological field sampling teams were prepositioned in the interest of saving time. The mobile radiological/communications van was dispatched to test the communications function only.

Those objectives not selected involved ingestion pathway actions, demonstration of evacuation, use of potassium iodide, on-site evacuation and decontamination, hospital facilities, relocation of EOCs and recovery and reentry activities.

#### 6. Summary of the Scenario

Both units are operating at 100% power. Extensive outdoor construction is occurring on the east side of the Plant. The wind is from the Southeast at 4 mph. #11 SI pump, #12 and #13 charging pumps are out of service.

A small leak begins through a pressurized safety valve. At approximately 0825 the pressurized safety valve fails, open and associated piping fails, resulting in a major Loss of Coolant Accident (LOCA). The State of Wisconsin EOC received notification from PI at 0830, Pierce and Dunn Counties at 0837, the State of Minnesota at 0840, and Goodhue and Dakota Counties at 0846. At 0900 #12 Safety Injection pump fails and a Site Area Emergency was declared at 0931. By 0945 the #11 charging pump had failed and some fuel failure had occurred. At 1000 there was a construction site explosion near unit #1 Shield Building that caused the equipment hatch cover to be severely damaged. Because ventilation radiation monitors are reading upscale, a General Emergency was declared at 1025. Sheltering was recommended at 0945 in all sectors 0-2 miles. The activation of PANS was to take place at the State and Counties at 1015. At 1035 the recommendation was made, for all sectors 0-2 miles and sector P, Q and R 0-5 miles should evacuate, sheltering in P, Q and R 5-10 miles.

At 1046 there was a report of off-site radiation readings, at 1114 there was a recommendation for evacuation in sector P, Q and R 5-10 miles. At 1230 there was a half hour break for lunch, upon return it was assumed to be 48 hours later (March 15, 1984) (using current local times. Radiation sampling continued at 1545 exposure control was terminated and at 1600 the exercise was terminated.

7. Description of State and Local Resources  
Planned to be used in the Exercise

a. State of Minnesota

State EOC  
State JPIC  
Governor's Office  
Governor's Press Secretary  
Division of Emergency Services  
State Patrol  
Health Department  
MN/Department of Transportation  
Welfare  
Public Safety - Public Information Office  
Agriculture  
Goodhue County/City of Red Wing EOC  
Dakota County EOC  
Radiological Health Monitoring Team  
Reception/Congregate Care Facility

b. State of Wisconsin

State EOC  
West Central Area EOC  
Division of Emergency Government  
Pierce County EOC  
Dunn County EOC  
JPIC St. Paul, MN  
Radiological Field Sampling Teams  
Radiological Health Monitoring Teams  
Reception/Congregate Care Facility  
Mobile Radiological/Communications Van

c. Northern States Power Co. (off-site)

EOF  
JPIC in St. Paul, MN  
Radiological Field Sampling Teams

8. Deficiencies Noted in Past Exercises Which Persist

a. State of Minnesota

None

b. Goodhue County/City of Red Wing

None

c. Dakota County

None

d. State of Wisconsin

None

e. Pierce County

None

f. Dunn County

None

9. Exercise Objectives Still to be Effectively Achieved

a. State of Minnesota

None

b. Goodhue County/City of Red Wing

(1) Demonstrate ability to formulate and distribute appropriate instructions to the public in a timely fashion.

(2) Demonstrate the ability to continuously monitor and control emergency worker exposure.

c. Dakota County

(1) Demonstrate the ability to continuously monitor and control emergency worker exposure.

d. State of Wisconsin

(1) Demonstrate appropriate equipment and procedures for determining ambient radiation levels.

- (2) Demonstrate appropriate equipment and procedures for measurement of airborne radioiodine concentrations as low as  $10^{-7}$  uCi/CC in the presence of noble gases.
  - (3) Demonstrate appropriate equipment and procedures for collection, transport and analysis of samples of soil, vegetation, snow and water.
- e. Pierce County
- (1) Demonstrate ability to formulate and distribute appropriate instructions to the public, in a timely fashion.
  - (2) Demonstrate the ability to continuously monitor and control emergency worker exposure.

B. NARRATIVE

1. State of Minnesota

a. Activation and Staffing

There is a direct dedicated telephone line from the utility to the State EOC, which is monitored continuously. The initial call was received from the utility at 0840 informing the State that the plant was at "Alert" classification. The call was verified at 0847. The EOC was staffed by 0905. Although this was a limited exercise for the State, all State agencies and State of Wisconsin's PIO were present. No shift change took place as it was not an objective of the exercise at the State level.

Participation exceeded or met the objectives and criteria. The activation was conducted in a professional manner. Each participant had a thorough knowledge of his/her duties, and demonstrated experience and commitment in their response to activation. Staffing was adequate and well organized.

b. Emergency Operations Management

The Director and Deputy Director of DES was in charge of the State EOC. A member of the staff was designated as Operations Chief. Message logs were kept and messages were reproduced and distributed to the participants. Calls were placed to activate the radiological monitoring teams, congregate care center staff and asking for assistance from The Department of Energy. Frequent briefings were held involving the total EOC staff. Each staff participant had reference material available.

c. Facilities

The EOC had the necessary furniture, lighting, ventilation, telephones, status boards, maps and other displays. The status boards (events, evacuees, monitoring points, road-blocks, and evacuation routes) were all kept up to date. The facility could support long-term operations. There is one suggestion concerning the status board: the time posted for major events should denote A.M. or P.M. or use the 24 hour clock system.

d. Communication

There was primary and backup communications with County EOC's, the State of Wisconsin, the licensee, EOF, FEMA, EBS Station, JPIC, local schools and hospitals. The primary system, in most cases, was telephone with radio as the backup system. It is suggested datafax system similar to that used between EOC's and the JPIC be used to send hard copies of messages. This would speed up message handling and reduce the chance for "copying errors". Communications were established with FEMA, Region V and DOE. Requests for assistance were made to these agencies.

e. Dose Assessment and Protective Actions

(1) Dose Projection

Those calculations were demonstrated using the programmable calculator and hand calculations. The plume was correctly defined and plotted on a map.

(2) Protective Action Recommendation

Protective action recommendations were prompt and based on EPA guidelines. They were updated as conditions changed.

f. Public Alerting and Instruction

(1) Public alerting was initiated at 1004 after a call was received from the plant declaring a "Site Area Emergency" classification. EBS and National Oceanic and Atmospheric Administration Radio were simulated activated. A message was sent to the Minnesota County EOC's and the State of Wisconsin to coordinate the sounding of sirens and initiate route alerting.

(2) Public instructions were drafted in the JPIC based on information from the plant EOF. The messages were approved by the EOC and coordinated for simultaneous release by Minnesota and Wisconsin.



g. Protective Action

(1) Evacuation and Access Control

This is a function primarily of the County governments. The State Department of Transportation assists in traffic control by using the State Police to assist County Sheriff's Departments and City Police.

(2) Special Evacuation Problems

There was substantial snowfall the night before and during the morning of the exercise. Evacuation routes and roads for route alerting were clear to passable. State Police have procedures to assist vehicles that become stranded. Personnel and equipment are available to handle traffic and control points.

(3) Implementation of Ingestion Pathway Protective Actions

Based on information from the EOF, field monitoring teams and EPA, recommendations were forwarded to the counties for protective actions in the ingestion pathway.

h. Radiological Exposure Control

This was not an exercise objective. For exercise continuity, recommendations were made to the counties concerning exposure control, primarily in the form of raw data. An analysis of the data should be developed with specific recommendations for stay time, dosimetry equipment, periodic readings of dosimeters, maximum dose allowed without authorization and the use of potassium iodide. Exposure control is primarily the function of County and City governments but the information and expertise is available at the State level to assist the Counties.

i. Media Relations

(1) Activation and Staffing

Public Information Officers (PIOs) from Minnesota, Wisconsin, Northern States Power and the Nuclear Regulatory Commission performed public information duties at the State EOC and Joint Public Information Center (JPIC). The Wisconsin and NRC PIOs were prepositioned, the Minnesota and NSP PIOs were mobilized following receipt of the "Alert" classification.

(2) Facilities

The PIO coordination activities were performed in a room adjacent to the State EOC operations room.

Adequate space, furniture, lighting, typewriters, and copying devices were available. A conference room was used by the PIO's to coordinate information that was to be presented at upcoming news conferences.

Maps and displays were effectively used by the news conference speakers. It is suggested that colored overlays on the "Population by Sector Map" could be used to designate areas evacuated or in shelter.

(3) Communications

Internal communications in the State EOC and the PIO working area consisted of closed circuit television transmission of briefings performed in the Operations Room. Communications between the PIO working area in the State EOC and JPIC consisted of telephones.

Hard copy datafax capability existed between the Minnesota PIO's and the County EOCs. Backup communication consists of dedicated telephone communication that are used as part of the State EOC Operations.

The Wisconsin primary communications systems consisted of a computer with two modes (one receiving, one sending) that were connected with the State EOC in Madison and Pierce County. This computer system provides hard copy print-outs to all connected locations. The Wisconsin PIOs had an open telephone line to the State EOC in Madison, WI and to the public information center in Pierce County, WI (Ellsworth) as a backup system. These systems did not prove to be timely nor reliable during the exercise due to the limited phone line capability and the malfunction of the microcomputer. There appears to be a need for a more efficient backup communications system for PIO activities.

(4) Information Function

Three news conferences were held in the JPIC. The press conferences presented accurate information.

The PIOs and the scheduled speakers met prior to news conferences to coordinate information. In one instance not enough time was allowed for all PIOs to exchange information prior to the news conference. The Minnesota PIO should insure all inputs are available and reviewed

and the news conference schedule should be coordinated with the Wisconsin PIOs.

(5) Public Information

Emergency public instructions were drafted by the PIOs. Eight EBS bulletins were generated and included prescribed information. Instruction relating to sheltering did not in all cases include guidance on sheltering procedures.

(6) Rumor Control

A rumor control number was activated.

j. Recovery and Reentry

Arrangements were made to secure the evacuated areas and the procedures were developed for entry into the evacuated areas for essential services. Recovery and reentry decisions were communicated to response organizations. Information was provided to the public on safety precautions during recovery and reentry.

k. Scenario

The scenario provided enough activity to keep the participants active and tested the operational capability of the State EOC staff.

l. Relocation Center

(1) Activation and Staffing

Activation of the reception/congregate care center and monitoring units was accomplished under the direction of the person who was in charge of the entire operation.

(2) Registration and Monitoring

As evacuees were received, and registered using the Red Cross form. This form was kept on file until the person left for a location other than the congregate care facility.

(3) Congregate Care

The congregate care portion of the facility can house 1500 people with all amenities provided. The Red Cross will set up a nursing station and the Salvation

Army will assist in meeting food needs using the kitchen facilities. Mobility impaired persons would be sent to nursing homes.

(4) Decontamination

Decontamination was not an objective for the State.

2. Goodhue County/City of Red Wing

a. Activation and Staffing

Activation and staffing of the EOC was accomplished in one hour. The initiating "Alert" message was received by the Sheriff's dispatch. Verification of the message was made. Mobilization procedures were demonstrated. A personnel directory was used for notification rather than the call list in the plan. There is a 24 hour capability to receive activation call and initiate staffing.

Key response organizations were presented in the EOC. The County EOC staff displayed knowledge of their function and responsibilities.

b. Emergency Operations Management

The County Emergency Director and the City Emergency Director appropriately share the emergency responsibilities. Briefings were held periodically to update the EOC staff. Each agency representative, when called upon, briefed their activities.

The staff became involved in problem solving and the decision-making process. The County plan, checklists and procedures were used for reference. Message logs were kept. Messages were distributed and acted upon. A single standardized message form is recommended. Training on the proper completion of the form will improve message content and control. Access to the EOC was controlled. Classification levels were received in an appropriate sequence.

c. Facilities

The County EOC is a permanently established facility located in the basement of the City/County law enforcement building. The operations room, communications room, kitchen, adjoining offices and mechanical equipment rooms are finish and equipped with the necessary furnishing to carryout an emergency response to a life/health threatening situation.

Support materials and environmental control measures enhance the working conditions.

d. Communications

Communications between emergency response organizations in the many different geographic locations was by primary means; in most instances commercial telephone. Where telephones were primary the backup was radio. Dedicated telephone is used around the State EOC and counties to provide simultaneous communications.

Hard copy materials were received from the JPIC. They were readable and prompt.

e. Dose Assessment and Protective Action Recommendations

This is not a county function. The action is carried out at the State level with recommendations made to the Counties.

f. Public Alerting and Instruction

(1) Public Alerting

This action was simulated. The county emergency response personnel went through the steps which would normally be taken to apprise the public of a need for protective action. Route alerting teams were dispatched at two separate occasions during the exercise. All vehicles were equipped with the necessary PA and radio equipment. The teams were briefed as to what announcements should be made. The alerting routes have been driven previously to determine the time needed to complete the route alerting. In addition, there are procedures and equipment available to activate alerting routes for river traffic via police boats and helicopter. These resources would be used to notify persons in the Wildlife Management Area and other remote areas around the power plant.

At 1005 a message was received from the State EOC directing coordination and sounding of sirens. The message directed this action be carried out in 15 minutes. Due to conflicting information in the local plan and the State plan, this action was not initiated until 1040, and completed at 1055.

Deficiency

E.5 Demonstrate ability to formulate and distribute appropriate instructions to the public, in a timely fashion.



Recommendation

E.5 The Goodhue County/City of Red Wing plan must coincide with the State plan to insure simultaneous sounding of sirens. This is as agreed to during the post exercise meeting on March 15, 1984 and is appropriate to future exercises and actual events.

(2) Public Information

Contact was made with the EBS. Announcements were not broadcast. After the initial contact, all action to put Public Services Announcements on the air were simulated. Messages were received in hard copy from the State JPIC and were used to simulate public announcements and for press briefings.

g. Protective Actions

Protective actions were recommended by the State and after counsel, implemented by the County.

(1) Evacuation and Access Control

Traffic control points were established. Road blocking equipment was dispatched and set up along the side of the roadway at the points plotted on the map in the EOC. In each case personnel at the roadblocks knew the evacuation routes, relocation/congregate care location, and were able to communicate with the EOC and other traffic control points. According to the plan and discussion with the EOC staff there are sufficient resources to cover all traffic control points.

(2) Special Evacuation Problems

The plan lists two companies and drivers that will evacuate school children. Evacuation of the mobility impaired persons was simulated. The fire department is responsible for providing vehicles and personnel to evacuate mobility impaired persons. They maintain a list giving names, locations, and routes needed for this function.

(3) Implementation of Ingestion Pathway Protective Actions

This action was simulated. The EOC reviewed recommendations from the State and directed the simulated actions.

h. Radiological Exposure Control

Emergency worker exposure control was observed at traffic control points. Personnel were equipped with dosimeters but did not have record cards or TLD's nor, were they requested to provide readings to the EOC. They were unaware of maximum dose allowable. KI was available.

Deficiency

K.3.a. Demonstrate the ability to continuously monitor and control emergency worker exposure.

Recommendation

K.3.a. The County/City in conjunction with the State should follow the written radiological exposure control procedures.

i. Media Relations

The media program in Goodhue County is organized and structured. The Red Wing Mayor is the PIO. A room is designated for meeting with the media should they appear at the county.

j. Recovery and Reentry

Guidance from the State was received and discussed. Arrangements were made to secure the evacuated area with procedures developed for entry into evacuated areas for essential services. Recovery and reentry decisions were communicated to response organizations. Information was provided the public on safety precautions during recovery and reentry.

k. Scenario

The scenario covered major points for demonstration of capability. Simulation of many activities precluded indepth evaluation of capability. Greater EOC staff involvement could be initiated to discuss what could be expected upon reentering the evacuated area.

The scenario presented realism. There was a lack of information to the county from the State on the status of accident assessment; i.e. the field readings, stay time, etc.

3. Dakota County

a. Activation and Staffing

The call initiating activation of the EOC was received at

8:40 by the Sheriff's dispatcher located in Hastings. This location is manned on a 24 hour basis. Copies of the call lists used to activate the EOC staff, were given the evaluation team. Many of the emergency responders are located in the Government Center on their daily jobs; therefore, staffing of the EOC was completed, and it was operational at 9:10. All required organizations were represented.

b. Emergency Operations Management

The Dakota County Civil Defense Director, was effectively in charge of the EOC, holding periodic briefings and leading in roundtable discussions of events. The plan was available for reference as well as operating procedures or checklists. The message handling procedures were observed, using multi-copy forms eliminating the need to make photocopies for distribution. A backup system was used for receipt of messages from the JPIC due to failure of the datafax.

c. Facilities

The EOC operation room had the necessary amenities for conduct of operations including furniture, phones, space, and lighting. Extended operations could be supported in the County Government Building. The building has backup power through the use of a generator, though it was not demonstrated.

d. Communications

All communications systems, both primary and backup, for the EOC were in place. The radio system for backup to the State EOC, the licensee, Sheriff's Department (Emergency Medical Service and local school notification), and Fire Department (ambulances) was operationally checked against the Fire Department and Sheriff's Department frequencies only. Recommend operational check against all frequencies.

e. Dose Assessment and Protective Action Recommendations

This is not a function of the County. This action is carried out at the State level with recommendations made to the Counties.

f. Public Alerting and Instruction

(1) Public Alerting

Prompt action was taken by the EOC to activate PANS.

The sounding of sirens was simulated. A copy of the March test of the sirens will become a part of this report. Route alerting is done by Dakota County Sheriff's Department and the Hastings' Police Department. The routes were well known by those using them. Teams did drive routes required and then proceeded to traffic control points to man roadblocks.

(2) Public Information

The EBS releases were prepared by the State JPIC. No releases were prepared by Dakota County EOC. In addition to the EBS station indicated in the plan, the Sheriff's Department has the capability to give additional information to TV cable subscribers on a channel used for EBS. This channel can show maps, charts and printed news releases.

g. Protective Actions

(1) Evacuation and Access Control

All evacuation and access control activities were demonstrated or simulated that pertained to the area effected. The traffic access functions would be carried out through the use of Sheriff's Department vehicles augmented by other County Highway Department vehicles. Traffic control points were staffed for about two hours. Barricades were available to effectively place roadblocks. Personnel were aware of traffic flow problems and knew how to deal with them. Some of the staff were not aware of the location of relocation/congregate care facility.

(2) Special Evacuation Problems

There are enough school buses to evacuate school children if necessary. Drivers would be contacted by telephone through the Sheriff's Department. Evacuation of the mobility impaired persons via ambulances and emergency vehicles driven by fire department personnel. The Hastings' Fire Department and surrounding fire departments have a mutual aid system which would provide additional equipment and manpower to assist in this or any emergency. This mutual aid agreement is well structured and is routinely placed in use in response to actual emergencies. A list of persons needing assistance during evacuation is maintained with

the Health Department (a member of the EOC). All persons reside in homes as there are no institutions within the counties jurisdictions. Tow trucks were available on request through the EOC to move stranded vehicles. Despite the snowfall, evacuation routes and roads for route alerting were clear for traffic.

(3) Implementation of Ingestion Pathway Protective Actions

This action was simulated. The Dakota County EOC reviewed recommendations from the State and directed the simulated actions required.

h. Radiological Exposure Control

Emergency personnel (Route Alerting Teams and Traffic Control Teams) were not well informed on exposure control. Each emergency worker had dosimeters and record cards. They were not instructed to use the record cards or to report the readings to the EOC. They were not aware of maximum allowable dosages.

Deficiency

K.3.a. Demonstrate the ability to continuously monitor and control emergency worker exposure.

Recommendation

K.3.a. The county in conjunction with the State should follow the written radiological exposure control procedures.

i. Media Relations

There is a designated place for press briefings if necessary in the County Government Building. In accordance with the plan, inquiries were referred to the JPIC.

j. Recovery and Reentry

When simulated evacuation was ordered security measures were implemented by the Sheriff's Department and local Police Department. Policies for entry to evacuated areas to attend to farm animals was the responsibility of the agriculture extension agent. A list of all farms having the need for entry is maintained by the Agriculture Soil Conservation Service. The policy involves using other farmers from unaffected areas to assist in milking and



maintaining animals to prevent anyone from going over the recommended allowable stay time in effected areas.

Reentry information was promptly passed to all response organizations. The County EOC relies on the State to provide information to be released to the public concerning safety precautions, possible health effects, and availability of compensation for financial losses.

k. Scenario

The scenario was realistic and gave the County the opportunity to fully demonstrate it's capabilities. Future scenarios should have more input that would result in more information from the State to the counties regarding stay times, and analysis of raw data that was provided.

4. State of Wisconsin

This was a limited participation exercise for the State of Wisconsin. Full participation at the State level was demonstrated in a November 1, 1983 exercise. For this exercise personnel from the Department of Health and Social Services (DHSS) Radiation Protection Section and Division of Emergency Government (DEG) personnel were used to simulate involvement by other State agencies so that the counties could be fully exercised.

a. Activation and Staffing

This was not an exercise objective for the State of Wisconsin. To conserve time, field monitoring teams and the mobile laboratory were prepositioned.

b. Emergency Operations Management

Even though this was limited participation exercise with partial staffing, periodic briefings were held, status boards were posted and maintained and messages were logged and distribution made in accordance with the plan.

c. Facilities

The normal Emergency Operations areas were used during this exercise. The area has all the necessary amenities for conducting sustained 24 hour operations. Changes in Emergency classification were verified and posted. Maps

sectioned according to NUREG-0654 showing evacuation routes, traffic control points, radiological monitoring points and population by evacuation area were posted.

d. Communications

Commercial telephone, NAWAS, CDNATS, CDNARS, TIME system, State microwave telephone, and microcomputer were used during the exercise to communicate with Pierce, and Dunn Counties, the West Central Area EOC in Eau Claire, field monitoring teams, the JPIC in Minnesota, the utility and FEMA. All systems functioned well with the exception of the microcomputer to the JPIC. The system was repaired during the exercise. During the down time the alternate system was used without difficulty.

e. Dose Assessment and Protective Action Recommendations

(1) Dose Projection

Dose calculations were demonstrated using programmed computers. Information from the utility is input and the computer will make accurate projections on anticipated doses and other information requested.

(2) Protective Action Recommendation

Based on the output from the computer, Protective Action Guides can be quickly drafted. Conflicting messages (#28 & #30) were sent to Pierce County causing confusion that may have contributed to the lack of action by that County. Message #28 did not include sheltering sector Q from 5-10 miles.

f. Public Alerting and Instruction

(1) The Wisconsin State staff coordinated actions for public alerting between the State of Minnesota and Pierce County.

(2) Public instructions were drafted in the common Minnesota/Wisconsin JPIC in St. Paul based on information from the plant EOF. These messages were approved for simultaneous release in Wisconsin and Minnesota.

g. Protective Action

(1) Evacuation and Access Control

This is primarily a function of County governments. The State Highway Patrol would assist in traffic control.

(2) Special Evacuation Problems

This is not a State level function, however, State agencies are available to give aid to the Counties, as requested.

(3) Implementation of Ingestion Pathway Protective Action

This was not an exercise objective.

h. Radiological Exposure Control

This does not apply to the State EOC.

i. Media Relations

This function was carried out at the common JPIC in St. Paul. Information was prepared by the JPIC before being cleared for release by Wisconsin. This problem can be corrected by not rushing releases.

j. Recovery and Reentry

The relaxation of protective actions were made after evaluation of field monitoring team data and consideration of plant conditions. The relaxation of these protective actions was discussed with the State of Minnesota and NRC officials prior to their implementation through the Officer-In-Charge in the Wisconsin EOC. The reentry decisions were communicated promptly to the Counties.

k. Scenario

This scenario was written to insure coordination would occur between the State of Wisconsin and the State of Minnesota, and that information would flow to Pierce and Dunn County to enable them to respond to meet the needs and provide protection of the public in Pierce County.

l. Mobile Radiological Laboratory

FEMA Region V requested some modification of exercise

objectives to align them with the scenario. The Mobile Radiological lab provided communications for the field teams. Sample processing was not demonstrated.

m. Field Monitoring Teams

(1) Mobilization

Mobilization of the field monitoring teams was not observed. To conserve time they were prepositioned at Ellsworth, WI.

(2) Equipment

The monitoring teams were suitably equipped with tools and radiation detection and measuring equipment to make the necessary radiation analysis of conditions in the field. It was noted that the air pumps were last calibrated in October 1983. Charcoal filters were not dated. No extra batteries were included in the kits.

(3) Technical Operations

The field monitoring team was able to activate their instruments by putting the batteries in and making a battery check. They did not demonstrate the use of a check source to determine the accuracy of the instruments against a known source. A check source was not available. The instruments were properly used. Air measurements were made about chest high and ground measurements were made about 10 inches from the ground to determine if ground deposition had occurred and if noble gases were present. Air samples were also taken. Charcoal filters were used to demonstrate iodine sampling. There were no silver zeolite cartridges in the kit.

(4) Communications

Field communications were good. The team was in contact with the Mobile Lab in Ellsworth and other field teams. Radio contact was maintained throughout the exercise. There were "dead spots" where a repeater had to be used. The use of the repeater was successfully demonstrated.

(5) Exposure Control

The teams exposure control in general was good. The team was supplied with pocket dosimeters to measure exposure doses up to 100 Roentgens over three ranges, dosimeter charger, and record cards. They also had TLD's.

Deficiency

I.8. Demonstrate appropriate equipment and procedures for determining ambient radiation levels.

Recommendation

I.8. Insure field monitoring teams are fully equipped for "worst case" operation with backup batteries, test sources, and cartridges to do all required testing. Recommend this be demonstrated during the LCBWR exercise in June 1984.

5. Pierce County

a. Activation and Staffing

While some repositioning was apparent, the call list was utilized and the EOC was fully staffed within thirty minutes of receipt of the "Alert" message. A Sheriff's Deputy was dispatched to the EOF in accordance with the plan.

A complete shift change took place around noon. The second shift was briefed as a unit on the morning's events and then entered the EOC and discussed the situation with their individual counterparts. The shift change went smoothly and a continuity of operations was maintained.

b. Emergency Operations Management

The County Board Chairman is designated in the plan as the individual in charge. After the EOC was staffed, he announced the Emergency Government Director would be in charge of the operation under his personal supervision. The County Board Chairman remained throughout the first shift.

Briefings were held throughout the day ... specifically at 0910, 0935, 1118, 1230, 1320 (2 day time jump), 1350, 1420 and 1515. Everyone in the EOC would discuss their current



status at the briefing but at many times their attention was diverted by telephone calls or small discussions. Thus coordination could have been better. Briefings should include discussions of proposed actions and coordination. Each EOC staff member used the current plan as a checklist and operating procedures guide. Two different PAG messages (#28 & #30) were received in the County from the State. There was confusion in the EOC as to the nature of some of the PAG's. This was cleared up by telephone and read to the EOC staff. The status board was incorrect even after an attempt to correct it. (The status board was assumed to be correct and EOC staff advised to use it.)

c. Facilities

The EOC facility is very good. There is a separate area for communications and for PIO activities which provided a sound buffer. Although some people were smoking, the ventilation system was more than adequate to handle it. The facility provided a functional working space.

There were numerous maps and status boards within the EOC. Not all were utilized to their maximum extent, except for the board used to track the location of field crews (e.g. roadblocks & Sheriff's cars). Evacuation routes could have been plotted against the plume. The map showing the PAG's in force was incorrect and did not agree with either the status board nor the oral instructions.

d. Communications

Communication was demonstrated to State and local EOC's via both telephone and the "TIME" teletype system. Communications to area schools are routed through the respective town governments. Sheriff's Department personnel, and ambulance crews in the field can be reached by radio.

Communications to the PIO work area within the Minnesota EOC were by telephone or microcomputer. Neither of these systems proved timely or reliable during the exercise due to limited phone line availability and the malfunction of the microcomputer. There appears to be a need for a more efficient backup communications system for PIO activities. The inability or time consuming process to contact the JPIC was a contributing factor for the Pierce County EOC to disseminate instructional messages.

It is recommended that the communications system between the Pierce County EOC and the PIO work area in the Minnesota EOC be reviewed to insure that required coordination on news releases can be made in a timely fashion.

e. Dose Assessment and Protective Action Recommendation

(1) Dose Projection

This is a function of the State level of government. Projections are made via computer and passed to the Counties.

(2) Protective Actions

Protective Action Guides are sent from the State to the Counties where they are reviewed and implemented.

f. Public Alerting and Instruction

(1) Public Alerting

The initial message to the EBS was timed to the siren sounding. The PAG to shelter all sectors 0-2 miles was received at 1005 and the sounding of the sirens at 1015 was directed by the State EOC staff. The message itself should be revised to indicate what activities are necessary for adequate sheltering. In addition to these measures, Sheriff's Department cars were driven through the 5-10 mile radius for alerting.

(2) Public Instruction

Every message was coordinated with the JPIC. Because of the JPIC communication problem some EBS messages were delayed. Some of the EBS messages were vague, some information was incomplete, and some information never was formulated into an EBS message.

The order to evacuate sectors R and Q from 5-10 miles was received and acted upon within the EOC but did not get released through the EBS. Some information during the Recovery phase also did not get disseminated even though it was acted upon within the EOC. Sheriff's officers did route alerting a second time.

Deficiency

E.5. Demonstrate ability to formulate and distribute

appropriate instructions to the public, in a timely fashion.

Recommendation

E.5. Attention to detail is required to insure that contradicting information is not given to the public and that all notifications concerning alerting, sheltering and evacuation are given to the public in a timely fashion. It is recognized these functions have been demonstrated without complications during the three previous exercises. Still, it is the considered opinion of FEMA Region V that additional training for selected EOC staff is needed to improve current proficiency in monitoring and recording pertinent developments and in processes to inform the public. The nature of this deficiency mandates that this training be accomplished at the earliest possible time.

g. Protective Actions

(1) Evacuation and Access Control

Evacuation traffic and access control was demonstrated by the County Highway Department. Each site had one truck, with one barricade and driver. Radio communications were available to the County Highway Department in Ellsworth. Each person asked, said he was to block traffic on the road, but not to direct traffic flow. None knew the evacuation routes or the location of the congregate care/reception center. Crews were shifted as protective action areas changed. Roadblocks were established at points other than indicated in the plan. It is recommended that the plan be reviewed and amended to include all roadblocks the county deems necessary.

(2) Special Evacuation Problems

Systematic information on mobility impaired individuals was available in the EOC. Procedures for evacuation of these persons were not demonstrated since it was not an objective for this exercise. Twelve senior citizens volunteered to be evacuees so that the County could demonstrate this capability. The evacuees reported to the Bay City Village Hall at about 1030. The bus arrived about 1035. The bus seated 16 people and 2 wheelchairs and was equipped with a wheelchair lift.

He was familiar with the area and had been provided with an evacuation route directed away from the plume. A RACES operator provided communications in the Village Hall and while enroute by following in his own vehicle. The RACES operator provided communications to the Pierce County, WI and Goodhue Co., MN EOCs. The drive left Ellsworth at 1010 and arrived at Bay City at 1035. He received authorization by phone from the Office for Aging for evacuation at 1050. At that time, the RACES operator was also receiving a confirming message of the evacuation route. The bus was loaded between 1052 and 1102 when it departed. It followed the evacuation route correctly. Pierce County Sheriff's Deputies were stationed at those locations where the bus was to turn to insure the route was followed. The driver indicated he was going to the Menominee reception center.

(3) Implementation of Ingestion Pathway Protective Actions

Although this was not an exercise objective, information on the location of dairies and meat producing farms was available. Recommendations for protecting livestock were formulated, based on State recommendations and given to the PIOs for distribution. Protective actions for livestock were minimal since animals are currently on stored feed and well water at this time of year.

h. Radiological Exposure Control

County Highway personnel were issued 0-200 mr dosimeters prior to being dispatched to traffic control points. They had no previous training in the use of dosimeters. The dosimeters had been charged to zero prior to issue. Some dosimeters when checked had readings from 5 to 9 mr. Personnel did not have logs to record readings or information on maximum allowable dose. On one occasion (approximately 1225) they were requested by radio to report their current readings.

Deficiency

K.3.a. Demonstrate the ability to continuously monitor and control emergency worker exposure.

Recommendation

K.3.a. The County should insure emergency workers are instructed in the use of dosimeters and permanent record devices as required by the county radiological defense plan, Tab E.

i. Media Relations

A representative from Pierce County was dispatched to the JPIC. Press briefings were held in the alternate Pierce County Media Room at 0950, 1013, 1125, 1230, 1447 and 1610. Media was present at some of the briefings, all material discussed was coordinated through the JPIC. No hard copy was given out at the county media center. Hard copy would be helpful to reporters and would eliminate possible errors.

The content of some of the messages was vague (e.g. evacuate NW of the plant out to 5 miles). Some data did not get disseminated at all (e.g. dairy farmers would be allowed in during recovery).

A map was brought to the Media room and was consulted once, to locate Highway 10. Additional visual aids such as colored overlays would prove helpful.

j. Recovery and Reentry

Very little information was disseminated over EBS concerning recovery activities, although the information was acted upon by EOC staff. Dairy farmer's names and dosimeters for their use were sent to the roadblocks. There was no simulation of an announcement on EBS that they could enter.

The final EBS message allowed unrestricted and unqualified reentry into all Wisconsin areas.

k. Scenario

The scenario provided sufficient activity for the county to demonstrate their capabilities.

6. Dunn County

a. Activation and Staffing

The EOC was fully staffed, status boards were up to date,



maps and charts were displayed. At the appropriate time in the exercise the EOC staff contacted those persons required to operate the Relocation/Congregate Care facility. These people were in place in ample time and prepared to receive evacuees from Bay City.

b. Relocation/Congregate Care Facility

(1) Activation and Staffing

The Reception Center, which was located at the Dunn County Recreation Park, was adequately staffed with two registered nurses, a radiological monitoring team, registrars, and building maintenance personnel. The Center was fully staffed within a period of twenty-five minutes. The participants stated they had received initial telephone calls from their respective agencies advising them of the incident at the plant and received instructions to remain near their telephones and be home to receive further instructions. They received subsequent calls instructing them to proceed to the park to activate the reception center for possible receipt of evacuees.

The participants were aware of their respective responsibilities and were regularly kept abreast of situations via telephone from the Dunn County EOC and the reception center manager.

The Dunn County EOC initiated a time compression of two days to reflect that the initial staffing in the Reception Center had changed.

(2) Registration and Monitoring

There was a demonstration evacuation of volunteers via bus from a Senior Citizens Center in Bay City, WI. A Pierce County transportation bus, driven by a volunteer driver and equipped with a wheelchair lift, was dispatched from Ellsworth to accomplish the transport, which included a mobility impaired volunteer in a wheelchair. Upon arrival at the Reception Center the group was monitored for contamination inside a segregated section of the entrance way to the Reception Center by the radiological monitoring team. After being monitored evacuees were routed to a reception desk. The three receptionists completed a multi-copy shelter form on each evacuee. One copy of the multi-copy form was given to the evacuee to carry to the

congregate care shelter, one copy to the Department of Human Services, one copy to the Red Cross, Disaster Welfare Inquiry team and the fourth was held for filing reference.

The State Rad Health team had two geiger counters with speakers to do the whole body scans and one Eberline Gamma Scintillation probe with a sodium iodine crystal to check the thyroids.

(3) Congregate Care

The Reception Center and the proposed sheltering locations at the University of Wisconsin and the National Guard Armory, both in Menomonee, is well beyond the 10-mile EPZ. Although there was no sheltering demonstrated during this exercise the Reception Center staff was aware of the locations and planned use of the Student Center location, housing and feeding at the university and planned means of transportation from the Reception Center via school buses and private automobiles to the care center(s).

The nurses at the center had equipment for emergency treatment such as blood pressure cups, a stethoscope, thermometers, ammonia nitrate spansules, and an assortment of slings and bandages.

(4) Scenario

The scenario provided activity to test the capability of Dunn County to staff and operate Reception Centers. The involvement of evacuees, a radiological monitoring team, nurses, etc. provided the realism necessary to accomplish the effort.

Minnesota

(State)

Minnesota

(Community)

Exercise Prairie Island Nuclear Power Plant  
Summary Listing of Deficiencies

March 13, 1984  
(Date)

A. Deficiencies Affecting Public Health & Safety

NUREG  
Item

Narrative Statement  
of Deficiency

Corrective Action  
Proposed

Scheduled  
Date

Actual  
Date

None

Minnesota  
(State)

Exercise Prairie Island Nuclear Power Plant  
Summary Listing of Deficiencies

March 13, 1984  
(Date)

Minnesota  
(Community)

B. Other Deficiencies

NUREG  
Item

Narrative Statement  
of Deficiency

Corrective Action  
Proposed

Scheduled  
Date

Actual  
Date

None

(Minnesota)

Goodhue County/City of Red Wing  
(State)

Exercise Prairie Island Nuclear Power Plant  
Summary Listing of Deficiencies

March 13, 1984  
(Date)

Goodhue County/City of Red Wing  
(Community)

A. Deficiencies Affecting Public Health & Safety

NUREG  
Item

Narrative Statement  
of Deficiency

Corrective Action  
Proposed

Scheduled  
Date

Actual  
Date

None

(Minnesota)

Goodhue County/City of Red Wing  
(State)

Exercise Prairie Island Nuclear Power Plant  
Summary Listing of Deficiencies

March 13, 1984

(Date)

Goodhue County/City of Red Wing  
(Community)

B. Other Deficiencies

<u>NUREG Item</u>	<u>Narrative Statement of Deficiency</u>	<u>Corrective Action Proposed</u>	<u>Scheduled Date</u>	<u>Actual Date</u>
E.5.	EOC did not take appropriate measures to alert the public within the 10 mile EPZ when directed by the State, but did so within fifteen minute time period in accordance with local plan.			
K.3.a.	Did not establish procedures to continuously monitor and control emergency worker exposure.			



Dakota County, MN  
(State)

Exercise Prairie Island Nuclear Power Plant  
Summary Listing of Deficiencies

March 13, 1984  
(Date)

Dakota County  
(Community)

A. Deficiencies Affecting Public Health & Safety

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

Dakota County, *mn*  
(State)

Exercise Prairie Island Nuclear Power Plant  
Summary Listing of Deficiencies

March 13, 1984  
(Date)

Dakota County  
(Community)

B. Other Deficiencies

<u>NUREG Item</u>	<u>Narrative Statement of Deficiency</u>	<u>Corrective Action Proposed</u>	<u>Scheduled Date</u>	<u>Actual Date</u>
K.3.a	Did not establish procedures to continuously monitor and control emergency worker exposure.			

Wisconsin  
(State)

Exercise Prairie Island Nuclear Power Plant  
Summary Listing of Deficiencies

March 13, 1984  
(Date)

Wisconsin  
(Community)

A. Deficiencies Affecting Public Health & Safety

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

Wisconsin  
(State)

Exercise Prairie Island Nuclear Power Plant  
Summary Listing of Deficiencies

March 13, 1984  
(Date)

Wisconsin  
(Community)

B. Other Deficiencies

<u>NUREG</u> <u>Item</u>	<u>Narrative Statement</u> <u>of Deficiency</u>	<u>Corrective Action</u> <u>Proposed</u>	<u>Scheduled</u> <u>Date</u>	<u>Actual</u> <u>Date</u>
I.8.	Field Monitoring Team was dispatched with charcoal filters that were packaged but had no date, radiological equipment with no backup batteries, no test sample and no silver zeolite cartridges for iodine sampling.			

Pierce County, WI  
(State)

Exercise Prairie Island Nuclear Power Plant  
Summary Listing of Deficiencies

March 13, 1984  
(Date)

Pierce County  
(Community)

A. Deficiencies Affecting Public Health & Safety

<u>NUREG</u> <u>Item</u>	<u>Narrative Statement</u> <u>of Deficiency</u>	<u>Corrective Action</u> <u>Proposed</u>	<u>Scheduled</u> <u>Date</u>	<u>Actual</u> <u>Date</u>
E.5.	The order to evacuate sectors Q & R from 5-10 miles was received and acted upon in the EOC but the information was never released to the public via EBS.			

Pierce County, WI  
(State)

Exercise Prairie Island Nuclear Power Plant  
Summary Listing of Deficiencies

March 13, 1984  
(Date)

Pierce County  
(Community)

**B. Other Deficiencies**

NUREG  
Item

Narrative Statement  
of Deficiency

Corrective Action  
Proposed

Scheduled  
Date

Actual  
Date

K.3.a.

Did not establish procedures  
to continuously monitor and  
control emergency worker exposure.



Dunn County, WI  
(State)

Exercise Prairie Island Nuclear Power Plant  
Summary Listing of Deficiencies

March 13, 1984  
(Date)

Dunn County  
(Community)

A. Deficiencies Affecting Public Health & Safety

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

Dunn County, WI  
(State)

Exercise Prairie Island Nuclear Power Plant  
Summary Listing of Deficiencies

March 13, 1984  
(Date)

Dunn County  
(Community)

B. Other Deficiencies

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

DIVISION OF EMERGENCY SERVICES  
85 - STATE CAPITOL  
1612/296-2233



STATE OF MINNESOTA  
DEPARTMENT OF PUBLIC SAFETY  
SAINT PAUL 55155

March 15, 1984

Mr. Rick Anthony, Team Chief  
Prairie Island Exercise Evaluation Team  
FEMA Region V  
Technological Hazards Branch  
Federal Government Center  
Battle Creek, Michigan 49016

Subject: Testing of the Minnesota portion of the Prairie Island  
Nuclear Generating Plant Emergency Planning Zone (EPZ)  
Public Alert and Notification System (PANS)

Dear Mr. Anthony:

This is to confirm that the Minnesota Prairie Island EPZ counties of Dakota and Goodhue and the City of Red Wing sirens are tested monthly on the first Wednesday at 1:00 p.m. The National Oceanic and Atmospheric Administration (NOAA) Alert radios are also tested monthly on the first Wednesday at 1:00 p.m.

An exemption from sounding the sirens during the Prairie Island Exercise held March 13, 1984 was given based on these monthly tests.

The results of the last siren test held March 7, 1984 at 1:00 p.m. are as follows:

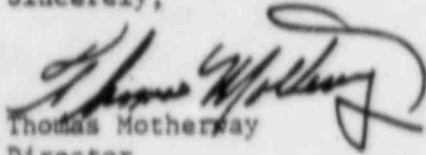
1. Dakota County Warning Point (Dakota County Sheriff) reported a successful test and all sirens are operational.
2. Goodhue County Warning Point (Goodhue County Sheriff) reported a successful test and all sirens are operational.
3. City of Red Wing (Red Wing Fire Department activates sirens) reported a successful test and all sirens are operational.

The NOAA Tone Alert radios were also activated March 7, 1984, at 1:00 p.m. All holders of these radios are responsible to report malfunctions and replacement radios are available.

Mr. Rick Anthony  
March 15, 1984  
Page two

Additional information about this system is contained in the Prairie  
Island Area Public Alert and Notification System (PANS) Implementing  
Procedures and Supplementary Documents.

Sincerely,



Thomas Motherway  
Director

TM:sp

cc: William Frederick, Sr. Consultant  
NSP-ERAD

PIERCE COUNTY WISCONSIN SIREN TEST RESULTS TO BE  
PROVIDED LATER