

DMB

October 21, 1982

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

Northern States Power Company
ATTN: Mr. Dennis E. Gilberts
Senior Vice President
Power Supply
414 Nicollet Mall
Minneapolis, MN 55401

Gentlemen:

We have received the attached Federal Emergency Management Agency (FEMA) letter dated May 26, 1982, and associated final exercise evaluations on the offsite emergency preparedness exercises conducted on December 8, 1981, for the State of Minnesota and Goodhue and Dakota Counties. Also included is an evaluation report on State of Wisconsin and Pierce County, Wisconsin, both of which participated on a small scale basis. These final exercise evaluations list some recommendations (which are referred to in the FEMA letter and attachments as deficiencies) regarding the off-site emergency response plans for the area around the Prairie Island Nuclear Generating Plant.

We fully recognize that the recommendations to be implemented may involve actions by governmental agencies which are not under your control. Nonetheless, we expect the subject of offsite preparedness for the area around the Prairie Island facility to be addressed by you as well as others.

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

Sincerely,

for C. J. Paperiello
J. A. Hind, Director
Division of Emergency Preparedness
and Operational Support

Enclosures: As stated

cc w/encls:

E. L. Watzl, Plant Manager
DMB/Document Control Desk (RIDS)
Resident Inspector, RIII Prairie
Island
Resident Inspector, RIII Monticello
John W. Ferman, Ph.D.,
Nuclear Engineer, MPCA

cc w/o encls:

Mr. E. N. Hakala, Deputy
Regional Director
FEMA, Region V

RIII *Joe*
Patterson/sv
10/16/82

RIII *WHA*
Axelson

RIII *CJP*
Paperiello
10/19/82

RIII *Keyes*
Keyes
10/19/82

RIII *CJH*
Hind
for 10/20/82



Federal Emergency Management Agency

Washington, D.C. 20472

26 MAY 1982

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

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

SUBJECT: Evaluation of Offsite Emergency Preparedness for
the Prairie Island Nuclear Generating Plant Exercise

Attached is a copy of the Final Report prepared by the Federal Emergency Management Agency, Region V, on the December 8, 1981, offsite exercise at the Prairie Island Nuclear Generating Plant. The States of Minnesota and Wisconsin were provided copies of the "execrit composites" after the exercise so remedial action could be taken on the deficiencies which surfaced during the exercise. Both States responded with corrective actions. However, the exercise report is now in final form and has been transmitted to Minnesota and Wisconsin for their review.

Region V indicates that the governments in the vicinity of the Prairie Island Nuclear Generating Plant have an adequate offsite capability to protect the public in the event of a radiological emergency, except for the significant deficiencies currently being addressed. Both States have been requested to provide a statement of corrective action taken or a schedule for corrective action. Contact Vernon E. Adler, Chief, Technological Hazards Division, at 287-0200 for additional information.

Attachment

JUN 28 1982

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APR 27 1982

Joseph LaFleur, Administrator
Wisconsin Division of Emergency
Government
4802 Sheboygan Avenue
Madison, Wisconsin 53702

Dear Mr. LaFleur:

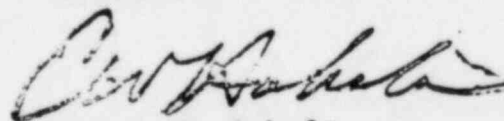
Previously you were provided "Exercrit Composites" with a summary of findings pertaining to the Prairie Island site-specific off-site exercise of December 8, 1981. This format has been superseded by a new and different reporting format.

To better facilitate the dissemination of findings, the evaluation of the exercise has been rewritten in the new format at the request of our National Office. Enclosed is the "Final Report" for the Prairie Island site-specific off-site exercise of December 8, 1981.

We received your letter of corrective actions pertaining to the Prairie Island deficiencies. We need additional information to determine the level of adequacy in protecting the public.

Please provide the following information for each of the significant deficiencies listed in Part IV of the enclosure: A statement of corrective action taken (State/County) for each deficiency and the date the action was completed; or, the projected date for completion of corrective action for each deficiency.

Sincerely yours,



Edwin W. Hakala
Acting Chief
Technological Hazards Branch

Enclosure

APR 27 1982

Mr. Kenneth Parsch
Acting Director
Division of Emergency Services
Department of Public Safety
B-5 State Capitol
St. Paul, Minnesota 55155

Dear Mr. Parsch:


Previously you were provided "Exercrit Composites" with a summary of findings pertaining to the Prairie Island site-specific off-site exercise of December 8, 1981. This format has been superseded by a new and different reporting format.

To better facilitate the dissemination of findings, the evaluation of the exercise has been rewritten in the new format at the request of our National Office. Enclosed is the "Final Report" for the Prairie Island site-specific off-site exercise of December 8, 1981.

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Sincerely yours,


Edwin W. Hakala
Acting Chief
Technological Hazards Branch

Enclosure

PART I
FINAL REPORT

Prairie Island Nuclear Generating Plant
Joint Emergency Exercise
December 8, 1981

Involving:

STATE OF MINNESOTA
(Full Scale)

STATE OF WISCONSIN
(Small Scale)

EXERCISE PARTICIPANTS

NUMBER OF EVALUATORS

| | | |
|--------------------|-----------|------------|
| State of Minnesota | 6 Federal | 3 Contract |
| Goodhue County | 6 Federal | 2 Contract |
| Dakota County | 1 Federal | - |
| | | |
| State of Wisconsin | 1 Federal | 1 Contract |
| Pierce County | 5 Federal | 1 Contract |

April 1982

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

PART II

EXECUTIVE SUMMARY

This report contains an evaluation of the emergency radiological preparedness of governments in the vicinity of the Prairie Island Nuclear Generating Plant, as demonstrated during the exercise held December 8, 1981. This was the second exercise for the site; the first was held in October of 1980. Prairie Island is located on the Mississippi River near Red Wing, Minnesota, about 40 miles southeast of Minneapolis-St. Paul. The States of Minnesota and Wisconsin participated in the exercise, as did Goodhue County (in conjunction with the City of Red Wing) and Dakota County in Minnesota and Pierce County in Wisconsin. Wisconsin chose to limit its participation in the exercise because the State had already tested its full capabilities earlier in the year. All Wisconsin activities, therefore, were directed from the Area Emergency Operations Center (EOC) in Eau Claire, Wisconsin instead of the central EOC in Madison. Although participation officially was limited, the Area EOC was fully staffed in order to train emergency response personnel. Dakota County participated in an exercise for the first time this year, and its participation also was limited. Only a small part of Dakota County is included in the ten mile Emergency Planning Zone (EPZ) and all of the Dakota County portion is at least five miles from the plant.

Minnesota and Wisconsin each prepared a scenario for the exercise. The Minnesota scenario only included simulated events at the power plant; these were the same in both scenarios. The Wisconsin scenario also included simulated events not related to plant conditions and detail on actions to be taken by the State and County. According to the scenario, an alert was to be declared at about 8:30 AM; the exercise was to escalate to the General Emergency classification by midday and then slowly de-escalate until the exercise ended about 4:00 PM. Trouble developed early in the onsite portion of the exercise, and, as a result, inconsistent data and recommendations were communicated to the off-site agencies and events differed from those projected by the scenarios, at least in the morning. In general, the off-site agencies dealt well with the problems caused by this. (See the evaluation of the on-site portion of the exercise, as prepared by the Nuclear Regulatory Commission, for a description of what occurred at the plant).

Federal evaluators were present in all five EOCs, and at other locations in Minnesota and Wisconsin: the Joint Press Information Center (JPIC);

the Minnesota communications van; Dunn County, Wisconsin, where evacuation and evacuee registration procedures were being demonstrated; in the field with a radiological monitoring team; and at local hospitals and relocation centers. Observers from each location met together after the exercise to prepare a composite evaluation that served as the basis for the findings presented in this report.

Conclusion

It is believed that the governments in the vicinity of the Prairie Island Nuclear Generating Plant have an adequate capability to protect the public in the event of a radiological emergency, with the exceptions noted below at pages 68 through 73.

PART III

NARRATIVE DESCRIPTIONSMINNESOTAStateSUMMARY I -- Emergency Operations Facilities and Resources (Space, internal communications, displays, security)

All facilities and resources needed to coordinate an emergency response were adequate in the Minnesota State Emergency Operations Center (EOC). There was some confusion about how evacuation decisions made by one state affected the residents of the other state. Interstate communications concerning evacuation decision need further coordination and study by both states.

Clc Adequacy of specific State or local resources needed to support a Federal response

State resources are more than adequate.

Flb Adequacy of communications systems (primary and backup) with contiguous State/local governments within the EPZs

Evaluators observed direct dial telephones, dedicated telephone lines to the County EOCs, and radio backup. A mobile communications van was also used to communicate directly with the field monitoring teams and supplement communications with the State and County EOCs and the utility. There was some confusion about how evacuation decisions made by one state affected the residents of the other state. Interstate communications concerning evacuation decisions need further coordination and study by both states.

Flc Adequacy of communications, as appropriate, with Federal emergency response organizations

Communications with Federal emergency response organizations were more than adequate.

Fld Adequacy of communications systems between the nuclear facility and near-site EOF, and State and for local EOCs

Evaluators observed direct dial telephones, dedicated telephone lines to County EOCs, and radio backup in the

State EOC. The mobile communications van can place State owned equipment at the utility to be used for communications. This capability was not demonstrated during the exercise. Communications between the JPIC and the EOC appeared to be minimal. This could result in press releases containing misinformation.

Adequacy of EOC working space and amenities.

EOC working space and amenities were more than adequate to meet the needs posed by this exercise.

Adequacy of EOC internal communications, including equipment, displays, and message-handling procedures.

A good layout of displays, the round table configuration, and periodic briefings facilitated internal communications.

Adequacy of EOC security measures.

Capitol security personnel handled this job efficiently, with only one entrance/exit to EOC.

H3 Overall adequacy of the emergency operating center (EOC)

The State EOC facility is more than adequate to handle an emergency of this magnitude.

J10a Adequate maps displayed showing evacuation routes, sampling points, relocation centers and shelter areas

All displays were large and easily read.

J10b Adequate maps displayed showing population distribution near nuclear facility by evacuation areas

Population distribution maps clearly display population by sector and ring.

SUMMARY II -- Alerting and Mobilization of Officials and Staff (Staffing, 24-hour capability, alerting timeliness)

The alerting and mobilization of officials and staff was completed in Minnesota in a thorough manner during the exercise, but minor deficiencies were noted that could be

improved. A second person could be assigned to help with the initial notification of response agencies. For example, the activation procedures for several agencies should be reviewed to see if improvements are necessary. The State should send a representative to the EOF.

Ale Capability for 24-hour initial emergency response and manning of communications

Initial calls are routed to the Capitol Security Office, which is manned around the clock.

A4 Capability for 24-hour continuous emergency response operations

Not observed.

E2 Adequacy of procedures used for alerting, notifying and mobilizing emergency response personnel

Adequately performed.

E1 Adequacy of procedures used for notification of emergency response organizations

The initial duty officer completed the notification of 13 organizations in 35 minutes. This time could be shortened by assigning at least one more person to this task. This is important because the duty officer was attempting to resolve inconsistencies in meteorological data provided by the utility at the same time.

C2a If appropriate, timely dispatch of a representative to licensees nearsite EOF

Not observed.

F1a Demonstration of an emergency response communications network with prompt activation

Telephone communications between the EOC and response organizations and dedicated lines to the County EOC and the utility were promptly established.

- F1e Adequacy of communications used for alerting and activating emergency response personnel
- Communications were promptly handled, displaying an adequate ability to handle this function.
- F2 Capability to communicate with fixed and mobile medical support facilities
- Not observed.
- H4 Demonstration of timely and efficient activation and staffing of EOCs and other facilities
- Demonstrated to be proficient. Representatives from the State Police and the Department of Agriculture were late in arriving at the EOC and the Fire and Rescue representative failed to respond. The activation procedures for these agencies should be reviewed to see if improvements are necessary. The communications van was on the scene and operational in a timely manner. The JPIC was activated and staffed when the status of the plant reached the "ALERT" stage.

SUMMARY III — Emergency Operations Management (Organization, control, leadership, support by officials, decision making)

During the exercise, emergency operations management in the Minnesota State EOC was efficient despite misinformation concerning radiological and meteorological data received from the utility. Organization control, leadership, and support by officials were sufficient throughout entire exercise. The Governor, his aide, and the Commissioner of Health participated. They were in evidence throughout the entire exercise. Interstate coordination relative decisions concerning evacuation must be improved.

- Ala Evidence that specific organizations have been adequately established as part of overall response
- The response organizations were well organized.
- Ald Demonstration that a specific individual, by title, was effectively in charge of emergency response
- The Acting Head of the Division of Emergency Services was in clear control.
- A2a Demonstration that primary and support functions and responsibilities have been assigned to specific organizational elements
- Responsibilities have been adequately assigned with one exception: The Departments of Health and Agriculture need to clarify their responsibilities for decision making and implementation of procedures relative to sheltering and feeding of livestock.
- Cl a Evidence that a specific person has been authorized to request Federal assistance (State only)
- An individual in the Health Department was responsible for recommending a request for Federal assistance. There was some confusion as to which person should make the request. Although this confusion was resolved quickly, the State should evaluate whether this is a problem in training or a fault in their plans.
- D3 An emergency classification system was effectively used and was consistent with that of the utility
- The emergency classification system described in NUREG-0654 was effectively used and was consistent with that of the utility.
- D4 Adequate written procedures are used for emergency actions consistent with facility recommendations and local offsite conditions
- Emergency actions by the State were consistent with the facility's recommendations and the simulated releases of

radioactivity from the plant. Confusion arose because the radiological and meteorological data provided by the utility were not consistent with emergency classifications established by the utility. State EOC personnel dealt effectively with this problem.

Demonstration of effective coordination between emergency response director and staff, through oral briefings, staff meetings, etc.

Timely briefings were held throughout the exercise, with full staff participation.

Adequacy of support and/or participation by elected officials

The Governor and his aide, along with the Commissioner of Health, participated during the exercise. The Governor's aide was available throughout the exercise. There is a definite need for initiative to communicate with the officials in Wisconsin to coordinate timely releases of information which affect the populace in the vicinity of the nuclear power plant.

SUMMARY IV -- Public Alerting and Notification (Means of notification - sirens, vehicles, or other systems)

The initial alerting of the public in Minnesota was not observed at the State level. Follow-up instructions to the public were given to the press at periodic briefings in the JPIC. It is critical that all press releases be coordinated with the utility. The utility was making releases from its headquarters that were not made at the JPIC.

E5

Evidence of a reliable system for dissemination to the public of appropriate information received from the licensee, e.g., EBS

Not observed.

E6 Adequacy of means used for notification and prompt instruction to the public in the plume exposure pathway

Periodic briefings were given in the JPIC with clear instructions for the public. It is critical that all releases be coordinated with the utility.

E7 Effective use of instructional messages for the public in affected areas

Adequate messages were given to the media at the JPIC. Press releases could have been improved by including more detail on what was happening at the power plant, the emergency classification system used, the rationale behind the protective actions recommendations by the governments, and how the bedridden or physically impaired were to be evacuated. Maps and charts used to illustrate the briefings were well done; it is recommended that maps showing relocation centers also be available to the press.

J10c Adequacy of means used for notifying all segments of transient and resident population

Not observed.

SUMMARY V -- Public and Media Relations (Publications, press facilities, media briefings, release coordination)

The information released to the media at the JPIC in St. Paul, Minnesota was adequate, but more detail could have been included. The multiplicity of press centers contributes to a great possibility of confusion, misinformation, and rumors, particularly when coordination between the press centers is weak. Information was provided to the media at NSP Headquarters that was not provided at the JPIC. It is strongly recommended that Minnesota, Wisconsin, and the licensee agree on a single press center, staffed by

spokespersons for the states, the counties, and the utility, and located closer to the Prairie Island plant than the present facility.

G1 Evidence of periodic dissemination of information to the public, such as annual publications, etc.

Adequate information was released to the public.

G2 Evidence of a public information program for permanent and transient population in the plume EPZ, such as posted notices, etc.

Brochures are provided to the public. It is not clear how the transient population in parks and hotels would be notified.

G3a Appropriate points of contact for the media have been designated

There are too many contact points. Information was given to the press at the JPIC, Northern States Power Headquarters, and at various other points in both States. This adds to confusion and could result in misinformation and rumors. Coordination between the facilities was not adequately demonstrated.

Adequacy of joint media facility, where appropriate.

The JPIC facility is adequate for its purpose, but more phones need to be provided for the press.

G4a A media spokesperson has been designated who has access to all necessary information

Both states had PIOs who did an adequate job and had access to all necessary information.

G4b Adequacy of arrangements for exchange of information among spokespersons

Very weak. Information was provided to the media at NSP Headquarters that was not provided at the JPIC, resulting in confusion. Coordination between the States and the utility was minimal.

G4c

Adequacy of coordinated arrangements for rumor control measures

Not observed.

SUMMARY VI -- Accident Assessment (Staff and Field Operations, Monitoring, Equipments Technical Calculations, Use of PAGs).

The accident assessment function performed at the State level demonstrated adequate capabilities in staffing, technical calculations, and the use of PAGs in the State EOC and in the mobile communications van. The development of on-line receipt of plant data would improve the State capability in issuing more timely dose assessment.

dose assessment.

H7

Adequacy of offsite radiological monitoring equipment

The field team was adequately equipped with radiation surveillance equipment, protective clothing, and communications equipment. Personnel monitoring dosimeters were available to team members.

H12

An adequate central point has been established for receipt and analysis of field monitoring data and sample media

The State EOC dose assessment group is the central point for receipt of field monitoring data. Samples from several sampling points were left at the "hot line" for pick-up by helicopter to be flown to the laboratory for analysis. The team dropped off samples from the first few sampling points on the their way to the fourth sampling point.

I7

Adequacy of capability and resources for field monitoring within the plume EPZ

The team had a motor-driven air sampler which operated off the car battery. Charcoal fillers and silver zeolite filters were on hand for trapping radioactivity. A Geiger-

Mueller counter was used to measure the activity on the filter. In addition, the Geiger-Mueller counter and an ion chamber instrument were on hand for field monitoring.

I 8

Adequate capability to make a rapid assessment of magnitude and location of liquid or gaseous radiological hazards

The State demonstrated adequate capability for making field assessments rapidly. Instructions are received via radio from the State EOC so that the team can be directed regarding points to be sampled and the type of information needed.

I 9

Capability for measurement of radioiodine concentrations in plume EPZ under field conditions to 10^{-7} (state only)

Capability exists to collect air samples on silver zeolite and measure the amount of radioactivity with a Geiger-Mueller counter. Capability to relate the measurement to the 10^{-7} $\mu\text{Ci/cc}$ lower limit for I^{131} was not demonstrated in the field. This should be done in the future.

I 10

Capability for relating measured parameters to dose rates and estimated integrated doses (state only)

Although the State has the capability of relating measured parameters and reported field data to integrated doses, this was not timely because of inaccurate data being reported by the utility. (Refer to Item J.10.m).

I 11

Capability for locating and tracking air-borne radioactive plume with aid of Federal and/or State resources (state only)

State field teams were available to make plume measurements. The State also notified the Federal Radiological Monitoring Assessment Program to request assistance in this area. The frequent wind direction changes which occurred as a result of the scenario made it difficult for the team to effectively track the plume.

J10m Capability to recommend protective action, based on PAGs, in plume EPZ (state only)

The recommendations for emergency teams to take KI and to shelter animals were accurate based on initial information received from the plant. It was later determined there was no release of iodine as reported by the plant. The State should have on-line computer access to utility data for more rapid independent dose assessment.

C3 Evidence of availability and capability of radiological laboratories (state only)

Not observed.

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

State actions to protect the public were adequately demonstrated, although deficiencies were found in the lack of heating and electricity in the relocation center and the fact that radiological monitoring apparently is to be conducted outside even in inclement weather. An alternate site for relocating evacuees is recommended.

J2 Coordination with utility for movement of onsite individuals to off site locations

This activity was not observed.

J9 Capability for implementation of protective measures

This activity was not observed.

J10d Adequacy of methods used for protecting mobility impaired persons, including institutionally confined

This activity was not observed.

J10g Adequacy of methods used for implementing relocation of populace

This activity was not observed.

J10k

Adequacy of organizations identification of and means for dealing with potential impediments to evacuation

Law enforcement and transportation officials at the State EOC were noted changing evacuation routes as wind conditions changed.

J11

Adequacy of protective measures in ingestion EPZ, including dairy facilities, food processing plants, etc. (State only)

Maps were available showing all dairy plants in the 50-mile ingestion pathway EPZ. Criteria were available for feeding and sheltering of animals and were followed during the exercise.

J12

Adequacy of registration and monitoring of evacuees in relocation centers

Registration and monitoring of evacuees in the relocation center were adequately demonstrated. Deficiencies were a lack of heating and electricity in the building utilized and that radiological monitoring apparently is to be conducted outside in inclement weather. An alternate site should be selected.

J10h

/dequate relocation centers have been established at least 5 miles and preferably 10 miles outside the plume EPZ

The relocation center was adequately located outside the 10 mile EPZ.

SUMMARY VIII --

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

State health and medical capabilities were not demonstrated as part of this exercise. The State dose assessment group has established exposure control criteria adequate for timely decision-making. Field units proved to be more than adequate for the role defined for them.

- J10e Adequacy of provisions for use of KI for emergency workers and institutional persons in plume EPZ
Potassium Iodide (KI) was carried by State field monitoring teams for distribution to all emergency workers. The State decided not to provide KI to institutionalized persons.
- J10f Adequacy of methods used by State Health Department in decisions to administer KI to central population (State only)
The State Health Department decided not to distribute KI to the general population.
- J10j Adequacy of control of access to evacuated areas
State and County personnel were stationed at designated access control points.
- K3a Adequacy of a 24 hour a day capability to determine dose received by emergency workers
Not observed.
- K3b Demonstration of adequate and frequent emergency worker dosimeter readings and maintenance of dosage records
Readings from pocket dosimeters were radioed to State EOC on demand and emergency workers were shifted accordingly.
- K4 Evidence that an adequate decision chain has been established to authorize exposure for emergency workers in excess of PAGs
The State EOC dose assessment group has a standard operating procedure which provided criteria for authorizing exposure in excess of PAGs for emergency workers. It is suggested that future exercises include more serious exposure so that this activity can be tested more rigorously.
- K5a Evidence that appropriate action levels have been specified for determining need for decontamination
RAD Health teams were set up to monitor evacuees upon entering the area of reception centers.

K5b Adequacy of measures for decontamination of emergency personnel, supplies, and equipment, and for waste disposal

Locations were designated for all emergency workers to pass through when they were recalled from the field in order to decontaminate them.

L1 Adequate capability demonstrated by local and/or backup hospital and medical services for handling personnel

Not observed.

L4 Adequate capability demonstrated for transportation of radiological accident victims to medical support facilities

Not observed.

M4 Capability for periodic estimation of total population exposure (State only)

The State has capability for periodic estimation of total population exposure, but it was difficult to demonstrate during this exercise because of inaccurate information from the utility.

SUMMARY IX -- Recovery and Reentry Operations

Reentry of evacuees was initiated prematurely during the alert stage of the de-escalation. Verification of the decision to reenter was not adequate. It is recommended that personnel drill this activity so that its effective implementation can be demonstrated in the future.

M3 Adequacy of established means for informing response organizations that recovery and reentry can be initiated (State only)

Reentry of evacuees was initiated prematurely during the alert stage of the emergency. Verification of the decision to reenter was not adequate.

M1 Adequacy of procedures demonstrated for reentry and relaxation of protective measures allowing reentry
 Not observed.

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

The exercise experience was relevant to all State officials who were involved and the scenario presented a good test of the emergency operation capability of the State.

N1b Adequacy of scenario to test capability to mobilize State and local personnel and resources

The scenario adequately tested the State's ability to mobilize its resources and personnel.

N1a Adequacy of exercise to test integrated Capabilities and major portions of the basic existing response elements in affected organizations

Capability and organizational functions were exercised and shown to be more than adequate to perform the job.

Benefit of exercise to participants

All participants benefited from the exercise. In particular, the exercise familiarized field monitoring teams with sampling points they apparently had not visited before. They should be able to respond more quickly to a real event.

MINNESOTAGoodhue CountySUMMARY I -- Emergency Operations Facilities and Resources (Space, internal communications, displays, security).

Communications from the Goodhue County EOC to the State EOC, adjacent counties and the utility were adequate. The internal communications, message handling procedures and status displays were very good. Maps showing the evacuation routes, roadblocks, and sampling points were well defined. It is recommended that maps showing the relocation center and population distribution be posted. The EOC was properly staffed with competent personnel. An air field and a small airplane were in readiness to respond to Federal needs.

Clc Adequacy of specific state or local resources to support Federal response.

A small air field and a small plane are available if needed. Other resources were not observed.

Flb Adequacy of communications systems (primary and backup) with contiguous State/local governments within the EPZs).

Communications with the adjacent counties were adequate. Mechanical problems caused the dedicated line to Dakota County to be inoperative until 12:00. The backup communications performed very well during this crisis.

Flc Adequacy of communications, as appropriate, with Federal emergency response organizations.

Not observed.

Fld Adequacy of communications systems between the nuclear facility and near-site EOF, and State and local EOCs.

Communications from the County EOC were adequate. They had a dedicated line and backup radio system to the State EOC, Dakota County EOC, and the utility. These functioned well except for the problem mentioned above with Dakota County.

Adequacy of EOC working space and amenities.

Adequate. It was observed that the EOC could have been more efficiently arranged to maximize work surfaces.

Adequacy of EOC internal communications, including equipment, displays, and message-handling procedures.

Adequate. The transferring mechanism on the telephone system created some problems when they tried to transfer the calls from the communications center to the operations room. This problem was overcome by the use of messengers. The message handling procedures were commendable. The status board was very good.

Adequacy of EOC security measures.

Adequate. A guard was posted at the entrance to the EOC. Personnel were required to sign in and out.

H3

Overall adequacy of the emergency operating center (EOC).

Adequate. The personnel demonstrated the ability to respond to an emergency.

J10a

Adequate maps displayed showing evacuation routes, sampling points, relocation centers and shelter areas.

Maps displayed within the EOC were adequate except for the identification of the relocation centers. Although evacuees will not relocate within the County, maps identifying the routes to the relocation center should have been posted.

J10b

Adequate maps displayed showing population distribution near nuclear facility by evacuation areas.

Maps showing the population distribution near the utility were not posted at the start of the exercise. Later a copy was extracted from the County plan and posted. A large map would have been more suitable.

SUMMARY II -- Alerting and Mobilization of Officials and Staff (Staffing, 24-hour capability, alerting timeliness).

The Goodhue County Sheriff's office is the initial point of contact and is manned 24 hours per day. The EOC was activated in a smooth and timely manner. The ability to man the EOC for around-the-clock operations was adequately demonstrated. The alerting and notification of the staff was accomplished by radio and telephone. Adequate communications exist between the EOC and medical facilities.

Ale Capability for 24-hour initial emergency response and manning of communications.

The Goodhue County Sheriff's office is the initial point of contact and is manned 24-hours per day.

A4 Capability for 24-hour continuous emergency response operations.

Adequate. A complete shift change was demonstrated during the exercise.

E2 Adequacy of procedures used for alerting, notifying and mobilizing emergency response personnel.

Both the County and City alerted their personnel in a timely manner. Both radio and telephones were used to accomplish the alerting and notification.

E1 Adequacy of procedures used for notification of emergency response organizations.

Same comment as for E.2 above.

C2a If appropriate, timely dispatch of a representative to licensees near-site EOC.

The County did not send a representative to the EOC; this decision should be evaluated carefully in future planning.

F1a Demonstration of an emergency response communications network with prompt activation.

Both the County and the City alerted their response personnel in a timely manner.

F1e Adequacy of communications used for alerting and activating emergency response personnel.

Both telephones and radio equipment were utilized for alerting the emergency response personnel.

F2 Capability to communicate with fixed and mobile medical support facilities.

The County uses both radio and landline communications to communicate with St. Johns hospital. Radio is used by the County Sheriff and City Fire Department to communicate with mobile medical units.

H4 Demonstration of timely and efficient activation and staffing of EOCs and other facilities.

The Red Wing/Goodhue County EOC was activated in a smooth and timely manner.

SUMMARY III -- Emergency Operations Management (Organization, control, leadership, support by officials, decisionmaking).

Capable leadership was demonstrated in the Goodhue County EOC. The County Emergency Management Director did a fine job of activating and staffing the EOC. After the EOC was activated the leadership role was assumed by the City of Red Wing Emergency Management Director. Under her leadership, the EOC functioned well. The primary and support roles of the agencies represented in the EOC were adequately demonstrated. Regular briefings were conducted to keep everyone abreast of the situation. The Mayor of Red Wing was an active participant in the exercise. Other City officials and County Commissioners were in attendance throughout the day. The emergency classification system used was consistent with that of the utility.

- A1a Evidence that specific organizations have been adequately established as part of overall response.
- All the emergency response agencies such as the Sheriff, Fire Department, State Highway Patrol, and Social Services, etc., were represented in the EOC.
- A1d Demonstration that a specific individual, by title, was effectively in charge of emergency response.
- Capable leadership was demonstrated within the framework of the existing organization. The County Emergency Management Director did a fine job of activating and staffing the EOC. After the EOC was activated, the leadership role was assumed by the City of Red Wing Emergency Management Director. Under her competent leadership the EOC functioned very well.
- A2a Demonstration that primary and support functions and responsibilities have been assigned to specific organizational elements.
- Primary and support functions and responsibilities have been adequately demonstrated.
- C1a Evidence that a specific person has been authorized to request Federal assistance (State only).
- Not observed.
- D3 An emergency classification system was effectively used and was consistent with that of the utility.
- The emergency classification was consistent with that used by the utility.
- D4 Adequate written procedures are used for emergency actions consistent with facility recommendations and local offsite conditions.
- Not observed.
- Demonstration of effective coordination between emergency response director and staff, through oral briefings, staff meetings, etc.
- Communications among the participants was very good. Regular briefings were conducted to keep everyone abreast of the situation.

Adequacy of support and/or participation by elected officials.

The Mayor was an active participant. Other City officials and County Commissioners were in attendance throughout the exercise.

SUMMARY IV -- Public Alerting and Notification (Means of notification - sirens, vehicles, or other systems).

The City of Red Wing in Goodhue County accomplished the alerting and notification of the public (simulated) in 24 minutes, using sirens, alert receivers, and public address systems. This does not meet the requirement outlined in NUREG-0654 that notification be accomplished within 15 minutes. City and County officials, however, indicated that extra emergency vehicles are available and would be utilized in the future to meet the 15 minute criterion. Appropriate messages were provided to the local radio station for dissemination to the public via the Emergency Broadcast System (EBS). Distribution of messages instructing the public to evacuate were timely and appropriate. Adequate arrangements have been made to notify transient populations in the area.

E5 Evidence of a reliable system for dissemination to the public of appropriate information received from the licensee, e.g., EBS.

Appropriate messages were provided to the local radio station for dissemination to the public.

E6 Adequacy of means used for notification and prompt instruction to the public in the plume exposure pathway.

The City of Red Wing used sirens and alert receivers (simulated) to alert the public. The County required 24 minutes to complete the alerting and notification using fixed and mobile sirens in conjunction with public address systems. City and County officials indicated that extra emergency vehicles are available and

would be utilized in the future to meet the 15 minute criterion as outlined in NUREG-0654.

E7 Effective use of instructional messages for the public in affected areas.

The distribution of messages instructing the public on evacuation procedures and other pertinent information was timely and appropriate.

J10c Adequacy of means used for notifying all segments of transient and resident population.

The Department of Natural Resources reported to the Sheriff that the river and parks were cleared of people (simulated). The State Highway Patrol helicopter was available to warn hunters in the area.

SUMMARY V -- Public and Media Relations (Publications, press facilities, media briefings, release coordination).

An adequate public information program has been established in Goodhue County that utilizes periodic notices in the newspaper and brochures that are distributed to citizens and public establishments. A briefing room for the press has been set up, and spokespersons are designated. The continued use of a separate media facility in Goodhue County is discouraged (see discussion under State of Minnesota).

G1 Evidence of Periodic Dissemination of information to the Public, such as annual publications, etc.

An adequate public information program has been established for the dissemination of general information on what to do during a radiological emergency. Instructions are published annually in the local newspaper and brochures are mailed annually to each citizen. The brochures are also placed in public buildings such as the Post Office and local restaurants. The evaluators found the brochures in several establishments during their stay in Red Wing. An explanation of the siren signals is published monthly in the newspaper.

- G2 Evidence of a Public information program for permanent and transient population in the plume EPZ, such as posted notices, etc.
- Printed pamphlets are posted in public places such as the Post Office and restaurants. The evaluators found the brochures in several establishments during their stay in Red Wing.
- G3a Appropriate points of contact for the media have been designated.
- A room in the Courthouse has been designated as the briefing room. The spokespersons met with several reporters during the exercise.
- Adequacy of joint media facility, where appropriate.
- Not observed.
- G4a A media spokesperson has been designated who has access to all necessary information.
- The Chairman of the County Board has been designated as the spokesperson for Goodhue County, and the Mayor of Red Wing has been designated as the spokesperson for that municipality.
- G4b Adequacy of arrangements for exchange of information among spokespersons.
- Not observed.
- G4c Adequacy of coordinated arrangements for rumor control measures.
- Not observed.
- SUMMARY VI — Accident Assessment (Staff and Field Operations, Monitoring, Equipment, Technical Calculations, Use of PAGs).
- Not observed.
- H7 Adequacy of offsite radiological monitoring equipment.
- Not observed.

- H12 An adequate central point has been established for receipt and analysis of field monitoring data and sample media.
Not observed.
- I7 Adequacy of capability and resources for field monitoring with the Plume EPZ.
Not observed.
- I8 Adequate capability to make a rapid assessment of magnitude and location of liquid or gaseous radiological hazards.
Not observed.
- I9 Capability for measurement of radioiodine concentrations in Plume EPZ under field conditions to 10^{-7} (state only).
Not observed.
- I10 Capability for relating measured parameters to dose rates and estimated integrated doses (state only).
Not observed.
- I11 Capability for locating and tracking airborne radioactive plume with aid of Federal and/or State resources (state only).
Not observed.
- C3 Evidence of availability and capability of radiological laboratories (state only).
Not observed.

SUMMARY VII -- Actions to Protect the Public (Sheltering, Evacuation, Reception and Care, Transportation).

Public protection was adequate. A listing of all persons within the County whose mobility was impaired was available. There were twenty-four ambulances available in the community for moving mobility-impaired persons out of the area. One hundred fifteen school buses were available for evacuation and relocation of County citizens. Livestock were ordered to be placed on stored feed.

- J2 Coordination with utility for movement of onsite individuals to offsite locations.
Not observed.
- J9 Capability for implementation of protective measures.
Public protection appeared to be adequate. For example, livestock were placed on stored feed and evacuation was accomplished as necessary.
- J10d Adequacy of methods used for protecting mobility impaired persons, including institutionally confined.
A listing of all persons in the County whose mobility was impaired was posted. Twenty-four ambulances were available in the community for moving them out of the area.
- J10g Adequacy of methods used for implementing relocation of populace.
One hundred fifteen school buses were available for evacuation and relocation. Drivers would be notified by radio.
- J10k Adequacy of organizations identification of and means for dealing with potential impediments to evacuation.
Not observed.
- J11 Adequacy of protective measures in ingestion EPZ, including dairy facilities, food processing plants, etc. (state only).
Not observed.
- J12 Adequacy of registration and monitoring of evacuees in relocation centers.
Not observed.
- J10h Adequate relocation centers have been established at least 5 miles and preferably 10 miles outside the Plume EPZ.
Not observed.

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

Goodhue County demonstrated a good capability to implement health, medical and exposure control measures. Roadblocks leading into the area were manned by law enforcement officials. Emergency workers in the field had self-reading dosimeters from which they could determine their radiation exposure accumulation while in the field. They also had TLD badges. Potassium Iodide (KI) was available and the emergency workers were instructed to take it. All personnel were instructed to wear dosimeters and maintain radiation exposure cards. St. Johns Hospital in Red Wing would be utilized to handle contaminated victims.

J10e Adequacy of provisions for use of KI for emergency workers and institutionalized persons in Plume EPZ.

KI was available and the emergency workers were instructed to take it.

J10f Adequacy of methods used by State Health Department in decisions to administer KI to central population (state only).

This activity was not observed.

J10j Adequacy of control of access to evacuated areas

Roadblocks which were adequate to control evacuated areas were observed to be manned by law enforcement officials.

K3a Adequacy of a 24 hour a day capability to determine dose received by emergency workers.

They had self-reading dosimeters from which they could determine their radiation exposure accumulations while in the field. They also had TLD badges.

K3b Demonstration of adequate and frequent emergency worker dosimeter readings and maintenance of dosage records.

All personnel were instructed to wear dosimeters and maintain radiation exposure cards.

- K4 Evidence that an adequate decision chain has been established to authorize exposure for emergency workers in excess of PAGs.
This activity was not observed.
- K5a Evidence that appropriate action levels have been specified for determining need for decontamination.
This activity was not observed.
- K5b Adequacy of measures for decontamination of emergency personnel, supplies, and equipment and for waste disposal.
This activity was not observed.
- L1 Adequate capability demonstrated by local and/or backup hospital and medical services for handling personnel.
Not observed
- L4 Adequate capability demonstrated for transportation of radiological accident victims to medical support facilities.
This activity was not observed.
- M4 Capability for periodic estimation of total population exposure (state only).
This activity was not observed.

SUMMARY IX — Recovery and Reentry Operations.

Procedures for reentry and recovery were adequate. Roadblocks were removed and the local EBS station was notified.

- M3 Adequacy of established means for informing response organizations that recovery and reentry can be initiated (state only).
This activity was not observed.

- M1 Adequacy of procedures demonstrated for reentry and relaxation of protective measures allowing reentry.
Procedures for reentry and recovery were adequate. Roadblocks were removed and the local EBS station was notified.

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

The exercise adequately tested the integrated capacity and major elements of the basic response requirements. Many participants stated that they thought the exercise was of great benefit.

However, the scenario was not followed during the exercise insofar as the meteorological conditions conveyed to the County were different than what should have been communicated. Nonetheless, the County responded well to the information it was given. More careful control of the exercise will avoid this unfortunate difficulty in the future.

N1b

Adequacy of scenario to test capability to mobilize state and local personnel and resources.

The scenario designed prior to the exercise was not followed during the exercise. Specifically, meteorological conditions were not conveyed as planned. However, the County responded well to the information it was given.

N1a

Adequacy of exercise to test integrated capabilities and major portions of the basic existing response elements in affected organizations.

The exercise adequately tested the integrated capacity and major portions of the basic response elements.

Benefit of exercise to participants.

Participants stated they thought they had benefited from the exercise.

MINNESOTADakota CountySUMMARY I -- Emergency Operations Facilities and Resources.

Communications facilities that were observed in the Dakota County EOC were adequate. The EOC, however, is a temporary facility with small space, no work surfaces for decision-makers, no permanent displays, and inadequate message handling procedures. Security was not adequate. It is recommended that a larger facility be obtained and that adequate procedures be developed to ensure the efficient and effective operation of this facility.

Clc Adequacy of specific state or local resources needed to support Federal response.

Not observed.

Flb Adequacy of communications systems (primary and backup) with contiguous state/local governments within the EPZs.

The communications equipment is adequate. The "hot line" phone was not working during part of the exercise; it was repaired by the phone company before the exercise ended.

Flc Adequacy of communications, as appropriate, with Federal emergency response organizations.

Not observed.

Fld Adequacy of communications systems between the nuclear facility and near-site EOC, and state and for local EOCs.

The only communications observed in the EOC were contact with the nuclear facility and with other county EOCs. All systems functioned well except for the problem with the "hot line" phone.

Adequacy of EOC working space and amenities.

Work space in the EOC is not adequate. The EOC does not have desks for decision-makers. The Emergency Director had to bring files and maps to the temporary EOC.

Adequacy of EOC internal communications, including equipment, displays, and message-handling procedures.

The status board was adequate and maps were displayed. Communications between the dispatcher and personnel in the EOC were oral. Written messages are recommended to reduce the likelihood of misunderstanding.

Adequacy of EOC security measures.

Persons entering the EOC were not asked for identification, and there was no provision for check-in or check-out procedures. Some security measures should be instituted.

H3 Overall adequacy of the emergency operating center (EOC).

The EOC is a temporary facility with small space, no work surfaces for decision-makers, no permanent displays, and inadequate security. It is recommended that a larger facility be obtained and that adequate procedures be developed to ensure the efficient and effective operation of this facility.

J10a Adequate maps displayed showing evacuation routes, sampling points, relocation centers and shelter areas.

Maps showing evacuation routes and sampling points were adequate. No maps showing relocation or shelter areas were observed.

J10b Adequate maps displayed showing population distribution near nuclear facility by evacuation areas.

Not observed.

SUMMARY II -- Alerting and Mobilization of Officials and Staff.

Initial alerting, notification, and mobilization of emergency response personnel can be carried out on a 24-hour basis in Dakota County. Notification procedures were adequate and the EOC was activated and staffed in a timely manner. It was not observed whether the County dispatched a representative to the licensee's near-site EOF. This should be considered in future planning.

- Ale Capability for 24-hour initial emergency response and manning of communications.
 Capability for shift change and 24-hour initial response was adequate.
- A4 Capability for 24-hour continuous emergency response operations.
 Capability for 24-hour continuous emergency response operations was adequate and handled in a timely manner.
- E2 Adequacy of procedures used for alerting, notifying and mobilizing emergency response personnel.
 Initial alerting, notification, and mobilization of emergency response personnel is the responsibility of Dakota County Sheriff's Department. Capability exists on a 24-hour basis.
- E1 Adequacy of procedures used for notification of emergency response organizations.
 Notification procedures were adequate.
- C2a If appropriate, timely dispatch of a representative to licensee's near-site EOF.
 Not observed.
- Fla Demonstration of an emergency response communications network with prompt activation.
 The responsibility of an emergency response communication network rests with the Dakota County Sheriff's Department.
- Fle Adequacy of communications used for alerting and activating emergency response personnel.
 Alerting and activation of emergency response personnel rests with Dakota County Sheriff's Department.
- F2 Capability to communicate with fixed and mobile medical support facilities.
 Not observed.

H4 Demonstration of timely and efficient activation and staffing of EOCs and other facilities.

Timely and efficient demonstration of activation and staffing of EOCs was shown.

SUMMARY III -- Emergency Operations Management.

The Dakota County Emergency Management Director managed the EOC operation in a professional and competent manner. He adequately coordinated the activities of all organizations that have been established as part of the emergency response.

Ala Evidence that specific organizations have been adequately established as part of overall response.

Good cooperation was observed between the Dakota County Sheriff's Department, Dakota County Fire Department, Dakota County Emergency Management Director, the Hastings Police Department, and other Dakota County operating departments.

Ald Demonstration that a specific individual, by title, was effectively in charge of emergency response.

The Dakota County Emergency Director managed the EOC operation in a very professional and competent manner.

A2a Demonstration that primary and support functions and responsibilities have been assigned to specific organizational elements.

Emergency responsibilities have been appropriately assigned to specific organizations in Dakota County and the City of Hastings.

Cl a Evidence that a specific person has been authorized to request Federal assistance (state only).

Not observed.

D3 An emergency classification system was effectively used and was consistent with that of the utility.

The emergency classification system used was consistent with that of the utility.

D4

Adequate written procedures are used for emergency actions consistent with facility recommendations and local offsite conditions.

Not observed.

Demonstration of effective coordination between emergency response director and staff, thru oral briefings, staff meetings, etc.

The Emergency Management Director effectively coordinated all functions necessary for the emergency response.

Adequacy of support and/or participation by elected officials.

Local elected officials could not participate in the exercise because they were required to attend another meeting that day.

SUMMARY IV — Public Alerting and Notification.

The Dakota County Plan calls for local public safety personnel to use door-to-door personal contact, public address systems on public safety vehicles, and a permanent siren warning system to alert the public. The county required an estimated 30 minutes to complete the alerting and notification (simulated) and did not meet the 15-minute requirement of NUREG-0654. Additional equipment is needed to complete notification of the public within 15 minutes. Methods to be used to notify the transient population were not observed. Procedures should be reviewed by the County to make sure they are adequate.

E5

Evidence of a reliable system for dissemination to the public of appropriate information received from the licensee, e.g., EBS.

Not observed.

- E6 Adequacy of means used for notification and prompt instruction to the public in the plume exposure pathway.
The Dakota County plan calls for local public safety personnel to use door-to-door personal contact, public address systems on public safety vehicles, and a permanent siren warning system for alerting the public. The County required an estimated 30 minutes to complete alerting and notification (simulated) and did not meet the 15 minute requirement of NUREG.
- E7 Effective use of instructional messages for the public in affected areas.
Not observed
- J10c Adequacy of means used for notifying all segments of transient and resident population
Not observed
- SUMMARY V Public and media relations (publications, press facilities, media briefings, release coordination)
Not observed
- G1 Evidence of dissemination of information to the public, within the last year.
Not observed
- G2 Evidence of a public info program for permanent & transient pop in the plume EPZ, such as posted notices, etc.
Not observed
- G3a Appropriate points of contact for the media have been designated.
Not observed
Adequacy of joint media facility, where appropriate.
Not observed
Adequacy of issued press releases.
Not observed
- G4a A media spokesperson has been designated who has access to all necessary information.
Not observed

- G4b Adequacy of arrangements for exchange of information among spokespersons.
Not observed
- G4c Adequacy of coordinated arrangements for rumor control measures.
Not observed
- SUMMARY VI Accident assessment (staff & field operations, monitoring, equipment, technical calculations, use of PAGs.
Not observed
- H7 Adequacy of offsite radiological monitoring instruments.
Not observed
- H 12 An adequate central point has been established for receipt and analysis of field monitoring data and sample media.
Not observed
- I7 Adequacy of capability and resources for field monitoring within the plume EPZ.
Not observed
- I8 Adequate capability to make a rapid assessment of magnitude & location of liquid or gaseous radiological hazards.
Not observed
- I9 Capability for measurement or radioiodine concentrations in plume EPZ under field conditions to 10 F-7 (State only).
Not observed
- I10 Capability for relating measured parameters to dose rates and estimated integrated doses (State only).
Not observed
- I11 Capability for locating and tracking airborne radioactive plume with aid of Federal and/or State resources (State only).
Not observed
- J10m Capability to recommend, protective action, based on PAGs, in plume EPZ (State only).
Not observed
- C3 Evidence of availability & capability of radiological laboratories (State only).
Not observed
- SUMMARY VII Actions to protect the public (sheltering, evacuation, reception & care, transportation).
Not observed

- J2 Coordination with utility for movement of onsite individuals to offsite locations.
Not observed
- J9 Capability for implementation of protective measures.
Not observed
- J10d Adequacy of methods used for protecting mobility impaired persons, including institutionally confined.
Not observed
- J10g Adequacy of methods used for implementing relocation of populace.
Not observed
- J10k Adequacy of organizations identification of and means for dealing with potential impediments to evacuation.
Not observed
- J11 Adequacy of protective measures in ingestion EPZ, including dairy facilities, food processing plants, etc. (State only).
Not observed
- J12 Adequacy of procedures for processing evacuees in relocation ctrs, including hlth care, decon & rad monitoring, etc.
Not observed
- J10h Adequate relocation centers have been established at least 5 miles & preferably 10 miles outside the plume EPZ.
Not observed

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

The only health, medical, or exposure control measure which was observed was that County public safety personnel were dispatched in a timely fashion to previously designated control points to limit access to the evacuated area.

- J10e Adequacy of provisions for use of KI for emergency workers and institutionalized persons in plume EPZ.
Not observed
- J10f Adequacy of methods used by State Health Department in decisions to administer KI to central population (state only).
Not observed
- J10j Adequacy of control of access to evacuated areas.
County public safety personnel were dispatched in a timely fashion to previously designated control points to limit access to the evacuated area.
- K3a Adequacy of a 24 hour a day capability to determine dose received by emergency workers.
Not observed
- K3b Demonstration of adequate and frequent emergency worker dosimeter readings and maintenance of dosage records.
Not observed
- K4 Evidence that an adequate decision chain has been established to authorize exposure for emergency workers in excess of PAGs.
Not observed
- K5a Evidence that appropriate action levels have been specified for determining need for decontamination.
Not observed
- K5b Adequacy of measures for decontamination of emergency personnel, supplies, and equipment, and for waste disposal.
Not observed
- L1 Adequate capability demonstrated by local and/or backup hospital and medical services for handling personnel.
Not observed

L4 Adequate capability demonstrated for transportation of radiological accident victims to medical support facilities.

Not observed

M4 Capability for periodic estimation of total population exposure (state only).

Not observed

SUMMARY IX -- Recovery and Reentry Operations.

Recovery and reentry operations were adequately demonstrated.

M3 Adequacy of established means for informing response organizations that recovery and reentry can be initiated (state only).

This activity was not observed.

M1 Adequacy of procedures demonstrated for reentry and relaxation of protective measures allowing reentry.

Procedures for reentry were adequate. The Sheriff notified personnel to remove the roadblocks and return to their normal duty station.

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

The exercise proved to be relevant to those involved and a capability to adequately respond during an emergency was shown. Participants stated that the exercise was beneficial.

N1b Adequacy of scenario to test capability to mobilize state and local personnel and resources.

The scenario designed prior to the exercise was not followed during the exercise. Specifically, the meteorological conditions were different as communicated to the County than the scenario provided. However, the County responded well to the information it was given.

N1a

Adequacy of exercise to test integrated capability and major portions of the basic existing response elements in affected organization.

The exercise adequately tested the integrated capacity and major portions of the basic response elements.

Benefit of exercise to participants.

Participants stated that exercise was beneficial.

WISCONSINSTATE AREA EMERGENCY OPERATIONS CENTERSUMMARY I -- Emergency Operations Facilities and Resources

The State Area EOC in Eau Claire, Wisconsin, has very good facilities and resources. Primary and backup communications systems are in place. There are sufficient space and resources to efficiently coordinate the emergency response as well as to accommodate relief personnel.

Clc Adequacy of specific state or local resources needed to support Federal response.

The Bay City Airport, near Red Wing on the Wisconsin side of the river, is available for Federal use during an emergency. Adequate communications, including NAWAS, commercial telephone, and State Police radios, are also available.

F1b Adequacy of communications systems (primary and backup) with contiguous state/local governments within the EPZs.

Primary and backup communications systems, which include teletype, NAWAS, commercial telephone, and State Police and local government radios, are in place. A local government radio should be installed in the Pierce County EOC to complete this system.

F1c Adequacy of communications, as appropriate, with Federal emergency response organizations.

Communications with Federal emergency response organizations are adequate.

F1d Adequacy of communications systems between the nuclear facility and near-site EOF, and State and local EOCs.

Personnel in the EOC were in communication with Northern States Power, the near-site Emergency Operating Facility, and the local County EOCs.

Adequacy of EOC working space and amenities.

The EOC is well furnished with good lighting. There is more than adequate space for a regional EOC.

Adequacy of EOC internal communications, including equipment, displays, and message-handling procedures.

Frequent verbal briefings were held. Messages were also posted on a blackboard and/or distributed by messengers.

Adequacy of EOC security measures.

Not observed.

H3 Overall adequacy of the emergency operating center (EOC).

The EOC has more than adequate space for a regional EOC.

J10a Adequate maps displayed showing evacuation routes, sampling points, relocation centers and shelter areas.

Maps of sampling points, traffic control points, and topography were posted; they could have been used to better advantage if current conditions were displayed on them. Maps displaying relocation centers and shelter areas were not available; these additional resources should be provided.

J10b Adequate maps displayed showing population distribution near nuclear facility by evacuation areas.

Population distribution maps were displayed.

SUMMARY II -- Alerting and Mobilization of Officials and Staff.

Wisconsin demonstrated the ability to alert and mobilize staff for continuous 24-hour operations.

Ale Capability for 24-hour initial emergency response and manning of communications.

Initial alerting and notification is carried out by the State Patrol, where communications are manned 24 hours per day.

- A4 Capability for 24-hour continuous emergency response operations.
The EOC facilities are adequate to support a 24-hour response. A shift change was not demonstrated because this was a small-scale exercise for Wisconsin.
- E2 Adequacy of procedures used for alerting, notifying and mobilizing emergency response personnel.
The procedures used were adequate for this exercise.
- E1 Adequacy of procedures used for notification of emergency response organizations.
The procedures used were adequate for this exercise.
- C2a If appropriate, timely dispatch of a representative to licensee's near-site EOF.
Not observed.
- F1a Demonstration of an emergency response communications network with prompt activation.
The emergency response communications network was adequate, with sufficient backup systems.
- F1e Adequacy of communications used for alerting and activating emergency response personnel.
The communications used for alerting emergency response personnel worked well.
- F2 Capability to communicate with fixed and mobile medical support facilities.
Not observed.
- H4 Demonstration of timely and efficient activation and staffing of EOCs and other facilities.
Not observed.

SUMMARY III -- Emergency Operations Management.

Personnel present in the Wisconsin State Area EOC effectively carried out their functions during their participation in the exercise. The staff dealt effectively with

the confusing radiological and meteorological data provided by the utility and reached a conservative and safe decision in the face of this problem.

A1a Evidence that specific organizations have been adequately established as part of overall response.

The range of organizations present was adequate to carry out the emergency response.

A1d Demonstration that a specific individual, by title, was effectively in charge of emergency response.

Appropriate channels of authority were established. The EOC worked smoothly, with no apparent conflicts.

A2a Demonstration that primary and support functions and responsibilities have been assigned to specific organizational elements.

Responsibilities were adequately assigned and understood. The organizations involved worked well together, and professional judgments formed by specific groups were accepted and acted on appropriately.

C1a Evidence that a specific person has been authorized to request Federal assistance (state only).

Not observed.

D3 An emergency classification system was effectively used and was consistent with that of the utility.

The emergency classification system described in NUREG-0654 was used. There were no conflicts in criteria for status escalation. There were differing opinions, however, as to what level of danger might exist based on the facts reported from the utility. In the face of conflicting data, the conservative and safe decision was mutually reached.

D4 Adequate written procedures are used for emergency actions consistent with facility recommendations and local offsite conditions.

Not observed.

Demonstration of effective coordination between emergency response Director and staff, thru oral briefings, staff meetings, etc.

There were many briefings. The staff became exceedingly immersed in detail which may not be vital to the overall function. Perhaps standards should be set on what information is necessary to report.

Adequacy of support and/or participation by elected officials

Not observed

SUMMARY IV -- Public Alerting and Notification.

Not observed

E5 Evidence of a reliable system for dissemination to the public of appropriate info received from the licensee, e.g., EBS.

Not observed

E6 Adequacy of means used for notification & prompt instruction to the public in the plume EPZ (within 15 minutes).

Not observed

E7 Effective use of instructional messages for the public in affected areas.

Not observed

J10c Adequacy of means used for notifying all segments of transient and resident population.

Not observed

SUMMARY V -- Public and media relations (publications, press facilities, media briefings, release coordination)

The State had staff assigned in the Minnesota EOC. A news information specialist was assigned to the news media center at the State Capitol. His briefings and releases were timely and well coordinated. His sources of information were well established. Information brochures are published and distributed to local residents within the EPZ and are made available to commercial businesses for transient and permanent populations.

- G1 Evidence of dissemination of information to the public, within the last year.
Brochures are provided to the public through commercial businesses, mailings, etc.
- G2 Evidence of a public info program for permanent & transient pop in the plume EPZ, such as posted notices, etc.
Brochures are provided for public distribution. They can be found in motels, hotels and restaurants.
- G3a Appropriate points of contact for the media have been designated.
For this exercise, there were 2 points of contact, the State media center at the State Capitol, St. Paul, and NSP corporate headquarters. The coordination of releases by and between the two lacked cohesiveness.
Adequacy of joint media facility, where appropriate.
The media center is adequate for its purpose. Minnesota needs to provide more phones for the press.
Adequacy of issued press releases.
Press releases were well prepared by the Wisconsin media spokesperson. His releases were well coordinated with Minnesota and the utility.
- G4a A media spokesperson has been designated who has access to all necessary information.
A spokesperson is designated. He has good access to the sources of information in both States and the utility.
- G4b Adequacy of arrangements for exchange of information among spokespersons.
The utility could improve its function by coordinating its news releases with the Minnesota Media News Center. The Wisconsin media information person did a good job.
- G4c Adequacy of coordinated arrangements for rumor control measures.
Rumor control measures were provided for and adequately met.
- SUMMARY VI — Accident Assessment (Staff and Field Operations, Monitoring, Equipment, Technical Calculations, Use of PAGs).
A State monitoring team was dispatched without equipment to each monitoring station in the affected area in order to simulate readings. The State EOC demonstrated good flexibility in recommending protective actions in the face of conflicting radiological data received from the plant. Mobile modeling procedures (T159) were effectively used to relate measured parameters to dose rates, but it is recommended that this be improved by upgrading to a micro-computer and using standardized modeling procedures.

- H7 Adequacy of offsite radiological monitoring equipment.
Not observed.
- H12 An adequate central point has been established for receipt and analysis of field monitoring data and sample media.
Not observed.
- I7 Adequacy of capability and resources for field monitoring within the plume EPZ.
Field monitoring teams were dispatched to each monitoring station in the sector which received contamination to simulate readings.
- I8 Adequate capability to make a rapid assessment of magnitude and location of liquid or gaseous radiological hazards.
Not observed.
- I9 Capability for measurement of radioiodine concentrations in plume EPZ under field conditions to 10^{-7} (state only).
Not observed.
- I10 Capability for relating measured parameters to dose rates and estimated integrated doses (state only).
Mobile modeling procedures (TI59) were effective, but can be improved by upgrading to micro-computer with standard modeling approach.
- I11 Capability for locating and tracking airborne radioactive plume with aid of Federal and/or state resources (state only).
Not observed.
- J10m Capability to recommend protective action, based on PAGs, in plume EPZ (state only).
Flexibility was demonstrated in the face of conflicting data.
- C3 Evidence of availability and capability of radiological laboratories (state only).
Not observed.

SUMMARY VII -- Actions to Protect the Public (Sheltering, Evacuation, Reception and Care, Transportation).

Although it was noted that river traffic was controlled and road construction was checked, this activity generally was not observed because of the small-scale status of this exercise.

- J2 Coordination with utility for movement of onsite individuals to offsite locations.
Not observed.
- J9 Capability for implementation of protective measures.
Not observed.
- J10d Adequacy of methods used for protecting mobility impaired persons, including institutionally confined.
Not observed.
- J10g Adequacy of methods used for implementing relocation of populace.
Not observed.
- J10k Adequacy of organizations identification of and means for dealing with potential impediments to evacuation.
River traffic was controlled and road construction was checked.
- J11 Adequacy of protective measures in ingestion EPZ, including dairy facilities, food processing plants, etc. (state only).
Not observed.
- J12 Adequacy of registration and monitoring of evacuees in relocation centers.
Not observed.
- J10h Adequate relocation centers have been established at least 5 miles and preferably 10 miles outside the plume EPZ.
Not observed.

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

With one exception, the State of Wisconsin demonstrated an adequate capability to implement health, medical and exposure control measures in the areas which were observed. A 38-hour exposure limit was established and demonstrated for emergency workers in the field. KI was administered, although perhaps prematurely, due to the conflicting data being received from the plant. However, the State made no attempt to demonstrate its ability to estimate total population exposure. Both proper computer equipment and sufficient staff must be assigned to this essential function in the future.

J10e Adequacy of provisions for use of KI for emergency workers and institutionalized persons in plume EPZ.

Not observed.

J10f Adequacy of methods used by state Health Department in decisions to administer KI to central population (state only).

Due to conflicting data, KI (potassium iodide) might have been recommended prematurely.

J10j Adequacy of control of access to evacuated areas.

Not observed.

K3a Adequacy of a 24 hour a day capability to determine dose received by emergency workers.

Not observed.

K3b Demonstration of adequate and frequent emergency worker dosimeter readings and maintenance of dosage records.

Not observed.

K4 Evidence that an adequate decision chain has been established to authorize exposure for emergency workers in excess of PAGs.

Workers within 1 mile had a 38-hour exposure limit.

- K5a Evidence that appropriate action levels have been specified for determining need for decontamination.
Not observed.
- K5b Adequacy of measures for decontamination of emergency personnel, supplies, and equipment, and for waste disposal.
Not observed.
- L1 Adequate capability demonstrated by local and/or backup hospital and medical services for handling personnel.
Not observed.
- L4 Adequate capability demonstrated for transportation of radiological accident victims to medical support facilities.
Not observed.
- M4 Capability for periodic estimation of total population exposure (state only).

This was not accomplished during the exercise. Its attempt was hampered by conflicting data and disparate modeling techniques used by participating agencies. Replacement of the present, marginal computer equipment with a micro-computer could improve this capability.

SUMMARY IX -- Recovery and Reentry Operations.

- All procedures were followed. A determination was made that food resources were not contaminated in the EPZ.
- M3 Adequacy of established means for informing response organization that recovery and reentry can be initiated (state only).
All procedures were followed.
- M1 Adequacy of procedures demonstrated for reentry and relaxation of protective measures allowing reentry.
It was determined that food resources were not contaminated in the EPZ.

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

While parts of the scenario were not adhered to (i.e., wind changes and early declaration of "Site Area Emergency" status), the participants were given the opportunity to adapt to erroneous, ad hoc, and conflicting data and make their best possible decisions. It was recommended that future scenarios be developed to simulate the dynamics of evacuation procedures in an interactive mode with decision-making authorities and law enforcement personnel.

N1b Adequacy of scenario to test capability to mobilize state and local personnel and resources.

The fact that the scenario was not followed caused concern about which items were to be exercised and which simulated.

N1a Adequacy of exercise to test integrated capability and major portions of the basic existing response elements in affected organizations.

This was adequate, but additional testing could be included in future exercises to simulate the dynamics of evacuation procedures in an interactive mode with decision-making authorities and law enforcement personnel.

Benefit of exercise to participants.

The decision-making process in the face of conflicting data was a learning experience for the participants.

WISCONSINPierce CountySUMMARY I -- Emergency Operations Facilities and Resources

The Pierce County EOC facility was adequate for its function. Space was sufficient for required staff, with room for expansion if needed. Facilities for feeding, briefing, and otherwise accommodating relief staff were adequate. Maps and status boards were displayed and kept participants well informed of status and actions taken. Internal and external communications worked well and were handled in a professional and efficient manner. Security was adequate.

Clc Adequacy of specific state or local resources needed to support federal response

Not observed.

F1b Adequacy of communications systems (primary and backup) with continuous state/local governments within the EPZS

The Pierce County EOC used point-to-point radio, TIME teletype, and telephone to communicate with Pepin, St. Croix, and Dunn Counties. The County communicates indirectly with the Minnesota EOC through the Wisconsin EOC.

F1c Adequacy of communications, as appropriate, with Federal emergency response organizations

Not observed.

F1d Adequacy of communications systems between the nuclear facility and near-site EOF, and State and local EOCs

There are both radio and telephone lines in the County EOC available for direct communication with the Prairie Island facility. Radio backup for communicating with the State EOC is on order, but had not yet been installed at the time of the exercise.

Adequacy of EOC working space and amenities

The amount of space in the County EOC was adequate for the level of staffing present, and there was room for expansion if needed. The communications room, however, would be-

come crowded if more than two dispatchers were present. There were restrooms and kitchen facilities immediately adjacent, and an auditorium that could be (and was) used for briefing, feeding, and otherwise accommodating relief staff.

Adequacy of EOC internal communications, including equipment, displays, and message-handling procedures

Internal communications worked well. Message handling procedures did not interfere with other activities. Relay of messages through the dispatchers from within the EOC was done professionally and efficiently. Dispatches were monitored in the EOC communications room. Adequate map displays and status boards were available and properly used.

Adequacy of EOC security measures

Identification, sign-in/out was required each time someone entered/exited the EOC. The communications center in the Sheriff's Department upstairs was secure. An alternate entrance to the EOC that was normally locked was discovered open at one point during the exercise and was immediately secured.

H3 Overall adequacy of the emergency operating center (EOC)

Adequate for reasons outlined above.

J10a Adequate maps displayed showing evacuation routes, sampling points, relocation centers and shelter areas

Adequate maps showing evacuation routes, radiological sampling points, and shelter areas, as well as many other informational maps, were displayed and used during the exercise. Relocation centers were shown on a map of schools in the County.

J10b Adequate maps displayed showing population distribution near nuclear facility by evacuation areas

Population distribution maps showing population, by sector, were displayed in one-mile increments up to 5 miles and the 5-10 mile total.

SUMMARY II -- Alerting and Mobilization of Officials and Staff

Alerting of primary staff was accomplished in a timely manner in the Pierce County EOC. The EOC was activated and fully manned within 20 minutes of notification of Alert status. Twenty-four hour capability is normal for the dispatch desk and was demonstrated within the EOC by a complete shift change midway in the exercise. The limited number of telephone lines in the EOC hampered agency notifications during simulated accidents not related to the power plant conditions.

Ale Capability for 24-hour initial emergency response and manning of communications

Initial notification goes to Pierce County Sheriff's office which is manned 24 hours a day.

A4 Capability for 24-hour continuous emergency response operations

The capability for a 24-hour continuous emergency response operation was demonstrated by a shift change in each of the positions in the EOC midway in the exercise. The second shift was thoroughly briefed.

E2 Adequacy of procedures used for alerting, notifying and mobilizing emergency response personnel

Emergency response personnel were alerted, notified, and mobilized according to Pierce County's Standard Operating Procedures. Notification of personnel was completed within 30 minutes, and the EOC was fully staffed at 9:05 a.m., 20 minutes after notification of Alert status.

E1 Adequacy of procedures used for notification of emergency response organizations

The County EOC was notified of emergency classification both by the utility (via NAWAS) and by the State EOC (via TIME teletype). Verification procedures were carried out properly.

C2a If appropriate, timely dispatch of a representative to licensees near-site EOF

A sheriff's deputy had been dispatched to the EOF by 9:15 a.m. in accordance with the County plan. Contact with the deputy was maintained throughout the day.

F1a Demonstration of an emergency response communications network with prompt activation

Primary and backup communications networks were demonstrated between principal emergency response organizations.

F1e Adequacy of communications used for alerting and activating emergency response personnel

Initial notification of response agencies was done from the County Sheriff dispatch center. This center received timely verifications from these agencies that their personnel had in turn been notified. The limited number of telephone lines in the EOC hampered agency notifications during simulated accidents not related to the power plant conditions. Perhaps lines from other Courthouse offices could be routed into the EOC.

F2 Capability to communicate with fixed and mobile medical support facilities

Health and medical personnel in the EOC were in communication with fixed and mobile medical support facilities.

H4 Demonstration of timely and efficient activation and staffing of EOCs and other facilities

The County EOC was fully staffed at 9:05 a.m., within 20 minutes of alert notification.

SUMMARY III -- Emergency Operations Management

Organizations to be included in the emergency response were identified in the Pierce County Plan. Their responsibilities were well understood and carried out in accordance with the plan and the SOPs contained therein. The County Board Chairman or other Board Member was present and in charge throughout the exercise. Coordination between the emergency response director and staff was effective. Periodic briefings were conducted, with all agencies reporting. The emergency classification system used by the County, State, and utility was consistent, and is the one specified in NUREG-0654.

Ala Evidence that specific organizations have been adequately established as part of overall response

Organizations to be included in the emergency response were identified and their responsibilities were well understood and carried out. Agency representatives were present in the EOC and reported status of their agencies within 30 minutes of notification of Alert status (by 9:15 a.m.).

Ald Demonstration that a specific individual, by title, was effectively in charge of emergency response

The County Board Chairman or his alternate was present throughout the exercise, and effected control through the Emergency Management Director and his deputy.

A2a Demonstration that primary and support functions and responsibilities have been assigned to specific organizational elements

Appropriate County agencies were represented in the EOC and performed their duties in accordance with the County plan.

C1a Evidence that a specific person has been authorized to request federal assistance (state only)

Not observed.

D3 An emergency classification system was effectively used and was consistent with that of the utility

The emergency classification system that was used by the County, State, and utility is the one specified in NUREG-0654.

D4 Adequate written procedures are used for emergency actions consistent with facility recommendations and local offsite conditions

The EOC staff followed the written procedures contained in the County Plan. The procedures specify actions to be taken under each emergency classification.

Demonstration of effective coordination between emergency response Director and Staff, thru oral briefings, staff meetings, etc.

Periodic briefings were conducted, with all agencies reporting. Changing conditions or new events were announced as they occurred. Communication was facilitated by the small number of participants and the face-to-face setup.

Adequacy of support and/or participation by elected officials

The County Board Chairman and another Member of the Board (on second shift) were in charge of the emergency operations.

SUMMARY IV -- Public Alerting and Notification

The sirens for the prompt notification system are being installed in Pierce County and were not operational for this exercise. Law enforcement and fire vehicles equipped with loudspeakers were deployed to notify the public. Notification of the public (simulated) was not accomplished within 15 minutes. Difficulty was experienced in contacting the radio station that was to broadcast EBS

messages, resulting in an hour's delay. Adequate provisions were made for notifying transient populations and controlling traffic through the area.

E5

Evidence of a reliable system for dissemination to the public of appropriate information received from the licensee, e.g., EBS

Early in the exercise, there was difficulty in contacting the local radio station in Red Wing to announce the emergency. Consequently, it took an hour before the emergency message was broadcast. A remote pickup unit (RPU) should be considered for installation to back up existing commercial phone lines. Press releases were coordinated by the news media center in St. Paul. The County PIO calls two local radio stations (via conference call) with press releases that he reads over the phone. These were delivered to the stations in a timely manner.

E6

Adequacy of means used for notification and prompt instruction to the public in the plume exposure pathway

The sirens for the prompt notification system are being installed. Warning of the public was carried out by County Sheriff personnel driving through the area at risk. Notification was not accomplished within 15 minutes.

E7

Effective use of instructional messages for the public in affected areas

Appropriate instructions for evacuation, as included in the County plan, were presented at part of the 12:30 p.m. press briefing in the County press room. No other evidence of dissemination of this information was observed.

J10c

Adequacy of means used for notifying all segments of transient and resident population

Sirens for prompt notification have not yet been installed. (see E.6 above) Aircraft to be used for notifying transient populations along the river were notified and standing by at Red Wing airport. Aircraft, river, and rail traffic through the area was stopped or redirected (simulated).

SUMMARY V -- Public and Media Relations

The Pierce County staff Public Information Officer actively gathered appropriate information and coordinated with the JPIC and the State prior to release. A press briefing room was established in the County Courthouse separate from the EOC and the designated spokespersons conducted briefings there. The use of separate news media facilities is not beneficial in the overall coverage of an emergency. There were no telephones in the County press room. Observers did not see evidence of a continuing public information program.

G1 Evidence of periodic dissemination of information to the public, such as annual publications, etc.

Not observed

G2 Evidence of a public information program for permanent and transient population in the plume EPZ, such as posted notices, etc.

Not observed

G3a Appropriate points of contact for the media have been designated

The News Media Center in St. Paul is the official point of contact for the media, but it is so far from the action in Pierce County that the County set up its own press room in the County Courthouse. Scheduled press briefings were held every two hours. Coordination between the two press centers was adequate and timely, but having two points of contact defeats the purpose of a JPIC.

Adequacy of joint media facility, where appropriate

The briefing area was adequate for the limited number of press present for the exercise, but there were no telephones in the press room. There is some question as to the adequacy of the trunk lines serving the Ellsworth area to handle the increased communications traffic that

would be generated by emergency operations and the news media representatives.

- G4a A media spokesperson has been designated who has access to all necessary information
 Media spokespersons have been designated. They were present in the EOC and conducted briefings in the County press room.
- G4 Adequacy of arrangements for exchange of information among spokespersons
 Communications between the County PIO, the News Media Center, and the State EOC worked smoothly. Press information was checked and verified constantly between these offices.
- G4c Adequacy of coordinated arrangements for rumor control measures
 The County recognized the need for rumor control and coordinated these activities with the News Media Center, Ellsworth.
- SUMMARY VI -- Accident assessment (staff & field operations, monitoring, equipment, technical calculations, use of PAGs)
 The RAD health function was not exercised on this occasion, but County organizations acted in accordance with State instructions. The Radiation Defense Officer in the County EOC monitored information and made appropriate clarifications to the staff. The West Central Area office was established for receipt and analysis of field monitoring data and sample media.
- H7 Adequacy of offsite radiological monitoring equipment
 Not observed
- H12 An adequate central point has been established for receipt and analysis of field monitoring data and sample media
 The West Central Area office served this function.
- I7 Adequacy of capability and resources for field monitoring within the plume EPC
 Not observed
- I8 Adequate capability to make a rapid assessment of magnitude and location of liquid or gaseous radiological hazards
 Not observed

- I9 Capability for measurement of radioiodine concentrations in plume EPZ under field conditions to 10^{-7} (state only)
Not observed.
- I10 Capability for relating measured parameters to dose rates and estimated integrated doses (state only)
Not observed.
- I11 Capability for locating and tracking airborne radioactive plume with aid of Federal and/or State resources (state only)
Not observed.
- J10m Capability to recommend protective action, based on PAGES, in plume EPZ (State only)
Not observed.
- C3 Evidence of availability and capability of radiological laboratories (state only)
Not observed.

SUMMARY VII -- Actions to protect the public (sheltering, evacuation, reception and care, transportation)

Although the lack of prompt notification provisions (sirens, EBS, etc.) reduced the capability for implementing protective measures, the EOC staff understood the required protective measures and used the best methods available to implement them. Relocation centers, with adequate facilities to receive the expected number of evacuees, were promptly notified and activated. Backup radio communications between the relocation centers and the County EOC were established. The RAD health team stationed at the Plum City Center monitored evacuees and registration was carried out efficiently. Evacuees (school children) were redirected to alternate facilities when the primary relocation center identified in the County plan was found to be full. Road conditions were closely monitored and impediments to evacuation removed promptly. Dairy farmers were advised of protective measures for their cattle.

- J2 Coordination with utility for movement of onsite individuals to offsite locations
- Not observed.
- J9 Capability for implementation of protective measures
- Capability for implementing protective measures was hampered by the inability to quickly inform the public (lack of sirens, delay of EBS). The EOC Staff understood required protective measures and used the best methods available to implement them.
- J10d Adequacy of methods used for protecting mobility impaired persons including institutionally confined
- A list of handicapped and elderly people needing evacuation was updated recently. A map of their locations was posted in the EOC. A bus equipped with a lift went to pick up these people when evacuation was declared. People were notified by phone prior to pick up. Two nursing homes in the area are on the edge of the 10-mile EPZ and were not evacuated.
- J10g Adequacy of methods used for implementing relocation of populace
- Relocation centers (schools) were notified promptly. Persons from the Diamond Bluff risk area were actually evacuated by bus to the Plum City relocation center. School children were (simulated) to be evacuated to Spring Valley relocation center (as designated in Plan) until that facility was full. The rest of the school children from Prescott were evacuated to the VW Stout facility.
- J10k Adequacy of organizations identification of and means for dealing with potential impediments to evacuation
- Road conditions were closely monitored. The County Department of Transportation crews were available to assist in clearing obstacles, such as rock slides, downed trees, etc.

J11 Adequacy of protective measures in ingestion EPZ, including dairy facilities, food processing plants, etc. (state only)

Dairy farmers within area were advised to shelter cattle and to put them on stored feed. Notification of farmers was well coordinated and carried out in a timely fashion.

J12 Adequacy of registration and monitoring of evacuees in relocation centers

A RAD Health team was stationed at the Plum City relocation center and monitored evacuees for contamination. Shower and laundry facilities were available at the facility to complete surface decontamination. Registration was handled by the Red Cross. They used both a State form and a Red Cross form for registration. After registration, the evacuees were fed and retained until reentry was authorized.

J10h Adequate relocation centers have been established at least 5 miles and preferably 10 miles outside the plume EPZ

Four relocation centers at least 5 miles beyond the plume EPZ, with adequate facilities to receive the expected number of evacuees, were activated. Amateur radio operators were dispatched to the centers to provide backup communications to the EOC.

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

The Pierce County EOC demonstrated an adequate capability to implement health, medical, and exposure control measures. The County EOC staff complied with exposure control limits established by the state. Dosimeters were issued to emergency workers, readings were recorded at the end of each shift, and KI was available for them as well as for nursing home residents. Roadblocks were positioned and backup crews were on standby.

- 10e Adequacy of provisions for use of KI for emergency workers and institutionalized persons in plume EPZ
- KI was available for emergency workers and nursing home residents.
- J10f Adequacy of methods used by state health department in decisions to administer KI to central population (state only)
- Not observed.
- J10j Adequacy of control of access to evacuated areas
- The County Highway Department dispatched crews to establish access control to the evacuated area. If primary roadblock personnel were called elsewhere, backup personnel were available to man these points.
- K3a Adequacy of a 24 hour a day capability to determine dose received by emergency workers
- Dosimeters were issued to all emergency workers and readings were recorded at the end of each shift. The exposure limit was established by State.
- K3b Demonstration of adequate and frequent emergency worker dosimeter readings and maintenance of dosage records
- See above.
- K4 Evidence that an adequate decision chain has been established to authorize exposure for emergency workers in excess of PAGES
- Not observed.
- K5a Evidence that appropriate action levels have been specified for determining need for decontamination
- Not observed.
- K5b Adequacy of measures for decontamination of emergency personnel, supplies, and equipment, and for waste disposal
- Not observed.
- L1 Adequate capability demonstrated by local and/or backup hospital and medical services for handling personnel
- No hospital participated in the exercise.

L4 Adequate capability demonstrated for transportation of radiological accident victims to medical support facilities

Not observed.

M4 Capability for periodic estimation of total population exposure (state only)

Not observed.

SUMMARY IX — Recovery and Reentry Operations

Upon notification that radiation had reached safe levels, the County closed evacuation centers and allowed evacuees to return home. When traffic flow into the evacuated zone had returned to normal, security was removed and emergency workers were called in, decontaminated as necessary, and released. The County remained on "Alert" with normal staffing.

M3 Adequacy of established means for informing response organization that recovery and reentry can be initiated (state only)

Not observed.

M1 Adequacy of procedures demonstrated for reentry and relaxation of protective measures allowing reentry

Upon notification that radiation had reached safe levels, the County closed evacuation centers and allowed evacuees to return home. When traffic flow into the evacuated zone had returned to normal, security was removed and emergency workers were called in, decontaminated as necessary, and released. The County remained on "Alert" with normal staffing.

SUMMARY X — Relevance of the Exercise Experience (Benefit to Participants, adequacy of the scenario)

The scenario was adequate to test the emergency response capability of Pierce County, with the addition of many complicating factors testing the ability to deal with a large spectrum of problems. The training and drills that

preceded the exercise contributed toward a marked improvement in the demonstration of capabilities and proficiencies of emergency response personnel in comparison to the previous year's exercise. The positive attitude and professionalism of the participants was evident throughout the exercise.

N1b

Adequacy of scenario to test capability to mobilize state and local personnel and resources

The scenario was adequate to test the emergency response capability of Pierce County.

N1a

Adequacy of exercise to test integrated capabilities and major portions of the basic existing response elements in affected organization

The addition of many complicating factors (loss of power, fires, rockslides blocking roads etc.) tested the ability to deal with large spectrum of problems.

Benefit of exercise to participants

Participants felt the exercise and the training leading up to it have been beneficial to them and other members of the County staff.

PART IV

SIGNIFICANT DEFICIENCIESMINNESOTAState

- G3a The multiplicity of press centers -- at the JPIC, at Northern States Power (NSP) Company Headquarters, and at various other points in both States -- contributes to a great possibility of confusion, misinformation, and rumors, particularly when coordination between the press centers is weak. It is recommended that Minnesota, Wisconsin, and the licensee agree on a single press center staffed by spokespersons for the States, the Counties, and the utility, and located closer to the Prairie Island plant than the present facility. The plan should be altered to reflect this if change is brought about. This requires a change in resources and an ultimate requirement in training of personnel.
- G4b Coordination of press releases between the JPIC and NSP Headquarters was minimal. Information was provided to the media at NSF Headquarters that was not provided at the JPIC. Communications between the JPIC and the near-site Emergency Operations Facility also appeared to be minimal. If the States and the licensee continue to use more than one press center, it is imperative that communications be improved between the press centers through formal training and that adequate procedures for coordinating press releases be developed and used.
- M3 Adequate means for informing response organizations that recovery and reentry can be initiated was not demonstrated by the State. Reentry of evacuees was initiated prematurely during the "Alert" stage of de-escalation and the reentry decision was not verified. On-the-job training is required in order to strengthen the experience of the EOC staff to assure that this function would be performed properly during a real emergency.
- E6 Inasmuch as the activation of the "Prompt Alerting and Notification System" is a function of the local jurisdiction, the State shares

in this responsibility. Largely due to the fact that the system exists to some degree, the "system" needs a total evaluation and certification as to its operation in accordance with Appendix 3 of NUREG 0654.

Goodhue County

- E6 Goodhue County did not demonstrate that notification of the public within the plume exposure pathway Emergency Planning Zone could be accomplished within 15 minutes. Additional emergency alert and notification equipment should be secured and utilized to demonstrate this capability. There is a need for additional resources and the training of personnel to effectively carry out this function.

Dakota County

- E6 Dakota County did not demonstrate that notification of the public within the plume exposure pathway Emergency Planning Zone could be accomplished within 15 minutes. Additional resources are required to improve this capability along with the training of personnel to effectively carry out this function.

WISCONSIN

State

- E6 Inasmuch as the activation of the "Prompt Alerting and Notification System" is a function of the local jurisdiction, the State shares in this responsibility. Largely due to the fact that the system exists to some degree, the "system" needs a total evaluation and certification as to its operation in accordance with Appendix 3 of NUREG 0654.

Pierce County

- E5 Backup communications are needed between the Pierce County EOC and the radio station in Red Wing. It is suggested a radio system be installed and personnel be trained on its use.
- E6 Pierce County did not demonstrate that notification of the public within the plume exposure pathway Emergency Planning Zone could be accomplished within 15 minutes. Additional alerting and notification equipment should be secured and utilized to demonstrate this capability. There is need for additional resources and the training of personnel to effectively carry out this function.
- G3a The Pierce County press room does not have adequate equipment resources to accommodate the number of press representatives expected

to appear in an actual emergency. If it is planned to continue the press room as a separate function from the central JPIC then additional equipment (telephones, copiers, telecopy, etc.) are needed to effectively carry out the responsibilities of this function.

PART V
MINOR DEFICIENCIES

MINNESOTA

State

- F1b Interstate communications concerning evacuation decisions need further coordination, study, and formal training by both States.
- E1 The notification of emergency response organizations by the State could be accomplished more rapidly if another person was assigned and trained for this task.
- H4 Representatives from the Minnesota State Police and the Minnesota Department of Agriculture were late in arriving at the EOC and the Fire and Rescue representative failed to arrive. The activation procedures for these agencies should be reviewed to see if changes in plan content are necessary to improve this capability.
- A2a Improvement is needed in Minnesota in the assignment of responsibilities for decision-making and implementation of procedures relative to sheltering and feeding of livestock. On-the-job training is required.
- Cl a There was some confusion during the exercise about who was responsible for requesting Federal assistance. Although this confusion was resolved, Minnesota should evaluate whether this is a problem in training or a fault in their plans.
- G3a The JPIC facility is adequate for its function, but more telephones need to be provided for the press.
- I9 The capability to relate the measurement of airborne radioactivity to the 10^{-7} uCi/cc lower limit for I¹³¹ was not demonstrated in the field. Staff need to be trained so that this can be done in the future.

Goodhue County

- J10a-b Maps displayed within the Goodhue County EOC need to identify the relocation centers. Although evacuees will not be relocated within the County, maps identifying the routes to the relocation centers should be posted. A larger population distribution map is also recommended.

- C2a Goodhue County did not send a representative to the licensee's near-site Emergency Operations Facility. This decision should be evaluated carefully to determine if resources are effectively utilized or whether the plan needs alteration.

Dakota County

- H3 The Dakota County EOC is a temporary facility with small space, no work surfaces for decision-makers, no permanent displays, and inadequate message handling procedures. Security was not adequate. It is recommended that a larger facility be obtained and that adequate procedures be developed to ensure the efficient and effective operation of this facility.

WISCONSIN

State

- J10a Maps of sampling points, traffic control points, topography, and population distribution were posted; they could have been used to better advantage if current conditions were displayed on them. Maps displaying relocation centers and shelter areas were not available; these additional resources should be provided.
- F1b Interstate communications concerning evacuation decisions need further coordination, study, and formal training by both States to avoid confusion for residents who may be asked to evacuate.
- I10 Although the State demonstrated an adequate capability for mobile monitoring, it is recommended that this system be upgraded to a micro computer with a standard modeling approach.
- N1a-b Although the exercise experience provided an adequate opportunity for exercise participants to make decisions under pressure in the face of conflicting data, it is recommended that future exercise scenarios be developed to simulate the dynamics of evacuation procedures in an interactive mode with decision-making authorities and law enforcement personnel.

Pierce County

- F1b An LG radio should be installed in the Pierce County EOC to complement the communications capability of the State.

- Fle The limited number of telephone lines in the EOC hampered agency notifications during simulated accidents not related to the power plant conditions. Perhaps lines from other courthouse offices could be routed into the EOC.
- Fld Additional resources are necessary to provide a backup for communicating with the State. A radio has been ordered but at the time of the exercise had not been installed.
- E5 A remote pickup unit should be considered for installation to back up existing commercial telephones. This is related to the problem of not being able to communicate with the radio station on an emergency priority basis.
- G3a A decision must be made as to the concept of operation for the news media centers. Minnesota must decide on one point of contact whereby Wisconsin is a part of it or each State establish their own with a good level of coordination.
- J9 A capability to implement protective measures exists, but they are hampered by the lack of rapid dissemination techniques to inform the public. With improvement in the "Prompt Alerting and Notification System" and backup communication between the County EOC and the local EBS radio station this element requirement should improve with the additional resources.
- L1 It is encouraged that hospitals become involved in the training process through their participation. Coordination between local governments and the community hospitals should take place which can benefit both parties; the hospitals for yearly certification and the local government to meet the REP criteria.

PART VI

SCHEDULE FOR CORRECTION OF SIGNIFICANT DEFICIENCIES

The two States, Minnesota and Wisconsin, have provided Region V with letters addressing the deficiencies sent them in the Prairie Island "Composite Exercrets." The States' actions need further definition. We believe they can readdress the deficiencies by the end of May 1982.