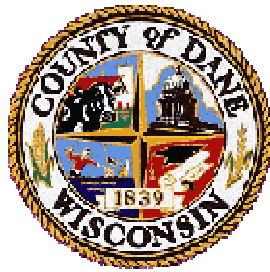


Dane and Rock County Long Term Power Outage Interactive Tabletop Exercise



After Action Report Improvement Plan

Exercise Date: August 11, 2010

Prepared By:

PRE-EMERGENCY PLANNING, LLC



HANDLING INSTRUCTIONS

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4. Program participants are encouraged to provide input relating to exercise design, conduct, and analysis to:

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EXECUTIVE SUMMARY

The Dane and Rock County Long Term Power Outage Interactive Tabletop Exercise was part of a state wide initiative that focused on coordination of regional planning for the response and recovery to a long term power outage (LTPO) situation.

The State of Wisconsin Office of Justice Assistance provided the grant funding for the program that brought together key stakeholders who participated in previously offered regional workshops. The focus of the workshops were to address the perceived needs of residents that maybe at risk and living independently, special populations planning and ensuring the availability of fuel for emergency response purposes. As a follow up to the workshops, the participating stakeholders were brought together to validate the discussions and continue regional planning efforts in the interactive tabletop exercise.

By conducting this exercise, Dane and Rock counties had the opportunity to assess the projected needs of residents working in unison to established priorities, objectives and tactical needs to support the response and recover to a long term power outage event. The exercise promoted regional collaboration, special needs planning and the building of emergency response capabilities.

The exercise was conducted on Wednesday, August 11, 2010 from 9:00 a.m. to 12:00 p.m. at the Stoughton Fire Department Training Room, 401 East Main Street, Stoughton, WI.

This report was prepared is to analyze exercise results, identify strengths to be maintained and built upon, document lessons learned, identify potential areas for further improvement, and support development of corrective actions.

Major Strengths

The major strengths identified during this exercise are as follows:

- Good interaction between counties
- Large variety of participating agencies resulted in good discussions
- Opened communications and gave a better understanding of roles and responsibilities
- Identification of available resources
- Realistic situation presented for planning purposes

Primary Areas for Improvement

Throughout the exercise several opportunities for improvement were identified. The primary areas for improvement are as follows:

- Promotion of citizen and neighborhood based preparedness programs
- Agency E•SPONDER® and WiTrac Training
- Develop a Southwest WI Regional Emergency Management mutual aid agreement
- Identify shelter locations that have generated power supply
- Expansion of emergency fuel plans for utility services and creating fuel distribution plans
- Procure auxiliary electrical generation for 211 and the primary animal shelters
- Pre-plan anticipated generation support needs for the utilities
- Communication plan that identifies methods of connectivity during an electrical outage

SECTION 1: EXERCISE OVERVIEW

Exercise Details

Exercise Name

Dane and Rock County Long Term Power Outage Tabletop Exercise

Type of Exercise

Tabletop Exercise

Exercise Start and End Date

Wednesday August 11, 2010

Duration

3 hours (9:00 am – 12:30 pm)

Location

Stoughton Fire Department-Training Room
401 East Main Street
Stoughton, WI

Mission

Response & Recovery

Capabilities

1. Citizen Evacuation & Shelter In Place
2. Communications
3. Emergency Operations Center Management
4. Restoration of Lifelines

Scenario Type

Natural Hazard- Severe weather resulting in a long term power outage

Exercise Planning/ Facilitation Team

Brian Demrow, Edgerton Fire Department (evaluator)
Kathy Krusiec, Dane County Emergency Management (group facilitator)
Shirley Connors, Rock County Emergency Management
Jude Maurer, Rock County Sheriff's Office (group facilitator)
Bridgett Aldridge, Alliant Energy (group facilitator)
Michael Stienhauer, Dane County Special Needs Planner (group facilitator)
Paul Logan, Dane County 911 Communications (group facilitator)
Melissa Waller, Pre-Emergency Planning, LLC (logistics)
Jo Ann Wipperfurth, Pre-Emergency Planning (lead facilitator)

Participating Organizations

Category	#	Category	#	Category	#
Appointed Officials	1	Law Enforcement	4	Transportation	
School Personnel		Military		Utilities	7
Communications	6	Private Industry		Voluntary Agencies	4
Emergency Mgt.	5	Human Services	1	Public Safety	
Finance	1	Public Participants		Federal	
Fire	3	Public Works	2	State:	2
Health & Medical	5	Radiological		Other:	5

Total number of Participants: 46

Participating Agency List:

- | | |
|--|-----------------------------------|
| American Red Cross | Rock County Sheriff’s Office |
| Rock County Public Information Officer | Dane County Housing Authority |
| Dane County Emergency Management | Rock County Board Chair |
| Rock County Emergency Management | Rock County 911 |
| Rock County Public Works | Beloit Public Works |
| Meriter Hospital | Rock County ARES/RACES |
| Wisconsin Emergency Management | Dane County Madison Public Health |
| Salvation Army of Dane County | United Way of Dane County |
| WI Department of Ag, Trade & Consumer | Madison VA Hospital |
| Dane County EMS | Dane County Administration |
| Wisconsin Capitol Police | Madison Gas and Electric |
| Dane County Land Information | WI Dept. of Administration |
| Stoughton Fire Department | Dane County Humane Society |
| Dane County ARES/RACES | Alliant Energy |
| Dane Co. Public Safety Communications | Janesville Police Department |
| Rock Energy Coop | Pre-Emergency Planning |

SUMMARY OF PARTICIPANT FEEDBACK:

The summary listed below was taken from the comments received from 25 of the 46 participants who returned a feedback form.

Assessment of the exercise:

Assessment Factor	Rating of Satisfaction with Exercise				
	Disagree		Agree		
	1	2	3	4	5
The exercise was well structured and organized.			1	7	17
The exercise scenario was plausible and realistic.		1		12	12
Participation in this exercise was educational.			2	5	18
Involvement in this exercise was appropriate for someone in my position.			1	14	10
The participants included the right mix of representatives.			2	11	12

Summary of additional comments:

- This exercise pointed out that there is more work to be done to make the flow of information more seamless.
- Emergency operations are not my area of responsibility so it was a great learning experience for me.
- Would have benefited from more knowledge of what the state was doing.
- Would have liked to have seen other first responders in attendance.
- Very informative exercise.
- Would have liked to have seen representatives from phone and cable companies.
- Very useful in identifying some of our weaknesses.
- Very well organized and set up so everyone learns what others responsibilities are. Very informative!
- Very well organized with a realistic incident.
- Not enough time to discuss all of the questions.
- Learned a lot from the different agencies, things I hadn't thought of.
- Would have liked to have seen participants from the private sector.
- Hard to hear during the group discussions.
- Great job, self and neighborhood preparedness is critical.
- Would like to see this exercise as a functional exercise allowing participants to identify specific response needs and plans.
- The exercise was well planned and organized.
- Good interaction with Rock County
- Felt somewhat as a silo with separate areas (tables) not able to hear all the good things that were being discussed
- Not enough time for discussion
- The scenario needed to be more drastic to establish true long term issues; months not days.
- Concerns on GIS compatibility and information sharing between Co. GIS and Utilities
- Good contact with other agencies

SECTION 2: EXERCISE DESIGN SUMMARY

Exercise Purpose and Design

The Dane and Rock County Long Term Power Outage Tabletop Exercise used capabilities-based planning to identify a baseline assessment of their homeland security efforts by comparing their current capabilities against the Target Capabilities List (TCL) and the critical tasks of the Universal Task List (UTL). This approach identifies gaps in current capabilities and focuses efforts on identifying and developing priority capabilities and tasks for the jurisdiction.

The Interactive Tabletop Exercise was designed for examination of operational plans, problem identification, and in-depth problem solving in a multiagency coordination setting. Through facilitated discussion, the individual table groupings discussed the processes that would be used to support response and recovery efforts for a regional wide long term power outage.

The facilitated table groupings were organized in the following manner:

Group A: Executives, finance, emergency management, state representatives, emergency communications, fire service and law enforcement officials.

Group B: Public Information staff and amateur radio operators.

Group C: Special needs planners, voluntary agencies, public health and animal shelter management.

Group D: Planned for Logistics and Finance. Not occupied due to limited registrants.

Group E: Electrical Utilities, Public Works, Gas Utility

Group F: EMS and Health and Hospitals

Exercise Objectives, Capabilities, and Activities

Capabilities-based planning allows exercise planning teams to develop exercise objectives and observe exercise outcomes through a framework of specific action items that were derived from the Target Capabilities List (TCL). The capabilities listed below form the foundation for the organization of the objectives and observations in this exercise. Additionally, each capability is linked to several corresponding activities and tasks to provide additional detail.

Based upon the identified exercise objectives below, the exercise planning team chose to demonstrate the following capabilities during this exercise:

Capability I: Citizen Evacuation & Shelter-in-Place

Capability Description: Citizen Evacuation and shelter-in-place is the capability to prepare for, ensure communication of, and immediately execute the safe and effective sheltering-in-place of

an at-risk population (and companion animals), and/or the organized and managed evacuation of the at-risk population (and companion animals) to areas of safe refuge in response to a potentially or actually dangerous environment.

Activity 1: Direct Evacuation and Sheltering

Task (Objective): In response to a region wide power outage discuss how decisions are made regarding citizen evacuation and emergency shelters activation.

Activity 2: Activate Evacuation

Task (Objective): Discuss the process that will be used to identify and make notification to at risk and special needs populations that may require assistance in an evacuation.

Activity 3: Direct Evacuation and/or In Place Protection Operation – Implement Evacuation Orders for General Population

Task (Objective): Discuss the ability of emergency response agencies to plan and implement evacuation or shelter in place of Long Term Care Facility's and special needs populations during an emergency or disaster.

Capability II: Communications

Capability Description: Communications is the fundamental capability within disciplines and jurisdictions that practitioners need to perform the most routine and basic elements of their job functions. Agencies must be operable, meaning they possess sufficient wireless communications capabilities to meet their daily internal and emergency communication requirements before they focus on interoperability, which means being able to work with other agencies.

Communications interoperability is the ability of public safety agencies (e.g. police, fire, emergency medical services (EMS) and service agencies (e.g. public works, transportation, hospitals) to talk within and across agencies and jurisdictions when needed and authorized using various communications systems to exchange voice, data, and/or video with one another on demand or in real time. It is essential that public safety has the intra-agency operability it needs, and that it builds its systems toward interoperability.

Activity 1: Alert and Dispatch

Task (Objective): Discuss the ability to establish and maintain communication essential to support response to a major incident.

Capability III: Emergency Operations Center Management

Capability Description: Emergency Operations Center (EOC) management is the capability to provide multi-agency coordination (MAC) for incident management by activating and operating

an EOC for a pre-planned or no-notice event. EOC management includes: EOC activation, notification, staffing, and deactivation; management, direction, control, and coordination of response and recovery activities; coordination of efforts among neighboring governments at each level and among local, regional, State, and Federal EOCs; coordination of public information and warning; and maintenance of the information and communication necessary for coordinating response and recovery activities.

Activity 1: Direct EOC Operations

Task (Objective): Evaluate the EOC personnel on how they assess the event and assist county personnel in support of their Emergency Plan during a major emergency or disaster.

Activity 2: Implement Continuity of Operations/Government Plans

Task (Objective): Discuss what community essentials services must be maintained and what services can be eliminated in a severe weather related event.

Capability IV: Emergency Public Information and Warning

Capability Description: Develop, coordinate, and disseminate accurate alerts and emergency information to the media and the public prior to an impending emergency and activate warning systems to notify those most at-risk in the event of an emergency.

Activity 1: Manage Emergency Public Information and Warning

Task (Objective): Communicate the process that will be used to manage, coordinate and disseminate emergency public information.

Capability VI: Restoration of Lifelines

Capability Description: Manage clearing and restoration activities (e.g., demolition, repairing, and reconstruction). This includes the restoration of essential gas, electric, oil, communications, water, wastewater and sewer, transportation and transportation infrastructure, and other utilities; this also includes clearing debris from lifelines (e.g., transportation, communications, and utilities).

Activity 1: Restoration and Assessment of Lifelines

Task (Objective): Restoration efforts are discussed, addressing the assessment process and establishing priorities for recovery as it relates to restoration to restore critical lifelines (i.e. Electricity, natural gas, water/wastewater, telephone, emergency fuel, and retail food supplies).

Scenario and Outcome Summaries

For exercise purposes the date was Wednesday, December 8th. The NWS predicted a round of severe winter weather for Southeast and Southwest Wisconsin. There is the potential for significant icing - ice accumulations of up to an inch are predicted throughout southwestern Wisconsin. Strong winds are forecasted with sustained winds of 25 to 35 miles per hour and gusts of 45 to 55 miles per hour. Light snow is expected to begin early today changing to sleet and rain by midnight. Temperatures are expected to remain in the low 30's for the rest of the week with additional snow accumulations expected on Friday.

The National Weather Service briefed WEM officials and the counties in the projected path of the storm on a regular basis. NWS predicts this ice storm may lead to “a potentially dangerous situation with long duration power outages possible.”

Utility providers are focused on the anticipated restoration needs ensuring they have adequate crews for line clearance and estimating the potential impact of the storm. Local governmental agencies are reviewing their winter weather response plans preparing to ensure they have adequate resources to manage the storm.

The State and local Emergency Operations Centers (EOC) are monitoring the storm closely with many planning to have personnel stay throughout the night. The National Weather Service has briefed the local Emergency Management's on the anticipated arrival of the storm and the associated impacts.

Initial Situational Briefing: Thursday, December 9th at 9:00 a.m.

The predicted storm swept across the southern half of the state last night bringing a wintry mix of precipitation and large amounts of ice build-up throughout many communities. Overnight 2-3 inches of snow accumulated in the area before changing to rain and ice. The NWS is stating this storm may be one of the most damaging ice storms in history for the State of Wisconsin. Meteorologist David George, from the Channel 15 Weather Authority reported that ice has accumulated anywhere from 1/2 inch to a full inch in some areas. Additional precipitation is expected over the area for the next 24 hours. The affected counties include: Walworth, Dane, Rock, Green, Lafayette, Iowa, Sauk and Columbia.

Uprooted trees and fallen limbs are being reported throughout the storm's footprint. Downed power lines, debris and broken utility poles are blocking access to many state and local roads. While Highway Departments and Public Works personnel have worked throughout the night, the wind, ice and debris are making roads impassable. Most businesses and schools in the affected areas have closed; flights have been cancelled from Chicago Rockford International and Dane County Regional Airport.

Utilities (Alliant, Madison Gas & Electric, Adams Columbia Cooperative, We Energies, Scenic River Coop, and Rock Energy) are reporting widespread damage to their electric distribution systems due to downed power lines, broken electrical poles, and debris. The number of meters without power has been described as massive.

Major power outages are reported in eight counties leaving more than 400,000 electric utility customers without power. It is believed that some of the affected customers may be without power for a week, while some in rural areas may be without electricity for up to a month. Telephone customers, including those with digital cable telephone service powered by electric modems, are without service as well. Cell phone coverage is sporadic at best, leaving many with no way to communicate.

The Dane and Rock County EOC's are operational, local emergency declarations have been issued and Governor Doyle has declared a State of Emergency for the southern portion of the state.

Outcome:

In preparation of the storm each County identified that they would be closely monitoring the situation, speaking with the NWS to predict the impact. Both counties would have partially activated their EOC's in preparation of the storm, communicating and monitoring the impending situation. As the event progressed the staffing of the EOC's would have been increased.

The impact of the wide spread power outage and limited modes of communication would have impeded routine methods of obtaining and assessing the impact of the event. The initial eight (8) hour operational period priorities for the EOC are summarized below:

Group A: (Officials – Emergency Management)

- Communication to the public, employees and department representatives
- Situational awareness - coordination with other external agencies, i.e. E•SPONDER®
- Providing essential services and suspension of governmental services
- Restoration of communication networks – establishing utility liaisons in the EOC

Group B: (Public Information)

- Communicating a safety message to the public advising to stay home and use resources wisely
- Identify contact/reporting locations for the public – government i.e. fire and police stations

Group C: (Special Needs – Social Services)

- Volunteer's ability to respond and support shelter operations due to road conditions
- Ensure location for animal services (sheltering)
- Utilizing 211 services to support emergency messaging
- Inability to communicate via phone or through email

Group E: (Utility Liaisons and Transportation)

- Establishing communication with the EOC's
- Coordination with American Transmission Company and neighboring utilities on their available resources
- Determining available staffing resources
- Assessing scope of the incident and mapping out the affected areas

- Arranging logistics for field personnel

Group F: (EMS and Hospitals)

- Maintaining business operations
- Adjust levels of care and staffing levels
- Operating in an emergency power (generator) environment
- Establishing road access for ambulances
- Transportation for staffing resources
- Communication link with Hospital Liaison at the EOC

Situational Briefing: (+8 hours) 5:00 p.m. on Thursday

Weather update: Light snow continues to fall, less than an inch of accumulations expected overnight. Winds continue to gust at speeds up to 30 mph causing additional drifting keeping roadway conditions hazardous.

- The communications networks continue to be a problem; cell phone coverage is unreliable and telephone companies are just beginning to access and assess the damaged areas to begin repairs.
- WEM has requested damage reports from the affected Counties.
- Local media are requesting information regarding the management of the storm and recovery operations within the counties.
- The established shelter sites are filling up fast as households flee because they have no heat or electricity. Some of the hospitals and area nursing homes are functioning as warming and feeding stations for the general public.
- The Highway and Public Works crew have been working continuously to clear roads. Due to the inability of staff to report for work employees are having to work extended hours. Supervisors are questioning if they should be tracking the hours attributed to the storm differently. Some vendors (i.e. food service, environmental services, etc) are notifying the County's that they are unable to make scheduled deliveries due to the condition of the roadways.
- Utilities are being questioned by the media regarding their priority restoration of power process. The EOC is planning for the next operational period and has requested maps and visuals that would display outage areas including visual that displays that depict the locations that have been restored.

Outcome:

Discussion was held regarding priorities and actions throughout the next operational period. It was identified that the original priorities would not have changed but would be enhanced to meet the situation as it progressed.

Group A: (Officials – Emergency Management)

- County government would have closed operations expect for the following essential services:
 - Law Enforcement

- 911 Communications
- Jail Personnel
- Home Health Services
- Emergency Management Personnel
- Information would be obtained through Fire, EMS, Public Works and County Highway personnel regarding municipal assessments
- Request the Air National Guard to survey areas
- Utilize redundant communications through ARES/RACES, satellite phones and portable radios

Group B: (Public Information)

- The message put out to the public would advise persons needing assistance to seek refuge at the local shelters
- The official spokesperson for Dane County is the County Executive
- The official spokesperson for Rock County is the County Board Chair or Sheriff
- Utilities would have corporate communication personnel at the EOC to coordinate with the County PIO's

Group C: (Special Needs – Social Services)

- Community service agencies would have prepared information for their clients prior to the storm
- American Red Cross would have established central locations for shelters that had generator power capabilities – this information would have been provided to 211 for referrals
- Transportation to and from shelters would be the responsibility of the citizens
- Would be requesting any additional fuel needs through the EOC
- Staff from neighboring voluntary agencies would be requested to support an event of this magnitude
- The Dane County Humane Society would work closely with the American Red Cross to ensure sheltering for pets was available

Group E: (Utility Liaisons and Transportation)

- Utilities are aware of persons with specialized medical needs through a registry, this population would not receive priority restoration
- Priority restoration would include the following:
 - Hospitals, Emergency Response Agencies, Government, etc.
- Crew safety and establishing staff rotations would be a priority
- Telecom and electric utilities do not coordinate efforts
- Utility would coordinate resource support through the EOC Liaison

Group F: (EMS and Hospitals)

- The hospitals could serve as a short term place of refuge until appropriate shelters were opened
- Transportation to shelters would be requested through the EOC Liaison
- The Dane County Medical Reserve Corps would be activated. Currently Rock County

does not have this resource available.

Situational Briefing: (+24 hours) 8:00 a.m. on Friday morning

Weather Update: Light snow continues to fall in the area. Temperatures have dropped significantly to the mid teens and the wind continues to gust up to 30 mph.

- Utility crews estimate the outages could take several days, if not more to restore the priority services. Cell phone coverage is improving, but many residents remain without communications due to the inability to charge their cell phone batteries.
- An assisted living facility, Swifthaven at 124 Henry Street in Edgerton reported that their generator has failed. They will need to find transportation and an alternate location for their 30 residents. Their preplanned alternate site is unavailable due to the conditions so they have requested assistance from County Human Services. Badger Prairie Nursing home in Verona has contacted Dane County Human Services because their boiler is not working properly. This has affected the buildings temperature controls.
- Several deaths have been reported as a result of the week's weather. One elderly female was found dead in her Janesville apartment and the Coroner has attributed the death to hypothermia – loss of heat. A family of four from De Forest was taken to the hospital with carbon monoxide poisoning believed to be from improper use of the portable generator they were using to power their residence.
- Several municipal law enforcement agencies and emergency response agencies have contacted the County Hwy Departments inquiring about the availability of fuel. Many of the local gas stations and County fuel suppliers that are routinely used are inoperable or have low fuel levels. Due to the road conditions regular fuel deliveries have been delayed.
- Due to the lack of deliveries, supplies and backup power a majority of the small grocery stores and large box stores have closed leaving area residents without essential items such as food, water and personal hygiene supplies. People have started to loot the area stores to get whatever items they can to sustain. One arrest was made last night and the thief claimed he could not get any cash from the ATM so he resorted to stealing what he needed for his family. While the local communities are attempting to control the looting, residents have become worried about their safety.

Outcome:

Twenty four hours into the incident the groups were asked a series of questions regarding sustainment and impact as the event continued.

Group A: (Officials – Emergency Management)

- Priorities would be transitioning to the recovery phase
- Communication with outside agencies would be done more frequently using whatever

modes possible

- The EOC's would be operational 24/7 but planning would begin to scale back operations as the situation diminished
- A task force would be assigned to establish fuel availability
- Law Enforcement agencies from non affected areas of the State would be requested and curfews would be enacted by local units of government

Group B: (Public Information)

- Emergency assistance and safety messages would be distributed via press conferences
- Joint Information Centers would form to coordinate information
- County to County PIO communication is deemed essential
- Message to the public would focus on restoration and reassurance to the public

Group C: (Special Needs – Social Services)

- Dane County has a long term care facility database that includes demographics and resources for all facilities within the County
- Rock County has begun long term care facility emergency planning
- Dane County has an agreement in place with Central Wisconsin Center to provide alternate facilities for special needs populations

Group E: (Utility Liaisons and Transportation)

- Utilities would limit fuel resources to field restoration personnel only
- MG&E currently has contracts for alternate fuel sources in place
- Utility restoration priorities would be continually reassessed and adjusted if necessary, based on the needs of the EOC (i.e. grocery stores, fuel pumping stations, etc.)
- Downed wire calls would be prioritized to major roadways not private residences

Group F: (EMS and Hospitals)

- Elective procedures and clinics would have previously been canceled and closed
- Additional call lines would be available for medical inquiries
- Ensure employees families needs were met as this would have an impact on staffing levels

Situational Briefing

Saturday	Sunday	Remainder of the week
Partly cloudy with periods of sunshine. The temperatures are not expected to get much above 25 degrees. Winds will be light.	The weather is predicted to deteriorate during the day and throughout the evening with heavy snow expected.	Sunny skies, warmer temperatures and no chance for precipitation

The weather predictions for today, tomorrow and the remainder of the week are as above. As things progressed over the next few days...

Status Update: 8:00 a.m. on Saturday morning (+48 hours)

- Much of the electricity at critical facilities has been restored.
- Some municipalities have concerns with fuel availability to maintain generators.
- The Wastewater Treatment plant in Janesville is down due to generator failure.
- A water main has broken in Verona causing a need to supply drinking water to residents.

Status Update: 8:00 a.m. on Sunday morning (+72 hours)

- More snow may lead to an increased population in shelters; site managers have identified a need for additional staffing resources, blankets and support with obtaining food supplies to continue operations.

Status Update: 8:00 a.m. on Monday morning (+96 hours)

- Snow accumulations from last night varied between 4 and 6 inches.
- Utilities are reporting steady progress in the restoration process.
- Municipal Public Works Departments working on tree clearance and debris removal.
- Approximately 1,200 customers were still without power but the utilities expect near complete restoration within the next day or two.

Based on the presented information the table groups were asked what their biggest concerns would be and what improvements are suggested. These comments are summarized in the analysis of capabilities section listed below.

SECTION 3: ANALYSIS OF CAPABILITIES

This section of the report reviews the performance of the exercised capabilities, activities, and tasks. In this section, observations are organized by capability and associated activities. The capabilities linked to the exercise objectives of the Dane and Rock County Long Term Power Outage Tabletop Exercise are listed below, followed by corresponding activities. Each activity is followed by related observations, which includes an analysis and recommendations. References are provided at the end of the section.

CAPABILITY I: CITIZEN EVACUATION AND SHELTER IN PLACE

- **Activity: Direct Evacuation and Sheltering**

Capability/Activity Observation: Dane and Rock County Emergency Management utilize the American Red Cross for general population sheltering management. It was identified that shelter operations would be needed in the presented situation. The decision to activate and staff shelters would have been coordinated at the County EOC's. Due to the power outage, a centrally located shelter that had the capacity to generate power would have been opened but this would be contingent upon available volunteer staffing.

A clear message projected in the exercise was that it will take time to establish emergency shelters. Volunteers must ensure their safety, family stability and have the ability to mobilize by accessing transportation to the shelter sites. Once at the locations, the facilities need to be readied to receive occupants. This may include setting up equipment, accessing food supplies and other logistical needs.

In our scenario the reduction of public transportation resources and hazard of navigation on the roadways would hamper shelter activations. Meanwhile citizens will need to care for themselves as this may be in a shelter in place situation. Citizens need to be self reliant. Some neighborhood preparedness programs are proving to be successful as reliance is local and those in the "community" support one another instead of having to go to a central located community based shelter.

Analysis: In response to a pending storm, pre-incident planning and communication should be communicated with shelter operations management and staff to discuss anticipated needs. This communication could promote a stance of leaning forward by getting staff prepared for an activation of shelters.

Community education regarding personal preparedness remains a key factor for health and safety. Robust programs that promote citizen education about winter storms and the possibility of isolation in their home, how to conserve heat and having supplies on hand could decrease the reliance of local governments.

Recommendation:

1. Pre-plan and communicate with shelter managers in a pending event.
2. Promote citizen self reliance and neighborhood based preparedness programs.

- **Activity: Activate Evacuation**

Capability/Activity Observation: Special needs populations (medically stable with specialized care needs) requiring sheltering in Dane County would have been coordinated through the EOC. A registry is in place that identifies those in needs. A special needs shelter has been identified to accommodate this population.

Rock County is currently developing plans for managing and sheltering special needs populations. Discussion regarding animal sheltering identified that the Humane Society in Dane County does not have auxiliary power. Both counties identified that pet sheltering planning is under development.

Some populations may seek temporary refuge at area healthcare facilities for warming and feeding. As information is relayed regarding shelter activations, those seeking refuge would be directed to the shelter facilities. Transportation to shelters from the healthcare facilities would be coordinated through the EOC.

Analysis: The Humane Society in Dane County may have the ability to accept pets that are not allowed in community shelters however the lack of electricity and heat may hamper operations based on weather and shorter hours of daylight.

County EOC's can anticipate that healthcare may be requesting transportation support to the shelters. While transit systems may be available to serve as warming locations these resources are very temporary.

Recommendation:

1. Identify and map shelter locations that have generated power supply.
2. Develop special needs population sheltering plan (Rock County).
3. Procure auxiliary electrical generation for primary animal shelters.

- **Activity: Direct Evacuation and/or Shelter In Place Operations – Implement Evacuation Orders for the General Population**

Capability/Activity Observation: It was discussed that many shelters may be needed in such a wide spread power outage situation. Communicating with volunteers would be difficult due to lack of communication networks but it was believed that many volunteers would self activate. The Salvation Army identified that personnel resources and supplies could be obtained from other regions but delivery methods of these resources would be a problem. Communication regarding the shelters would have to occur directly and through a County EOC liaison. A discussion was brought forward about requesting the National Guard for assistance in operating shelters. While armories may be available for use as shelters the main concern was staffing and shelter management. In previous disasters governments have used National Guard resources for this purpose.

Analysis: The goal of the EOC s would be to safely support sheltering of the affected and at-risk populations so they can obtain access to medical care, physical assistance, shelter, and other

essential services. In a wide spread winter storm, personnel resources to support shelter operations may be scarce, particularly if the event lasts for many days or weeks. Identifying non-traditional staffing resources for sheltering services may prove beneficial.

As plans are developed for redundancy the shelter communications methods should be addressed. As ARES/RACES personnel are dispersed to support emergency communications, these resources may be considered for locating at the centrally based shelters as they could relay essential information to the EOC's.

Recommendations:

1. Establish a plan for communicating with the shelters when routine communications are unavailable.
2. Investigate the capability of the Wisconsin National Guard to provide shelter management mission assignments.

CAPABILITY II: COMMUNICATIONS

▪ **Activity: Alert and Dispatch**

Capability/Activity Observation: The ability to communicate in a wide spread power outage would be a challenge. Public Safety personnel have redundancies and utilize radio waves and satellite which would allow for a reliable means of communicating. Amateur Radio Services (ARES) operators are a great resource because they have the ability to establish and maintain communication under adverse conditions.

The Counties both utilize Wisconsin ARES[®]/RACES volunteers to support communication needs from their EOC to healthcare facilities, state and other locations. These volunteers can provide emergency communication to specific identified locations when landlines, cell phones and other conventional means of communications fail.

Both counties have 2-1-1 systems in place. 211 uses volunteers to take calls and connect people in need with human services. Callers are linked to information about local resources, from both government and nonprofit organizations. It was identified that the 211 center does not have back up generation to maintain operations, however they capability to transfer calls and have another community 211 center support center operations.

Analysis: In a long term power outage event there will be challenges including a sense of isolation impeding the ability to plan and prepare appropriately based upon limited information received due to the disruption of traditional methods of communication. Both county public safety communications centers (911) have generator power and have the capability to continue operations.

It was identified that amateur radio operator volunteers will be a critical component for communicating information and data when conventional communication methods are disrupted. Agencies that staff the EOC need to have an understanding of the capability of amateur radio services to communicate and set up operations at various locations to support communications.

While the participants believed dissemination of information would be critical the means to get the information to the public will have to be by word of mouth and through public safety patrol methods. In the scenario, limited cellular phone networks had varying access but priority systems such as using Government Emergency Telecommunications Service (GETS) and Telecommunications Service Priority (TSP) and Wireless Priority Services were not discussed.

Recommendation:

1. Review emergency communications plans to ensure all forms of communication redundancies are included and include plans for communicating in an electrical outage.
2. Procure auxiliary electrical generation for 211 call centers.
3. Train EOC staff on the capabilities of ARES/RACES to provide emergency communication support.

CAPABILITY III: EMERGENCY OPERATIONS CENTER (EOC) MANAGEMENT
Activity 1: Direct EOC Operations

Capability/Activity Observation:

As the scenario was presented it was evident that the counties would manage and support the emergency through a coordinated process by involving key public and private organizations. The Emergency Operations Centers would serve as a hub of assessing the impact of the storm, disseminating information and coordinating restoration and recovery efforts. Situational awareness will dictate the effectiveness of this process. As stated earlier in this report communications will challenge officials because obtaining information and delivering messages with limited communication networks will require creativity and use of non traditional methods to obtain needed information. It was assumed that data transmission of information may be the most reliable in this type of event.

Dane and Rock County EOC's have auxiliary power for operations. It was discussed that EOC situational awareness could be maintained through the use of technologies such as E•SPONDER® and WiTrac if fiber optics were available but not all agencies know how to use these systems.

Both EOC's would be staffed with a utility liaison to coordinate restoration and recovery efforts. The utilities identified they use special mapping programs to display outages and restoration status. The ability to share utility maps are incompatible with routine software programs not allowing accessibility from the local EOC's.

The EOC's identified they would coordinate needs with the State EOC for additional resources in a regional crisis. While plans were underway for a regional mutual aid program, the process has been halted. It was identified that several nontraditional resources may be available for assistance, i.e. the Southwest WI Incident Management Team could possibly be used to back fill staff positions in the EOC and in the field as indicated.

Analysis:

Both Dane and Rock County have plans in place to manage and support weather related emergencies. In a long term power outage event that affects routine communications pathways, impedes road traffic limiting human capital the reconstitution procedures to return to normal will take time. Lessons learned from a previous winter storm that affected both counties identified the need to keep motor vehicle traffic routes open and promote through public information the criticality of citizens to stay off of the roadways and shelter in place. Operational periods would be established and revisiting priorities would be the norm.

To maintain situational awareness with the jurisdictions in the counties would rely on information from public safety personnel and through the use of electronic technologies. E•SPONDER® is a technology resource available in Wisconsin. The technology platform provides tools for resource management, event management, emergency operations planning and management and has GIS mapping capability. E•SPONDER® training will be offered in conjunction with the October 2010 Wisconsin Emergency Management Association Conference; this training could be promoted or a stand along training course could be scheduled to meet the needs of the agencies.

Although the event would be effectively managed through multi-agency coordination, it would be a challenge for the staff due to delayed incoming information and the need for additional staffing for future operational periods.

Recommendation:

1. Promote E•SPONDER® Training
2. Offer training to EOC staff on the capabilities of WI Trac (Wisconsin Tracking, Resources, Alerts and Communication) technology

Activity 2: Implement Continuity of Operations/Government Plans

Capability/Activity Observation: The groups were asked what essential services would be required in the presented scenario. In response, it was identified that government would need to maintain public safety systems (law enforcement, 911 centers, fire, EMS), confinement facilities (i.e. jails), highway/public works and emergency management services at a minimum. The remainder of government services would have been closed until staff could safely report to an operable work facility.

Healthcare systems would have initiated their internal Incident Management Teams, cancelled non essential services (i.e. elective surgeries, therapies, etc.) and linked communications through an inter-hospital liaison that would be located at the County EOC. Both Dane and Rock County have an inter-hospital liaison system comprised of representatives from their county healthcare facilities. The liaison would use a technology platform called WI Trac (Wisconsin Tracking, Resources, Alerts and Communication). WI Trac is a web based tool that hospitals use to alert and communicate with each other and with their emergency response partners, not only in an emergency, but also on a day-to-day basis. While intended primarily for hospitals, this system is

also available to EMS, First Responders, public health, physician offices, law enforcement, fire departments, Dispatch Centers and Emergency Management directors.

Recognizing that emergencies may require assistance in the form of personnel, equipment, and supplies from outside the area of impact, emergency management in the Southwest Region of Wisconsin began discussion on the development of a Regional Program for Mutual Aid and Assistance but this process has slowed.

Analysis: Understanding that continuity planning facilitates the process that will be employed to provide during an incident that disrupts normal operations. Rock and Dane County continue to plan, train and exercise to ensure that essential services are provided to their municipalities and citizens.

In this exercise some resources were identified which could possibly enhance readiness efforts; these included assets that may be provided by the private sector. As planning continues, establishing relations and agreements with the private sector in advance of a need may expedite recovery efforts. Resuming the process to develop a Regional Mutual Aid and Assistance Program may support the projected resource needs to coordinate activities and share resources during emergencies.

Recommendation:

1. Develop a Southwest WI Region Emergency Management Mutual Aid Agreement
2. Expand emergency fuel plans that include distribution priorities and establish agreements with private organizations (i.e. McFarland Tank Farm for fuel resources) that could support anticipated needs.

CAPABILITY: EMERGENCY PUBLIC INFORMATION AND WARNING

- **Activity: Manage Emergency Public Information and Warnings**

Capability/Activity Observation:

The communication and dissemination of critical information to the public proved to be a significant challenge. A majority of the southwest region experienced power and communication outages which made the normal methods and modes primarily ineffective. The public that relies upon television, radio or computer had no electricity.

Both counties have assigned public information officers to prepare messages and communicate with the media. Based on the situation as initially presented, the opening of shelters and safety messages would have taken priority. As the situation grew into days the message focused to a “we will recover from this event”. A Joint Information Center (JIC) would be needed to manage emergency information. Rock County would have worked closely with the Sheriff’s Office and Emergency Management while Dane County would have direct contact with the County Executive.

Analysis: Plans for emergency public information and warning would have been activated both

prior to and after the storm. Information would have been coordinated with utilities and other essential partners. Dane County identified they would develop an EOC Incident Action Plan. The process for managing and disseminating public information and warnings would have been a component of the planning. The counties would have coordinated information and transmitted the information via accessible routes. The information would have useful and reliable information regarding health risks, safety, restoration information and traffic. The public information would have been updated regularly and outlined protective measures. As planning continues between the counties and the region, developing plans for public information collaboration (speaking with “one voice) should be a focus.

Recommendation: None

CAPABILITY: RESTORATION OF LIFELINES

- **Activity: Restoration and Assessment of Lifelines**

Capability/Activity Observation:

The utilities identified that they do a lot of planning because of regulatory mandates. MG&E has contracts for alternate fuel sources but a need may exist for all of the utilities to expand on their fuel plans for a long term incident. To ensure they can prioritize and meet the requests of local governments, the utilities requested a list of anticipated portable generator needs from the counties. This would help them predict equipment needs for supporting a long term power outage. In the scenario presented, the natural gas system would not have been affected.

Telecom restoration was discussed briefly; no telecom representative was involved in the exercise. The electrical utilities do not work directly with telecom but often cross paths in the restoration process due to road access and clearance.

The retail food industry does not often invest in generators or generator hook-ups. As the need for groceries and convenience store (for fuel) escalates the priority may be made to restore electrical service to these facilities. Utility restoration priorities will be reassessed based on the needs of the EOC (i.e. grocery stores, fuel pumping stations, etc.), and utility providers will work with emergency management officials to determine the best actions.

An ice storm will have a devastating effect on the transportation systems. As Public Works identified in our presented scenario, having snow on top of the ice made things easier to deal with. Public Works would leave the layer of snow and not clear to the road surface to avoid ice covering surfaces.

The storm left debris of downed trees and power lines, including some complications to the critical infrastructure (i.e. waste water and drinking water systems) and public transportation.

In a storm this vast the utilities stated they would work on downed wire calls but the response would be prioritized to major roadways not private residences. As calls were received the callers would be advised to be safe and stay clear of the lines but it may take an extended amount of time before utility services attended to the situation.

Many of the local communities have a back-up power plan for their critical municipal facilities but it may not be routine for convenience stores and gas stations. Surveying local jurisdictions on their business capabilities may be beneficial.

Analysis:

Previous research identified a lesson learned from a severe ice storm that hampered the east coast. It was suggested that the development of a comprehensive generator-lending program containing inventory, criteria, protocols, pre-identified prioritization (when available) and specifications to lessen delay and confusion as resource requests are made and filled.

While the lifelines to facilitate emergency response and recovery activities would be restored, it will be through coordination and collaboration that needs are communicated and priorities are jointly established.

Recommendation:

1. Pre-plan and categorize anticipated portable generation support needs and provide this information to the electrical utilities.
2. Establish communications with telecom providers to determine their plans for service restoration in a long term power outage.

REFERENCES:

1. Homeland Security Exercise Evaluation Program, Exercise Evaluation Guides.
2. FEMA Continuity Guidance Circular 1 (CGC 1), Continuity Guidance for Non-Federal Entities (January 2009).
3. Food and Fuel as Critical Infrastructure: A Case Study from a Long Term Power Outage by Christa J Fisher. WI DATCP
4. Dane County Emergency Operations Plan
5. Rock County Emergency Operations Plan
6. Disaster Recovery. Brenda Philips. CRC Press 2009

SECTION 4: CONCLUSION

The communities in Wisconsin are vulnerable to severe winter storms. It is essential that citizens take the initiative to prepare for not only this type of event but all emergencies. While government agencies prepare to support the needs of the population they serve they cannot fix everything and citizens must take some ownership. In this exercise, the attendees learned of some new initiatives such as neighborhood based preparedness planning, back up systems for community call centers, pet sheltering, special population planning, Incident Management Teams and other critical elements and resources for supporting emergency management activities.

Having both Dane and Rock counties working together identified some differences in procedures, but there were several commonalities. The tabletop exercise offered a learning environment for problem sharing and resolution. Further planning and maintaining communications, collaboration and information sharing will strengthen the emergency management programs.

The exercise as designed challenged the participants due to the unavailability of electricity. Electricity is essential to the daily operations for citizens and their communities. Without power many of the services which we depend upon are not accessible. Communication, in all forms, represents the key to a comprehensive, effective response. The infrastructure must be in place and capable of withstanding extraordinary circumstances.

Citizens will need to be resilient and cooperative as restoration and recovery efforts take place. Proven effective is community education programs that help citizens prepare, along with communities identifying what actions to take in emergencies and the expectations they can rely on from government. As communities plan for evacuation, sheltering services (and locations) and other key support measures, consideration should be made to educate the public in advance of what these plans entail.

As with any exercise, the participants walk away with a better sense of capabilities, resources and those areas to be focused upon to make our emergency management programs more effective and efficient. One thing was evident: Communication, in all forms, represents the key to a comprehensive, effective response.

APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for Dane and Rock County as a result of the Long Term Power Outage Tabletop Exercise conducted. These recommendations draw on both the After Action Report and the feedback provided by the exercise participants. The implementation of the recommendations outlined in this after action report and improvement plan are dependent upon available funding. Alternate corrective actions may also be identified by various agencies that are deemed more effective or less difficult to implement.

Capability	Analysis	Recommendation	Primary Responsible Agency	Completion Date
<p>CITIZEN EVACUATION AND SHELTER IN PLACE</p> <p>Direct Evacuation and Sheltering</p>	<p>After a power outage, the following information should be communicated with shelter operations management and staff to discuss anticipated needs. This communication could promote a stance of leaning forward by getting staff prepared for an activation of shelters.</p> <p>Community education regarding personal preparedness remains a key factor for health and safety. Robust programs that promote citizen education about winter storms and the possibility of isolation in their home, how to conserve heat and having supplies on hand could decrease the reliance of local governments.</p>	<p>Pre-plan and conduct a tabletop exercise tabletop exercise pending event.</p> <p>Promote citizen self reliance and neighborhood based preparedness programs.</p>	<p>Emergency Management, Public Health, Public Safety Agencies</p>	<p>Ongoing</p> <p>Ongoing</p>
<p>CITIZEN EVACUATION AND SHELTER IN PLACE</p> <p>Activate Evacuation</p>	<p>The Humane Society in Dane County may have the ability to accept pets that are not allowed in community shelters however the lack of electricity and heat may hamper operations based on weather and shorter hours of daylight.</p> <p>County EOC's can anticipate that healthcare may be requesting transportation support to the shelters. While transit systems may be available to serve as warming locations these resources are very temporary.</p>	<p>Identify and map shelter locations that have generated power supply.</p> <p>Develop special needs population sheltering plan (Rock County).</p> <p>Procure auxiliary electrical generation for primary animal shelters.</p>	<p>ARC, Emergency Management, Planners</p> <p>Rock Co. Emergency Management</p> <p>Humane Society</p>	<p>December 2010</p> <p>FY 2011</p> <p>As funding is available</p>
<p>CITIZEN EVACUATION AND SHELTER IN PLACE</p> <p>Direct Evacuation and/or Shelter In Place Operations</p>	<p>The goal of the EOC's would be to safely support sheltering of the affected and at-risk populations so they can obtain access to medical care, physical assistance, shelter, and other essential services. In a wide spread winter storm, personnel resources to support shelter operations may be scarce, particularly if the event lasts for many days or weeks. Identifying non-traditional staffing resources for sheltering services may prove beneficial.</p> <p>As plans are developed for redundancy the shelter communications methods should be addressed. As ARES/RACES personnel are dispersed to support emergency communications, these resources may be considered for locating at the centrally based shelters as they could relay essential information to the EOC's.</p>	<p>Establish a plan for communicating with the shelters when routine communications are unavailable.</p> <p>Investigate the capability of the Wisconsin National Guard to provide shelter management mission assignments.</p>	<p>Emergency Management</p> <p>Emergency Management</p>	<p>FY 2011</p> <p>December 2010</p>
<p>COMMUNICATIONS</p> <p>Alert and Dispatch</p>	<p>In a long term power outage event there will be challenges including a sense of isolation impeding the ability to plan and prepare appropriately based upon limited information received due to the disruption of traditional methods of communication. Both county public safety communications centers (911) have generator power and have the capability to continue operations.</p> <p>It was identified that amateur radio operator volunteers will be a critical component for communicating information and data when conventional communication methods are disrupted. Agencies that staff the EOC need to have an understanding of the capability of amateur radio services to communicate and set up operations at various locations to support communications.</p>	<p>Review emergency communications plans to ensure all forms of communication redundancies are included.</p> <p>Procure auxiliary electrical generation for 211 call centers.</p> <p>Train EOC staff on the capabilities of ARES/RACES to provide</p>	<p>Emergency Management</p> <p>United Way</p> <p>Emergency Management</p>	<p>November 2010</p> <p>As funding is available</p> <p>Ongoing</p>
<p>Appendix B</p>				

Table A.1 *Improvement Plan Matrix*