**Applies To:**

* All Wisconsin Veterans Home at King (WVH-K) staff, members, volunteers and visitors

### Policy:

* Auxiliary power shall be provided to designated areas within the facility to operate key medical equipment and other operating systems equipment should our normal power supply fail.
* Emergency generators shall be provided and are designed to activate automatically in the event of a power outage.
* The generators shall be capable of providing the facility with minimal supply of electricity.
* Staff shall shut down and turn off their computers if not in use, to save the power in the uninterruptable power supply (UPS) which would also eliminate the alarming sound.

### Procedures:

In the event of a power outage, the follow steps should be followed:

1. Report loss of power to Security/Fire/Safety.
2. Security will determine the source of the outage by checking the electrical sub-station lights across Hwy QQ located north of the Crematory Entrance, then contact the appropriate resource.
3. WVH Maintenance electrician staff
4. Local power company
5. Contact Administrative staff: Commandant, Deputy Commandant, Executive Directors, Director of Dining Services or Food Service Administrator, and Nursing Supervisor(s) on duty.
6. Nursing staff will gather flashlights, headlamps and batteries from the emergency supply kits in the designated areas below. Items are to be signed out by the user and returned to the tote when power is restored.

AH under the desk in the nursing station.

MH for 1st floor use, items are in 19B in the basement tunnel, MH 246, and MH 346.

MH-Pharmacy has flashlights at various work stations.

OH in cupboard behind the soiled utility door on the bottom shelf and in 1st floor lobby desk area.

SH 2 the end of B wing; SH 3 end of A wing; SH 4 & 5 end of C wing; basement in the housekeeping room.

SH scheduling office 116 between the filing cabinet and recycling bin.

1. Nursing staff to ensure necessary medical equipment (i.e. oxygen concentrators, powered air mattresses, electric beds, respiratory equipment, CPAP and IV Pumps) is plugged in to the designated (red) emergency outlets in the member’s room, if needed during your shift. Note: If needed, staff will be allowed to use multiple fused outlet strips and extension cords on a limited basis during a power outage to support medical equipment for the care of members. These extension cords and multiple outlet strips will be stored in the emergency kits.
2. Necessary office equipment should be plugged into emergency (red) outlets. Unplug computers and UPS units if not in use.
3. All diet kitchen and med room refrigerators not on e-power need to be re-located to e-power or plugged in using extension cords to maintain proper temperatures to ensure food safety.
4. Plug personal member refrigerators and break room refrigerators into e-power if possible. If not possible ensure all perishable food is discarded.
5. Non Nursing support building emergency kits:
6. Marden Center: emergency flashlights/lanterns etc. are kept in Alley 5 for tunnel/basement area use; main floor items are in the copy room 201A which is located between offices in 202; 3rd floor items are in the library office.
7. Central Services Building:
8. Dietary: blue totes with emergency lighting are located in the snack closet; some lanterns and flashlights are more readily available in the main office on filing the cabinet. Refer to Policy [06-00-14](https://agency.wisconsin.gov/sites/dva/WDVA%20Policies/06-00-14_Meal%20_Service_during_Power_Loss.pdf) for specific departmental directions.
9. Laundry: lanterns are in the bundle room top shelf.
10. Staff Development: kit is located in room 8 (instructor office).
11. For other areas not specifically identified, staff may have flashlights at their workstations.
12. Extended period of power loss for non-nursing support buildings.
13. Building managers will need to evaluate their staff work status whether they can still perform job duties.
14. Staff maybe reassigned to a nursing care building to assist with members or support needs in other locations of the facility.
15. Marden Center staff will need to evaluate current and upcoming events for the day. Close the building and secure tunnel gate due to limited staff and limited e-power.
16. Staff may need to be reassigned to assist in other areas of the facility.
17. Marden staff needs to send an e-mail to advise campus of their closing, and make overhead announcement(s).
18. Members should be directed to return to their units due to lack of lighting and limited e-power.
19. Generators are available to provide power. See Attachment A-Emergency Generator Inventory / Location and Attachment B-Generator Fuel Consumption.
    1. Power plant generator supplies power to Central Services, Security, MH and Marden Center.
20. Power may be limited to certain types of equipment and designated outlets (red outlet cover).
21. Each nursing care and support building has its own generator that will supply power to support the building needs.
22. Non-nursing buildings have limited power.
23. Nursing care building e-power supports the following:

Olson Hall and Stordock Hall

Fire alarm system for each building Elevators #1, #2 and Freight are on e-power

WVH-King potable water system Hot water system and DHS circulation pumps

All IT server rooms Tub rooms will have one or two red outlets

Main dining room Small kitchen areas on unit have one red outlet

Phone system on e-power First floor has limited red outlets in office areas

Retherm units.

Each member room has a one red covered outlet with two plugs.

Each staff office area has one red covered outlet with two plugs.

All stairwells, hallways and lobby’s in each building have emergency lighting.

Note: No emergency lighting in member’s rooms or restrooms.

Member freedom is on e-power and UPS back up power in all building, UPS power which will last about 1.5 hours if e-power is lost.

MacArthur Hall

Fire alarm system for each building Elevators #1, # 2, and Freight on e-power

WVH-King potable water system Hot water system and DHS circulation pumps

All IT server rooms Tub rooms will have one or two red outlets

Main dining room Small kitchen areas on unit have one red outlet

Phone system on e-power First floor has limited red outlets in office areas

Retherm units.

Each single room has a one red-covered outlet with two plugs.

Each double room has a two red-covered outlet with two plugs.

Each staff office on the upper floors has one red-covered outlet with two plugs.

Second and third floor hallways have six each red-covered outlets throughout.

All stairwells, hallway and lobby’s in each building have emergency lighting.

Lab room 129 Pharmacy has three red-covered outlets

Note: No emergency lighting in member’s rooms or restrooms.

Member freedom is on e-power and UPS back up power in all buildings, UPS power which will last about 1.5 hours if e-power is lost.

Ainsworth Hall

Fire alarm system for each building Elevators #1, #2, # 3 are on e-power, #4 is NOT

WVH-King potable water system Hot water system and DHS circulation pumps

All IT server rooms Tub rooms vary-See attached maps

Main dining room Nursing stations vary

Phone system on e-power Pavilion area has limited to no e-power

Retherm units.

Each single room has a one red-covered outlet with two plugs.

Each double room has a two red-covered outlet with two plugs.

All stairwells, hallway and lobby’s in each building have emergency lighting.

Note: No emergency lighting in member’s rooms or restrooms.

Member freedom is on e-power and UPS back up power in all building, UPS power which will last about 1.5 hours if e-power is lost.

The following are the electronic version maps, showing the amount of emergency outlets in each area.



1. Non- nursing support buildings e-power supports the following:

Security

Most of the building is under e-power which is supplied by the Power Plant

Fire Alarm system on is e-power

* + - Be prepared to reset each alarm panel throughout campus.

Phone system on e-power

Member freedom is on e-power and UPS back up power in all building, UPS power which will last about 1.5 hours if e-power is lost.

Marden Memorial Center

Emergency lighting in hallways and stairwells

Fire Alarm system on e-power

Elevators 1 and 2 on e-power

Member freedom is on e-power and UPS back up power in all building, UPS power which will last about 1.5 hours if e-power is lost.

Central Services

Fire Alarm system

Most of the Kitchen areas are on e-power. Refer to [06-00-14](https://agency.wisconsin.gov/sites/dva/WDVA%20Policies/06-00-14_Meal%20_Service_during_Power_Loss.pdf) Meal Service During Power Loss. Portable generator could be used if needed to supply the rest of the kitchen.

Laundry no e-power, limited lighting

Staff Development and Hardware no e-power, limited lighting

Member freedom is on e-power and UPS back up power in all building, UPS power which will last about 1.5 hours if e-power is lost.

Maintenance

Fire Alarm System

Limited power and lighting

OVE Hall

Fire Alarm System

Emergency lighting only with-in hallways and kitchen area

Water tower provides system pressure

Well House 2 – Connected to the Water Plant Generator

Well House 4 – Portable hook up

1. The following systems do not have e-power

Air handlers in all buildings

Air conditioning in all buildings

OVE elevator

Member freedom is on e-power and UPS back up power in all building, UPS power which will last about 1.5 hours if e-power is lost.

1. Staff check on all members to ensure their safety and continued use of essential equipment.
2. Refer to [14-00-01J](https://agency.wisconsin.gov/sites/dva/WDVA%20Policies/14-00-01J_Loss_of_Heat.pdf) Loss of Heat during applicable seasons.
3. Emergency contact information for additional support:

Emergency Power Service

WPS – Emergency # 1-800-450-7250

Cell # 1-715-581-1164

Cell # 1-715-848-7407 Contact: Fred Westphal fkwestphal@wisconsinpublicservice.com

Suburban – #1-800-739-8112

Cell #1-920-739-4767 Contact: Dan Bender [dbender@suburbanelectric.com](mailto:dbender@suburbanelectric.com)

Bauer – #1-715-258-2848

Cell #1-715-281-8843 Contact: Tim Bauer [bauerelectric@bauerelectric.net](mailto:bauerelectric@bauerelectric.net)

Fuel - #2 low sulfur diesel fuel

Insight FS Co-op - #1-715-423-6280

Cell #1-920-660-6399 Contact: Ross Radpke holly.wood\_313@yahoo.com

Generator Rental (portable)

Total Energy Systems 1-888-548-1400 ext. 316 – Kegan Collins

<http://www.totalenergysystems.com/>

Chiller rental (portable)

Trane 1-866-431-3755

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Building** | **Manufacture** | **Fuel Type** | **Fuel Capacity** | **Model #** | **Serial #** | **KW** | **Amp** | **Volts** |  | **Installed** |
|  |  |  |  |  |  |  |  |  |  |  |
| Ainsworth | Kohler | Diesel | 600 gallons | 300ROZD71 | 299598 | 300 | 451 | 480 |  | 1992 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Stordock | Kohler | Diesel | 225 gallons | 250DEOZD | 702823 | 265 | 150 | 208 |  | 2000 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | 1982 |
|  |  |  |  |  |  |  |  |  |  |  |
| Olson | Kohler | Diesel | 225 gallons | 250REOZD | 702824 | 265 | 347 | 208 |  | 2000 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Power Plant | Cummins | Diesel | 3000 gallons | DQFAD | L160128712 | 1MW | 1600 | 480 |  | 1990 |
| (Serves MH, Central | |  |  |  |  |  |  |  |  |  |
| Kitchen & Security) |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Water Plant | Kohler | Diesel | 150 gal | 150R0ZJ81 | 339066 | 150 | 520 | 208 |  | 1993 |
|  |  |  |  |  |  |  |  |  |  |  |
| Portable Generator (Serves Wells, backup for other locations) | Onan | Diesel | 100 gallon | 100DYC-15R/127050 | D800496934 | 100 | 400 | 208 |  | purchased used |
|  |  |  |  |  |  |  |  |  |  |  |
| Maintenance Bldg. | Onan | Diesel | 100 gallons | 50DEG-4R8/1483B | 469094973 | 50 |  | 208 |  | purchased used |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Total Gallons in generator fuel tanks** | 4,400 |  |  |  |  |  |  |  |  |  |
| **Reserved for emergency boiler fuel** | 14,000 |  |  |  |  |  |  |  |  |  |
| **Vehicle Fuel** | 2,000 |  |  |  |  |  |  |  |  |  |
| **Total Gallons** | 20,400 |  |  |  |  |  |  |  |  |  |

Current as of 9/2017

**FUEL BURNED PER HOUR/DAY AT FULL LOAD CAPACITY**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | **GPH** | **GPD** | **Tank Size** | **Days per tankfull** |
| **Ainsworth** |  | **21** | **504** | **600** | **1.19047619** |
|  |  |  |  |  |  |
| **Olson** |  | **17** | **408** | **225** | **0.551470588** |
|  |  |  | **0** |  |  |
| **Stordock** |  | **17** | **408** | **225** | **0.551470588** |
|  |  |  | **0** |  |  |
| **Power Plant** | **full load** | **72** | **1728** | **3000** | **1.736111111** |
|  | **3/4 load** | **54** | **1296** | **3000** | **2.3148148** |
|  | **1/2 load** | **36** | **864** | **3000** | **3.4722222** |
|  | **1/4load** | **19** | **456** | **3000** | **6.5789473** |
| **Water Plant** |  | **11** | **264** | **150** | **0.568181818** |
|  |  |  | **0** |  |  |
| **Maint. Bldg** |  | **5** | **120** | **100** | **0.833333333** |
|  |  |  | **0** |  |  |
| **Portable** |  | **9** | **216** | **100** | **0.462962963** |

Current as of 9/2017

**Checklist for Nursing Units During Loss of Electrical Power**

Obtain emergency lighting kit.

**RN immediate responsibilities:**

* Account for ALL unit members.
* Ensure all stairwell “Member Freedom” door alarms are operational. If not, assign someone to watch the doors until further instructions are received.
* Direct CNAs/designees to ensure all essential medical equipment is plugged into emergency outlets: O2 concentrators, air mattresses (may need to be reset d/t power interruption), CPAP/nebulizers, and pumps (IV/feeding/negative pressure wound therapy). Due to the emergency, power strips may be used. (Only one device per extension cord. The cords must run along a wall and not create a trip hazard.)
  + Other equipment could use emergency outlets, i.e., beds, member refrigerators.
* Power off / shut down computers not being utilized. (Note: the uninterruptable power supply (UPS) that the computers are plugged into have about 1 ½ hours of battery supply, so unplug any UPS not being used.)
* Determine other unit needs.
* Depending on local and distant environments, review members’ consult appointments. (Does appointment facility have power? Are roads passable?)

**LPN continues with routine as necessary:**

* Keep backup laptop plugged into emergency power.
* Consider potential behavior changes.

**CNAs follow RN instructions:**

* Keep members calm.
* Keep members hydrated; use up unit refrigerator fluids first.
* Unplug non-medically necessary equipment (microwaves, coffee pots, toasters, etc.).
* Plug med room, diet kitchen, and breakroom (if possible) refrigerators into emergency power.

**3+ Hours without full electrical power:**

RN ensures:

* Members are kept warm/cool as appropriate. Assess the need for additional blankets or fans.
* CNAs increase walking rounds.

**Checklist for EDs & Nursing Supervisors During Loss of Electrical Power to Nursing Units**

**Immediately:**

* Ensure Member Freedom alarms are working.
* Get report from unit RNs regarding the whereabouts of their members and any perceived immediate unit needs.
* Make contact with building activities staff to see if planned activities will occur or alternate plans need to be made.
* Non-nursing staff available will pass trays, provide 1:1 activities, etc.
  + Power off / shut down computers not being utilized and unplug UPS due to limited battery life.
* If power loss > than a few hours, ensure “Out of Order” signs are posted on vending machines. Consider need to contact vending machine contractor.
  + May need to post on power assisted bathroom doors.
* May need to convene at the Emergency Operations Center.

**3+ hours without full electrical power:**

* Check with nursing units for additional needs.
* Evaluate staffing needs.
* Instruct staff to print MAR/TAR.
* Evaluate the need for additional fluids: i.e., ice, “Gatorade”, etc.
* In the winter, consider eating supper on units d/t decreased lighting inside and outside.
* If a member’s refrigerator has been without power, instruct staff to remove/discard potential spoiling food products.

**After normal power is restored:**

* Ensure ALL emergency equipment (extension cords, lighting, and power strips) is returned to its normal storage location.
* Plan to replace broken items and/or order additional items needed.