

## What to Do During a Power Failure on the Farm

A power failure or fuel shortage can cause problems on poultry and livestock farms, but being prepared can minimize the seriousness of these problems.

There are four areas of concern:

- Poultry
- Livestock
- Milk
- Equipment

### Poultry and Livestock

To protect poultry and livestock during a power failure, you should provide four essentials: ventilation, water, heat and feed.

#### *Ventilation*

- Most commercial poultry facilities should already be equipped with standby power generation for emergency ventilation.
- Ventilate shelter with standby power generators rather than natural ventilation.
- Do not close buildings tight to conserve heat, since animals could suffocate from lack of oxygen.
- Because oxygen will eventually be used up in mechanically ventilated production facilities, clear debris from all vents. Then open vents to facilitate natural airflow.
- In dairy facilities, open doors or turn cows outside, unless weather conditions prohibit (e.g., ice storm, tornado, etc.).

#### *Water*

- Provide all animals, especially cattle, with plenty of water.
- Your water pump might be adapted to be driven with a small gasoline engine and a belt. In some cases, a tractor may provide power for a standby

power generator. Otherwise you will need to haul water.

- If you have an outside source of water (pond or a stream), cattle can be turned out.
- Whatever the source of water, make sure it remains clean so animals can drink it.
- If no water is available, dairymen can feed cows their own milk as a last resort.

#### *Heat*

- Provide essential heat during cold weather. Use portable camp stoves and heaters as emergency heat sources for brooders. However, remember that stoves or heaters use oxygen and, if improperly managed, can present a fire hazard. Have qualified personnel inspect your standby heaters routinely in order to enhance fuel combustion and heat production; recondition or discard equipment that has potential to ignite a fire.
- Plan ahead to have this equipment ready when needed.

#### *Feed*

- Provide feed. Animals need extra energy for body heat during prolonged severe weather, especially if they are unsheltered. The best sources of energy are corn and other grains.
- If mechanical feeders are not connected to emergency power generation equipment, they will be inoperable during a power failure and emergency feeding procedures must be employed.
- Use pelleted cake or cake concentrate for emergency feed.

#### **Storing Milk**

- Request that the marketing cooperative or processor pick up milk as soon as possible.

- A standby power generator can handle vital electrical equipment on the dairy during emergencies. Although such equipment can represent a sizable financial investment, one major power failure can pay for the equipment. While generation equipment can be borrowed during emergencies, be aware that travel may not be possible in ice storms, severe rain or wind storms and such equipment may already be in use.
- The intake manifold on a gasoline tractor engine may be used as a vacuum to operate select milking machines that do not have magnetic pulsators, but the vacuum levels may vary and increase the incidence of mastitis. If cows are not milked within 24 hours, the level of mastitis is likely to increase greatly.
- Even if you are short of extra milk storage facilities, do not store milk in stock tanks or other containers such as bathtubs. Dairy plants are not likely to accept milk that has been stored in anything other than regular milk storage containers.
- Check with your local marketing cooperative or processor about the policy from the Arkansas Department of Health regarding emergency storage of milk.
- If you are unable to cool your milk or have it picked up, check your tank for souring each time you add milk to it by looking for clumping or smelling for odors. This check could mean the difference between losing all or only part of your milk supply.

## Standby Power Generators

Emergency power generation is strongly recommended for commercial facilities caring for large numbers of animals. However, emergency power generation equipment must be properly sized, installed, maintained and routinely tested to be effective.

- Remember when sizing generators to account for both operating and start-up wattage needs.
- Mount generators securely in a location that protects the equipment from the weather, but permits the exhaust of gases and heat during the operation.
- Keep wiring runs as short as possible and size the wire for the maximum current load.
- Test generation equipment under full load for at least 30 minutes weekly and ensure that all equipment operates properly under generated power.
- Ensure that adequate fuel is available.

## Equipment

- Unplug or turn off all electric equipment to prevent damage when power is restored.

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