

Milking through power outages

The power can go out at any time due to localised issues such as a fallen tree or following an extreme weather event, such as a flood or bushfire. Minimise your recovery efforts by keeping the farm working during a prolonged power disruption.

Organise alternative power

Your goal will be to minimise the number of missed milkings.

Remember you need to cool the milk as well as milk the cows.

Make a decision and source a generator as quickly as you can. Hire one and/or share one with a neighbour.

- A 40–50 kVA capacity generator should be sufficient to milk 230–250 cows.
- For tractor driven generators, a 50 kVA generator will need a 75 hp tractor to run it (the tractor needs to be about 1.5 times the generator capacity).
- For small herds, the tractor hydraulics or PTO can drive the vacuum and milk pumps. Hydraulic motors are preferable for safety reasons. A common drive shaft for the diaphragm milk and vacuum pumps will be required.
- If the milking plant relies on a centrifugal milk pump, a generator will be required. Guard all belts, pulleys and PTOs associated with rotating drive shafts before use.

If you cannot source an alternative, think about milking cows at a neighbouring property if practical and safe to do so (remember to consider animal health, biosecurity and welfare factors). For further information on these factors refer to the Cow Parking fact sheet on the Dairy Australia website at dairyaustralia.com.au/farm/land-water-carbon/extreme-weather/managing-wet-conditions

*You must notify your milk processor and dairy food safety authority before milking in another dairy.

Immediate steps

1. Check with the neighbours

Is their power out or is the disruption limited to your property?

2. Check the power company website/voicemail and social media feeds

How long is the outage expected to last?
Power infrastructure restoration could take days.

3. Focus on your priorities

Fences Are livestock safely and securely contained?
Will the outage affect fencing?

Water pumps Do livestock have access to water?
Will water pumps operate without power?

Milking What needs to be done to milk the cows?

Milk factory Have you contacted your factory to let them know of your disrupted milking schedule and/or inability to cool milk?

4. Check the power lines on your property

Can you assist the power company by providing precise details (GPS) of the problem e.g. a fallen tree?

Note Connection of any alternative power supply to the fixed wiring of a dairy, house or other circuits must be performed by a licenced electrical contractor. Preferably, you will already have a professionally installed change-over switch.



Minimising the impact of missed milkings

Missed milkings can be stressful for you and the cows. If normal milking resumes before 48 hours, longer term production losses should be minimal. Minimise the impact by:

Managing mastitis and somatic cell counts (SCC)

If cows cannot be milked, SCC numbers will likely spike and it may take up to five days to recover. Be extra vigilant with mastitis detection and management.

- When you can milk, don't rush, ensure every cow is checked for clinical mastitis and milked out completely.
- Ensure thorough coverage of all surfaces of the teats with teat spray.

Feed the herd well

Maintaining access to high quality feed and clean drinking water is important to support ongoing milk production.

Production losses and the speed of recovery will depend on the duration of the outage and the stage of lactation for the individual cow. Cows in early to mid-lactation should recover well whereas cows in later lactation are more likely to dry off.

Consider your milk disposal options

Even if you can milk, you may have to dump one or more vat loads on farm if you can't cool milk adequately or the tanker can't access the farm. e.g. if the tanker cannot access the farm.

There are several options including:

- Feeding the milk to livestock (e.g. to calves or by introducing increasing amounts slowly to the milking herd's diet).
- Diluting 10:1 with water and apply to land, ensuring it does not enter waterways or other environmentally sensitive areas.
- Disposing into an effluent pond. Note that this is only advised for a maximum of one to two days due to the high BOD (Biological Oxygen Demand) and organic loading.

FOR FURTHER INFORMATION

Refer to the Dairy Australia website at dairyaustralia.com.au and search for information on Mastitis and Extreme Weather.