

FREQUENTLY ASKED QUESTIONS

How will SaskPower know when the power goes out?

The microgrid will have a control panel that transmits signals to let us know how the equipment is running. If the control panel sends an error signal or the communication stops, we'll know there is a problem and that power may be disrupted. We're also bringing smart meters to everyone in Saskatchewan, including Descherm Lake. These will help us detect the source of any outage.

What maintenance will the microgrid need?

Throughout the year we'll need to maintain the land around the microgrid for safety and access. The solar panels will need to be cleared of snow and other debris from time to time. The equipment inside of the microgrid container will be serviced on a routine schedule.

How will this change my power bill?

The microgrid won't change your power bill. You'll continue to pay based on how much power you use. When smart meters are installed, there will be no more estimated bills. You'll only pay for the exact power you use.

Who can I contact?

If you have questions about the microgrid, please contact IndigenousRelations@saskpower.com or call 1-306-240-5536.



Descherm Lake MICROGRID

The Descherm Lake Microgrid is the first independent power system of its kind in Saskatchewan.

It's an innovative and custom-built system that combines **solar power, battery storage, and back-up diesel generation** to serve the community of Descherm Lake.



BENEFITS OF MICROGRID



Reliable power
in all weather
conditions



Reduced
impact on
forested areas



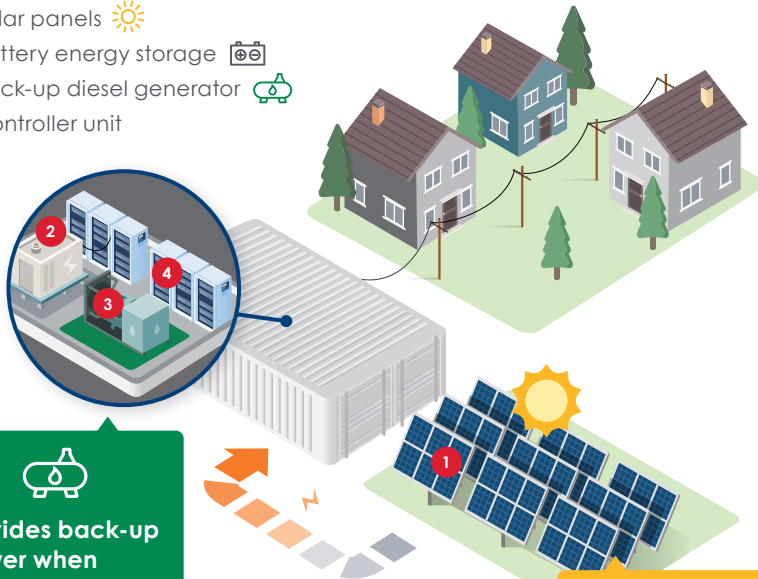
Reduced
greenhouse
gas emissions
intensity



Less costly to
maintain than
current power line

HOW IT WORKS

- 1 Solar panels
- 2 Battery energy storage
- 3 Back-up diesel generator
- 4 Controller unit



Provides back-up
power when
batteries are low

Average winter
runtime 8-12 hours
every other day

Excess energy
stored in batteries

Charge time from
0-100% = 8 hours

Over 80%
of power
generated by
sun most days

SAFE AND RELIABLE POWER

The microgrid is built to provide **safe** and **reliable** power for the community year-round and in all weather conditions.

Built-in Safety Features:



Remote safety
monitoring
24 hours a day



Safety light
(**green** if operation is
normal; **red** if potential
hazard detected)



Automated venting
(will close if fire is
detected to cut off
oxygen to the fire)



Battery control systems
(will identify faults/
surges and disconnect
batteries if they're not
operating correctly)



Leak detection
sensors on
diesel tank



Alarm
(will sound if hazard
inside container is
detected)



Infrared thermal heat
imaging (detects
irregular heat within
the container)



Carbon monoxide
detection

IN CASE OF EMERGENCY



A **red** light is installed on the container to indicate when the safety system has been activated.
If you see the red light on, call 310-2220.



SaskPower has an emergency response plan, and we'll respond to any incident immediately. Our plan identifies possible risks and actions that need to be taken if an incident occurs.