

rental diesel generators in Mayo

providing reliable power in case of an emergency

At Yukon Energy, it's our job to supply the electricity Yukoners need when they need it. Our ability to keep the lights on is especially important during the Yukon's cold and dark winters when demand for electricity is the highest.

Yukoners are using more electricity than ever before – on December 20, 2022, we set a record peak of 118.5 megawatts.

This is why we need dependable sources of electricity and why we rent diesel generators each winter, until we can build more dependable renewable resources.

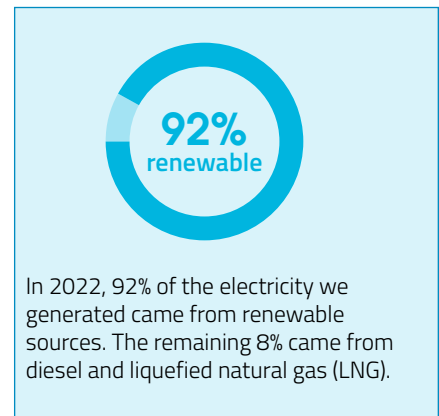
In the winter of 2022–23, we rented 17 diesel generators. Ten of them were installed in our Whitehorse parking lot and the other seven were installed at our diesel power plant in Faro. For the winter of 2023–24, we will need to rent an additional five diesel generators to ensure we have enough electricity to meet demand. These additional five generators will be installed beside our hydro plant outside of Mayo.

Why now?

In addition to growing demand for electricity, we also are experiencing supply chain issues. These issues are causing delays in some of our projects, like the Thermal Replacement Project in Faro and the Grid-scale Battery Storage Project in Whitehorse. When completed, these projects will reduce the number of diesel generators we need to rent each year. However, because they will not be completed for this upcoming winter, we need to rent more diesel generators to fill the gap. Renting diesel generators is the only feasible way to meet electricity demand for this coming winter.

Where in Mayo will the rental diesel units go?

The five rental diesel units will go near our Mayo A hydro plant outside of Mayo (see maps, right and on reverse).





Why Mayo?

There is no space for the additional five units in Whitehorse or Faro. The site in Mayo was selected as the best alternative location for several reasons.

- There is an existing substation with transformer capacity nearby. This is important as the substation distributes the electricity to the rest of the Yukon.
- Yukon Energy staff live and work in Mayo. Having nearby staff will make maintenance activities easier.
- The site is far away from homes and businesses. The nearest residence is over one kilometre away.

How long will the additional diesel rental units be in Mayo?

This will depend on when other projects, like the thermal replacement and battery projects, are completed. We will be applying for a five-year air emissions permit that is required to operate the units.

How loud will the rental diesel units be?

While we recognize diesel generators can be loud, the nearest residence is over a kilometre away. At this distance, sound levels will be well below permissible sound levels. The units will also only run during the winter.

We will be completing spot sound level measurements next winter and will share these results when they are available.

Do we need rental diesel units in Mayo because industrial (mining) load is growing?

No. The number of rental diesel units we need each year is based on the amount of electricity Yukon homes and businesses (i.e., not mines) need during a winter emergency situation.

This emergency situation assumes power from our largest generation source, the Aishihik hydro facility, is unavailable. We call this emergency situation N-1.

Do the rental diesel units provide electricity to the mines?

Yes, but only when there is enough electricity to first meet the demand from Yukon homes and businesses. During emergencies, the mines are the first to be disconnected from the grid so that we can supply the necessary electricity to Yukoners.

Next steps

We are required to go through a Yukon Environmental and Socio-economic Assessment Board (YESAB) review process. We submitted our proposal to the YESAB Mayo Designated Office in May. YESAB will now review our proposal, then conduct its own public engagement. You can get involved in this process by visiting yesab.ca.

After the YESAB assessment, we will apply for an air emissions permit through the Government of Yukon. Site preparation is scheduled for this summer, so that the rental units are ready for this upcoming winter.

Questions or concerns?

Contact communications@yec.yk.ca.

