HAVRE SCHOOL DISTRICT'S

ELECTRIC SCHOOL BUSES

Havre, MT
March
2023

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EPA REGIONAL WEBINAR

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About

YTCC Project Manager, Jesse Therien, visited Havre, Montana to learn more about the state's first operational electric school buses. Havre's School District acquired two Lion C electric school buses in late 2022 that were put into service in early 2023, thanks to their service attendant Allen "Woody". Woodwick's secured a grant from the Montana DEQ with the Volkswagen settlement funds. With the funding provided, both buses combined cost the School District less than the cost of one diesel bus. As part of the funding requirements, two older/retiring diesel buses were destroyed and recycled.

Charging & Range

The two electric buses are parked in a smaller "bus barn" where two 80 amp level 2 Blink chargers are installed. After their morning routes of about 20 miles, the buses return, are plugged back in and fully charged ready for the afternoon route within a couple hours. With the 126kWh battery packs, capable of about 100 miles of range, the buses could probably go a couple days between charges, but Woody is playing it safe for right now.

Operation & Maintenance

When the Havre School District took delivery of these buses, Lion provided on-site training for the mechanics as well as Havre's first responders. They also facilitated the installation of the charging units. Operating these electric buses is not much different from the diesel buses and have been working great so far.

The frame, tires, windows, seats and most non-motor-related parts are the same for internal combustion and electric buses. Gauges are analogue looking to make the transition as easy as possible for the drivers. They seem to be the perfect addition to this fleet. While Woody asserts they likely won't be replacing all the buses with electric, they'll probably be adding a few more as the older buses are retired.

So far, the electric buses are running about 75% cheaper than their diesel counterparts.

Heating

These buses are equipped with auxiliary diesel heaters towards the rear of the bus which is standard in all the other diesel and gas buses of the fleet. Thanks to these auxiliary heaters, the range isn't reduced as much in the colder months like most EVs in our region. One nice addition found only on the electric buses is the heated driver's seats and the preheating schedule that requires no input from the drivers: when the drivers arrive in the morning buses are warm and ready to go.

While these buses are housed in an unheated building, Lion informed Woody that they can be kept outside as long as they're kept plugged in during the colder months.