December 14, 2022

Electricity and Water - Never a Good Mix? Well, Standby…
Certainly with the introduction of electric powered pickup trucks and a wide variety of electric and hybrid cars now available, fishing boats would be a way off yet, right? Not so! Pat Shepard and I were recently invited to Prince Edward Island to visit Aspin Kemp & Associates (AKA), a company who has launched the first plug-in hybrid lobster boat. After a 7 hour drive to recently wind ravaged PEI, we were treated to a demo of the F/V Hybrid I, a working prototype of the future of Canadian fishing machines. The 45’ Provincial had a 500HP Cummins main engine, a 110HP (75 KW) electric motor and hydraulic pump working separately or in unison through a power take off and traditional marine clutch/gear.

With the press of a button, the boat can toggle between diesel power for steaming and charging, electric power for tending gear, or both for a (small) bit of boost if you’re in a big hurry (19 knots WOT). Two banks of Lithium Ion batteries, 1600 pounds split port and starboard, will push the traditional 45 footer at about 7 knot into a stiff 25 knot breeze and chop for over an hour before switching back to diesel propulsion. With full hydraulic capability and only the whir of the electric motor, it was certainly a different experience than what we are used to - quiet enough to have a conversation at normal volumes. After an hour at full electric power the batteries were down to about 40%. Switching back to diesel power, the electric motor turns into a generator and charges the batteries back to full charge in under an hour sailing at a 16 knot cruise, or it also can be charged up at a dock with shore power.

The big question? As currently configured and programed, it’s projected to cost north of $100,000 to retrofit an existing operation, but this is a prototype and AKA already has plans for a Hybrid II that will have different options and components for either new builds or retrofits. They are collecting data to fine tune the payback projections based on fuel savings (up to 20%), lower maintenance frequency and flexibility of use to improve their cost recovery based on an average annual duty cycle. As the technology develops, we’re keeping a close eye on it as a real option for a greener fishery and better bottom line.

Do you have a question about our fisheries? Send it to info@coastalfisheries.org or call 207.367.2708. Learn more about MCCF by visiting us online at www.coastalfisheries.org.

FISHERIES LOG
Prices to Harvesters in Stonington
Lobsters (shedder): $4/lb.
Bait (pogies): $78/bu.
Fuel (diesel): $5.30/gal.

Oceanographic Buoy I-01
44°6’10”N 68°6’44”W - Frenchboro
Water Temp. (50 meters): 48.92°F
Mean by day (12/11/2022): 47.03°F
Source: www.neracoos.org