

Davie Polar Icebreaker Program Confirms GE as Strategic Partner



CCGS Louis S. St-Laurent, one of Canada's aging polar icebreakers, shown here transiting Halifax Harbor. Wikipedia / Verne Equinox

LEVIS, QUEBEC – Davie, Canada's premier builder of polar and ice-capable ships, welcomed GE as a strategic partner in its polar icebreaker program, the flagship of Canada's National

Icebreaker Centre, Davie said in a Feb. 2 release.

Launched in August 2020, the NIC is a center of excellence for polar technologies and Arctic expertise. It reflects Davie's role as Canada's icebreaking partner and builder of the new icebreaker fleet, under the National Shipbuilding Strategy. This will create thousands of good jobs, a vibrant world-class maritime cluster in Québec and drive exports of Canadian innovation.

Canada's current polar icebreakers are very old. CCGS Louis S. St-Laurent is deep into its sixth decade and CCGS Terry Fox is fast approaching 40 years in service. A new polar class will enable Canada to maintain a continuous Arctic presence benefiting all Canadians, including the northern communities, enabling ice-choked trade, supporting Arctic sovereignty and protecting the polar environment.

GE's Power Conversion business offer a full spectrum of best-in-class integrated electrical propulsion and power systems, including its Seajet podded propulsion units. The ice-class range of Seajet – a technology jointly developed with AETC Sapphire – is available for Polar Class notation, with a power range of 7.5 MW to 15 MW. In the Seajet system the electric motor is housed in the hull mounted pod and directly connected to the propeller, freeing up cargo and operational space in the ship. Maneuverability and efficiency are greatly improved, and total fuel consumption and exhaust emissions are reduced. Customizable for different ship types, with simplified installation, Seajet pods can enhance performance in an array of commercial, offshore marine, and ice breaking ships.

Davie is Canada's only mega-yard with 50% of total capacity, able to build up to eight large, complex ships simultaneously. The 150-meter polar will be easily accommodated in Davie's 351-meter Champlain Dry Dock. An integrated build schedule would ensure polar would complement other Davie programs such as the six program icebreakers it is set to build under the

NSS. In fact, it would facilitate a steep learning curve and economies of scale to significantly benefit both programs by mitigating cost, schedule and performance risks.

Moreover, a recent analysis conducted for Davie by Deloitte, drawing on ISED and StatCan numbers, concluded that building polar icebreakers at Davie will generate up to 2,500 well-paid jobs, engage over 1,300 suppliers (with 900 plus in Québec) and contribute up to \$2.5 billion to the Canadian economy.

“We welcome GE to our polar program,” said James Davies, president and CEO of Davie Shipbuilding. “Their leading-edge propulsion system combined with decades of icebreaker experience and electric and power system capabilities are unsurpassed. Their inclusion also greatly strengthens Canada’s National Icebreaker Centre. Together, we can ensure the polar is stimulating the post-pandemic economy and protecting Canada’s Arctic interests into the far future.”

Philippe Piron, president and CEO of GE Power Conversion, said, “GE are ready to begin work with Davie Shipbuilding to deliver Canada’s new generation of polar class ships. GE and Davie skills are complementary. GE are prepared to deliver the robust systems and equipment that are essential for the powerful polar class ships that Davie will build for Canada. We are excited to have the opportunity to strengthen Canada’s National Icebreaker Centre under Davie’s leadership, and we look forward to engaging broadly with Canada’s marine industry.”

GE joins Vard and Serco as partner in Davie’s polar program. Davie expects to soon announce steel, critical systems and other service partners.