

The Coastal Corsairs, LLC mission statement is to identify and facilitate the development of business opportunities for the application of clean hydrogen fuel in maritime projects. The inaugural project focuses on a ferry service between France and the UK. This project supports maritime transport decarbonization goals in Europe.

Phase 1 of our proposal is the development of a hydrogen facility, which will utilize 2 MW of PEM electrolyzers to produce hydrogen for supply to 3 passenger ferries. The hydrogen production facility will be located at the port and access power from the nearby Gravesline Nuclear Power Station. Due to the ongoing nation-wide nuclear expansion program in France, by winter of 2025/2026, it is expected that the national system will produce extra power capacity, including from Gravesline.

Each ferry will be powered by 2 fuel cells and hold 7 storage tanks of compressed hydrogen. This allows each ferry to operate for approximately 100 nautical miles, which is one roundtrip from Dunkirk to Dover and back. The ferry can operate for 4 hours before needing to be refueled.

3 Ferries <ul style="list-style-type: none">• 2 fuel cells / ferry• 7 storage tanks of 164 kg compressed H₂ / ferry	300 Nautical miles per day <ul style="list-style-type: none">• 2 hours / trip• 3 roundtrips / day• 4 hours at sea / ferry	2 MW PEM electrolyzer <ul style="list-style-type: none">• 8 hours refuel / ferry during off-peak hours• 12 hours refuel / ferry during peak hours
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The fueling schedule is such that two ferries can be simultaneously fueled overnight during off-peak hours of the power plant and one ferry can be fueled during the day during peak hours of the power plant.

Ferry operation and refueling is staggered so that the electrolyzers operate continuously, ramping down during the peak hours and ramping up during off-peak hours between 60 to 95 percent nameplate capacity.

In support of France's nation-wide recycling initiatives for wastewater, recycled municipal water is being considered as the source of water to produce the hydrogen. Desalinated seawater is being considered as the source for the cooling system.

As with our business case for future projects, this inaugural project takes advantage of end-user adjacent available or stranded clean power and is based on a flexible production schedule. This physical location allows us to reduce or eliminate the cost for storage and transportation of compressed or refrigerated hydrogen. The physical location and the flexible production schedule allow us to use lower-cost power sources to feed the electrolysis process.

The Corporation's partnership with Maersk will be predicated on the scalability of the ferry service into a European maritime shipping strategy in deploying this technology for the transportation of freight and goods.

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