



Hydrogen and Fuel Cells in Ports and Shipping Workshop

Captain Joe Burgard

Red and White Fleet

Port of Los Angeles, CA

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RED AND WHITE FLEET



- FOUNDED IN 1892, THE HISTORIC RED AND WHITE FLEET TODAY OFFERS OVER 5,000 SIGHTSEEING TRIPS PER YEAR UNDER THE GOLDEN GATE BRIDGE.
- WE HAVE A FLEET OF FOUR PASSENGER VESSELS RANGING IN SIZE FROM 350 TO 600 PASSENGER.

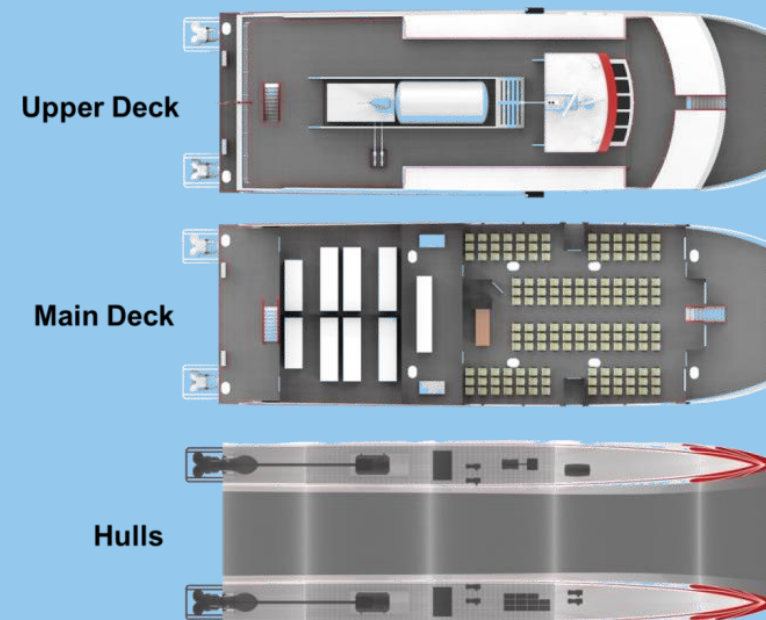




KEY CONSIDERATIONS

- CAPITAL COSTS
- OPERATING PROFILE/ENERGY CONSUMPTION
- FUELING/CHARGING INFRASTRUCTURE
- ROI: ENERGY COST VS DIESEL FUEL
- AVAILABILITY OF RENEWABLE ENERGY
- OPERATIONAL IMPACTS
 - MANNING & SAFETY
 - EQUIPMENT FLEXIBILITY
- EMISSIONS COST/REDUCTION INCENTIVES

SF-BREEZE



Hybrid Electric--Lithium Ion Vessel



Enhydra

128' Length

30' Beam

600 Passenger

800 Horsepower

160 kWh ESS

20+% Fuel Efficiency

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THANK YOU

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