

better to build · better to operate

Low/Zero Emission Vessel Technology: Impacts on Vessel Design

SEC Annual Meeting 2022

John Reeves, PE, PMP

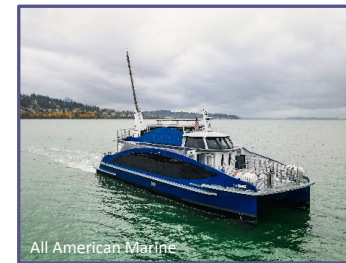
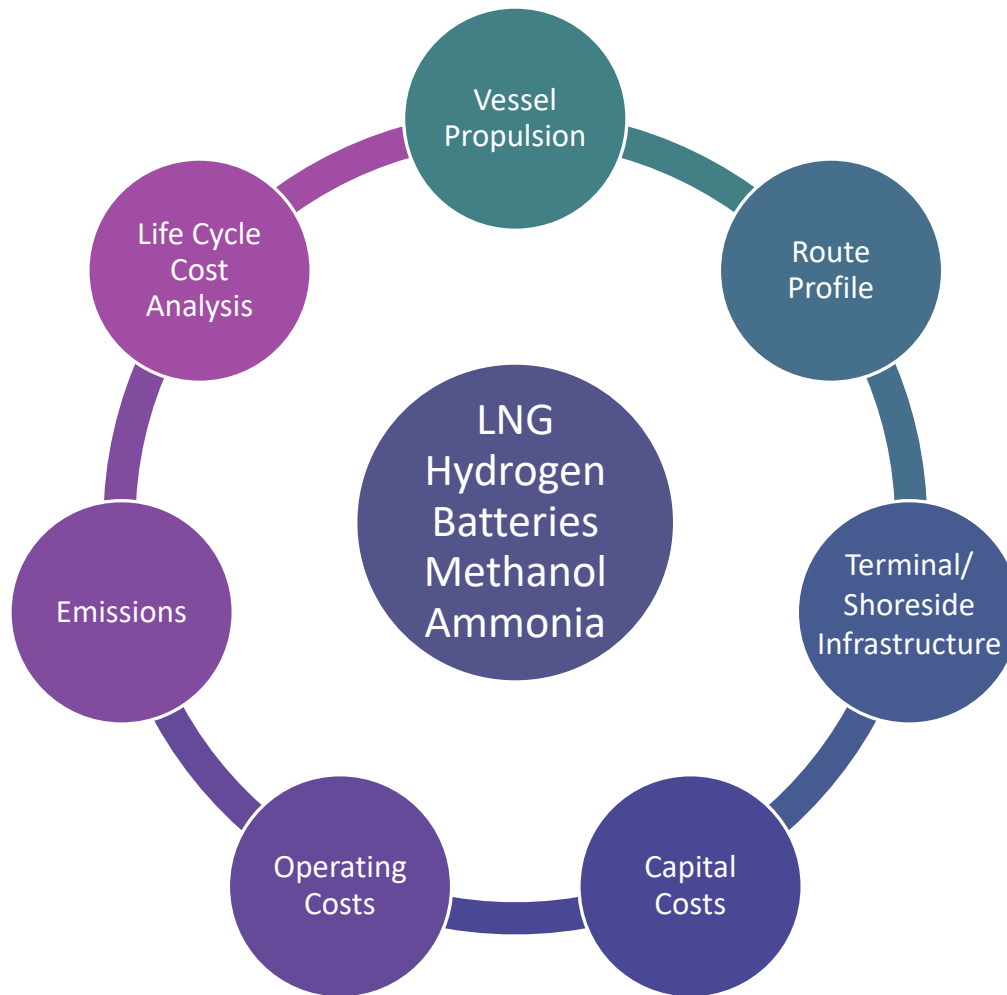
Director of Business Development



Southeast Conference

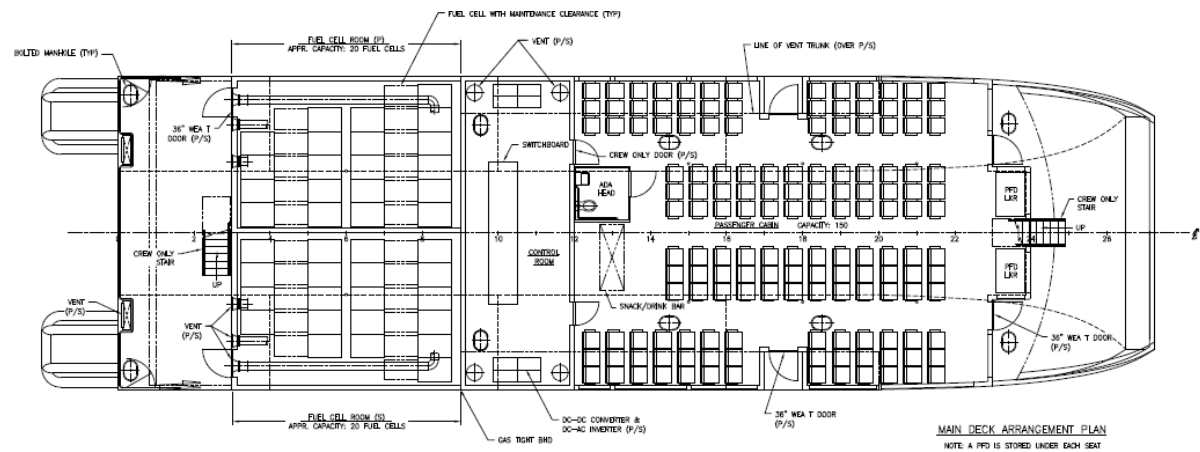
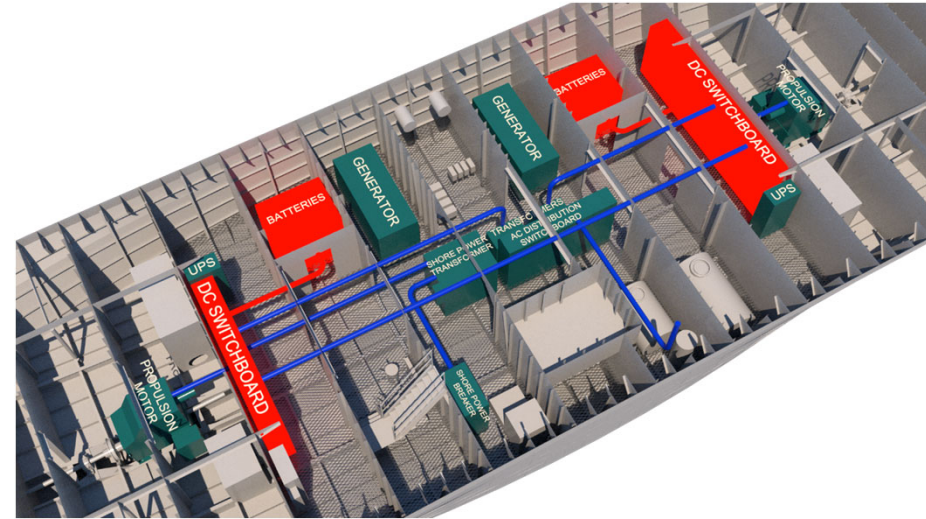


Does zero-emission technology impact vessel design?



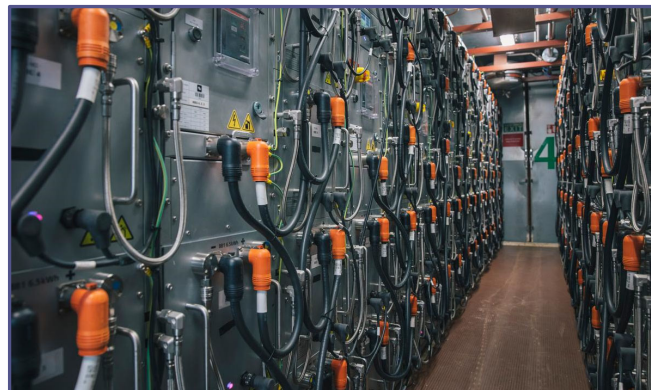
YES! But how...?

- Arrangements
 - Machinery Arrangements
 - Egress routes
 - Refuge areas
 - Passenger capacity
- Supporting Systems
- Weight



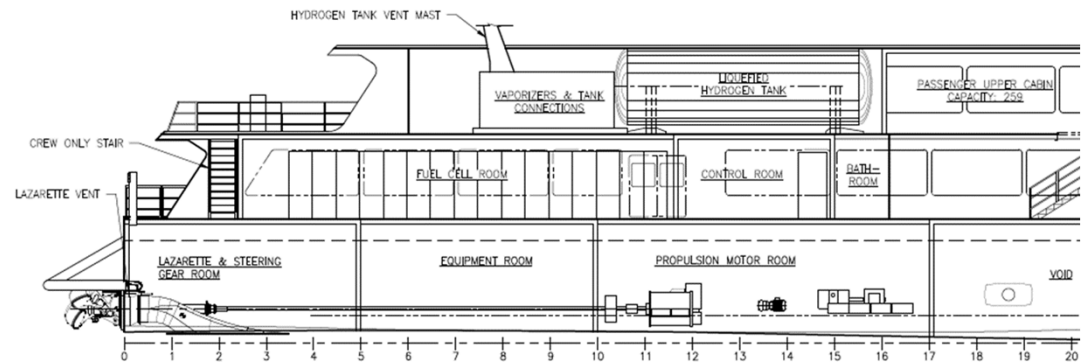
YES! But how...?

- Arrangements
- Supporting Systems
 - Ventilation and Cooling
 - Fire suppression
 - Gasification
 - Cryogenics
 - Piping systems
 - Charging systems
- Weight



YES! But how...?

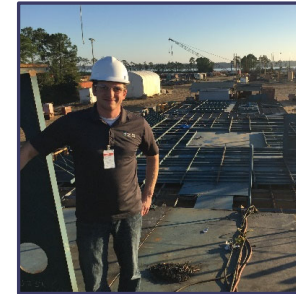
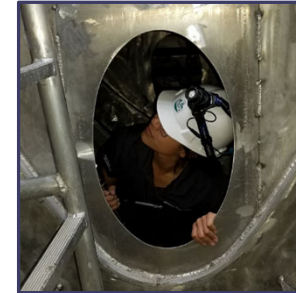
- Arrangements
- Supporting Systems
- Weight
 - Speed
 - Passenger/Cargo Capacity
 - Stability



 INBOARD PROFILE

So, what do we need to do?

- Get educated on the options
- Conduct an alternatives analysis
- Confirm the supply chain
- Consider the long-term benefits of near-term investments
- Account for intangible benefits
- Select the most beneficial system
- “Future proof” the vessel for a desired system later



Low-emission Ferry Feasibility - Update

- DOT&PF – SEC MOU -> SEC – EBDG RFP
- Purpose
 - Examine the operational, technical, and financial feasibility, as well as the economic benefits associated with low-emission ferry operations within the AMHS service area
- Concept vessel defined
 - 20-25 vehicles in an enclosed vehicle deck, minimum of 150 passengers
 - All-electric and shore charging capable
 - Alternative fuel for longer routes
- Next Steps
 - Shoreside Infrastructure analysis
 - Financial/Economic analysis



Questions/Follow-ups?

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