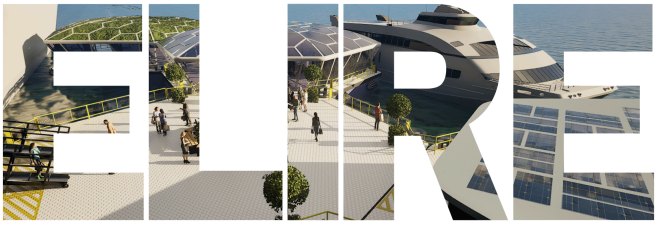


VP of Marine Systems Engineering

- Industries: Power Systems, Renewable Energy, Microgrids
- Remote working – 20 hours per month
- Services for equity arrangement
- Start and onboard immediately
- Evolves to a paid role upon closing our next capital raise

Want to assist an exciting innovative, smart infrastructure venture that is passionate and determined to accelerate the new world of clean energy, transportation and maritime to net zero & to meet ESG targets?

As a group, ELIRE has accelerated very quickly over the last months to position our ventures and world-first solutions critical to accelerating the ecosystem shift to adopt new technologies. ELIRE Infra has a long pipeline of exciting projects from London, UK, UAE, Australia, Nordics and the Mediterranean.

Company Description
ELIRE Group pioneers innovative solutions at the intersection of infrastructure, transport, and clean energy to help clients achieve decarbonisation and net zero goals. The company values commercially viable, scalable, and impactful innovation, blending existing technologies with new ideas to drive change.

Role Description

Our senior engineering and tech team is looking for an experienced Marine Systems Engineer to join the team to play a key role and assist in designing, specifying, and integrating marine subsystems for cutting-edge floating infrastructure projects.

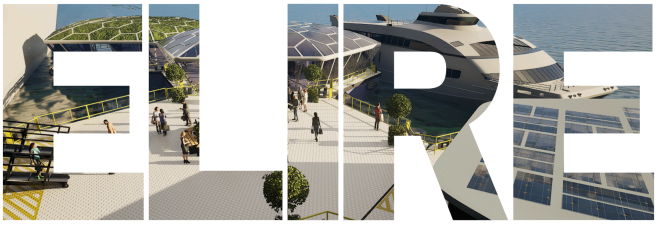
This role will be responsible for full lifecycle system development, ensuring compliance with marine classification rules, optimizing subsystem integration, and applying risk-based engineering principles to deliver robust, scalable, and efficient marine solutions.

Key Responsibilities

Subsystem Design & Integration

• Lead the design, specification, and integration of key marine subsystems, including fuel systems, cooling systems, HVAC, grey & black water treatment, fire protection, and fluid distribution systems.

• Develop and manage General Arrangement (GA) drawings, Piping & Instrumentation Diagrams (P&IDs), and system schematics.



• Ensure that all designs are scalable, modular, and aligned with best practices for marine engineering.

• Address thermal management, vibration isolation, and fluid dynamic considerations to optimize performance and longevity.

Systems Engineering & Interface Management

• Implement systems engineering best practices to manage the entire lifecycle of marine subsystems, from concept development to operational validation.

• Lead interface management between electrical, mechanical, automation, and structural teams, ensuring seamless subsystem integration.

• Develop detailed interface control documents (ICDs) to define technical boundaries, functional specifications, and compatibility between connected systems.

• Identify and mitigate potential integration risks, ensuring that all subsystems work together efficiently within the marine environment.

• Apply risk-based design methodologies, such as Failure Modes, Effects, and Criticality Analysis (FMECA), Hazard and Operability Studies (HAZOP), and Fault Tree Analysis (FTA), to enhance safety, reliability, and performance.

• Ensure all systems comply with marine classification rules and standards (e.g., DNV, ABS, Lloyd's Register, IMO).

• Conduct failure mode impact assessments to predict and mitigate potential mechanical, hydraulic, and electrical failures.

• Implement redundancy strategies for critical subsystems, enhancing overall platform resilience.

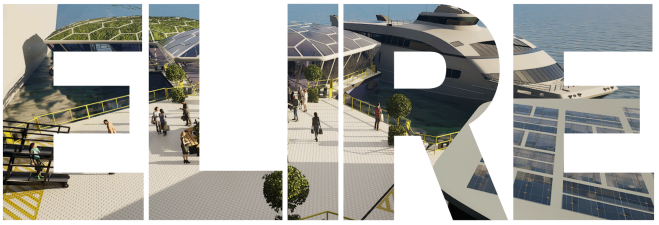
Integration Management & Testing

• Lead the development and execution of system validation plans, ensuring that all subsystems function as expected under real-world conditions.

• Oversee factory acceptance testing (FAT), site acceptance testing (SAT), and commissioning for critical marine systems.

• Develop a progressive testing framework, refining designs before deployment using model-based systems engineering (MBSE) and digital twin simulations.

• Manage subcontractors, vendors, and third-party suppliers, ensuring on-time, on-budget system integration.



Marine Engineering and Environmental

• Address marine-specific engineering challenges, including corrosion resistance, hydrodynamic forces, wave-induced stress, mechanical fatigue, and long-term durability.

• Ensure system designs are optimized for harsh marine environments, considering seawater ingress, pressure fluctuations, and extreme weather resilience.

• Conduct structural and mechanical interface assessments to ensure seamless integration of marine systems with floating platforms.

• Develop and implement preventative maintenance strategies to extend the service life of floating marine infrastructure.

Ideal Candidate Profile:

- Experience: Minimum 10+ years in marine systems engineering, subsystem design, or floating infrastructure development.
- Technical Skills: Expertise in marine fuel systems, cooling, HVAC, fire protection, and water treatment.
- Systems Engineering & Integration: Strong understanding of interface management, modular subsystem integration, and validation testing.
- Software Expertise: Proficiency in AutoCAD, AVEVA Marine, CADMATIC, or similar tools for GA drawings, P&IDs, and system modeling.
- Regulatory Knowledge: Deep understanding of marine classification standards (DNV, ABS, Lloyd's Register, IMO regulations, ISO 13628-6, etc.).
- Risk & Reliability: Experience with FMECA, HAZOP, FTA, and other risk analysis methodologies.
- Marine Environment Expertise: Understanding of how the marine environment affects mechanical design, including corrosion resistance, wave loads, and thermal dynamics.
-

Contact and apply with your resume, portfolio, LinkedIn profile and a short description of your interest and experience via an email using the subject - *VP MSE + 'your name'* to Rajeev Verma, Group CTO, rajeev@eliregroup.com