JOB DESCRIPTION

Job Title:	Commissioning Engineer
Location:	Primary (Aberdeen) Secondary (Glasgow)
Responsible To:	Commissioning Manager
Direct Reports:	Head of Project Delivery and Operations
Review Date & Rev No:	05.09.25

Purpose of Job:	To ensure the safe, efficient, and compliant start-up of hydrogen production facilities. This role is responsible for planning, executing, and validating all commissioning activities across mechanical, electrical, instrumentation, and process systems. Working closely with engineering, construction, and operations teams, the Commissioning Engineer ensures that all systems are installed and tested in accordance with design specifications, regulatory standards, and hydrogen safety protocols. The goal is to deliver a fully operational plant that meets performance, reliability, and environmental targets, ready for handover to operations.
Key Areas of Responsibility:	**Planning & Preparation** • Develop and maintain detailed commissioning plans, schedules, and procedures for hydrogen production systems and associated infrastructure. • Review engineering designs, P&IDs, datasheets, and specifications to ensure commissioning requirements are incorporated. • Participate in HAZOP, HAZID, and other safety reviews to identify commissioning risks and mitigation strategies. • Coordinate with project management, construction, and operations teams to align commissioning activities with overall project timelines. **System Commissioning** • Lead the commissioning of mechanical, electrical, instrumentation, and process systems including electrolyzers, compressors, purification units, storage tanks, and control systems. • Conduct pre-commissioning checks such as loop checks, pressure tests, flushing, and calibration. • Execute functional testing and performance verification of equipment and systems in accordance with design and safety standards. • Ensure all systems are commissioned in compliance with hydrogen-specific safety protocols and environmental regulations. **Documentation & Reporting** • Prepare and maintain commissioning documentation including test procedures, checklists, punch lists, and handover packages. • Record and report commissioning progress, issues, and resolutions to stakeholders. • Ensure all commissioning activities are documented for regulatory and operational audit purposes. • Support the development of operation and maintenance manuals based on commissioning outcomes.

	Team Coordination & Supervision • Supervise and coordinate commissioning technicians, contractors, and vendors during execution phases. • Facilitate training and knowledge transfer to operations personnel on newly commissioned systems. • Liaise with equipment suppliers and OEMs to ensure proper installation, testing, and troubleshooting support. **Safety & Compliance** • Enforce strict adherence to hydrogen safety standards, site safety rules, and permit-to-work systems during commissioning. • Lead or participate in safety audits and incident investigations related to commissioning activities. • Ensure compliance with local, national, and international codes and standards relevant to hydrogen production and handling. **Troubleshooting & Optimization** • Identify and resolve technical issues during commissioning, working collaboratively with engineering and vendor teams. • Support performance tuning and optimization of systems to meet design throughput and efficiency targets. • Recommend design or operational improvements based on commissioning findings. **Handover & Closeout** • Manage the transition from commissioning to operations, ensuring systems are fully functional and ready for continuous operation. • Facilitate final acceptance testing and client sign-off. • Close out commissioning documentation and contribute to lessons learned for future projects.	
Interfaces:	**Internal:** Head of Project Delivery and Operations, Construction Manager, Discipline leads/engineers Project Manager, Project Delivery Lead, health safety and quality lead, scheduler **External:** Electrical Contractor – FES and equipment suppliers	
Qualifications:	Essential	Desirable
	• Chartered Engineer (CEng) status or working towards it (UK-specific). • ATEX / IECEx Certification for working in explosive atmospheres. • CompEx Certification (for hazardous area electrical work). • Hydrogen Safety Training – specific to hydrogen handling, leak detection, and explosion risk mitigation. • Permit to Work / LOTO Training – for safe system isolation and control. • HAZOP / HAZID Training – for participation in safety and risk assessments. First Aid & Emergency Response Certification – especially in high-risk environments.	

Experience Required:	Essential	Desirable
	Industry & Project Experience • Proven experience in commissioning within hydrogen production facilities, or similar process industries such as oil & gas, petrochemicals, or renewables. • Hands-on experience with hydrogen technologies such as: • Electrolyzers (PEM or alkaline) • Hydrogen purification systems (e.g., PSA, membrane separation) • Compression and storage systems • Fuel cell systems (if applicable) • Experience in greenfield and/or brownfield commissioning projects.	
Skills/Training Competences:	Essential	Desirable
	Technical Skills • Strong understanding of hydrogen production technologies (e.g., electrolysis, SMR, purification systems). • Proficiency in interpreting P&IDs, electrical schematics, and control system logic. • Experience with commissioning mechanical, electrical, instrumentation, and process systems. • Knowledge of industrial automation systems (PLC, SCADA, DCS). • Familiarity with hazardous area classifications and ATEX requirements. • Ability to conduct and interpret functional and performance tests. **Project & Process Skills** • Commissioning planning and execution. • Root cause analysis and troubleshooting. • Risk assessment and mitigation planning. • Documentation and reporting (e.g., commissioning dossiers, punch lists). • Quality assurance and control during commissioning phases **Digital & Analytical Skills** • Use of commissioning management software and digital tools. • Data analysis for performance validation and optimization. • Competence in Microsoft Office Suite and project management tools. **Technical Competence** • Deep understanding of hydrogen plant operations and commissioning requirements. • Ability to integrate multi-disciplinary systems into a cohesive operational unit. **Safety & Compliance** • Commitment to safety culture and regulatory compliance. • Proactive identification and resolution of safety risks. **Communication & Collaboration** • Clear and effective communication with cross-functional teams. • Ability to lead and coordinate contractors, vendors, and internal stakeholders.	

	Problem Solving & Decision Making • Analytical thinking and sound judgment under pressure. • Ability to make informed decisions in dynamic commissioning environments. **Adaptability & Resilience** • Flexibility to work in changing conditions and tight schedules. • Resilience in managing complex technical challenges. **Leadership & Accountability** • Ownership of commissioning deliverables and outcomes. • Mentoring junior engineers and technicians.	

Please note that you may be requested to undertake other duties from time to time and it is possible that your duties may change over time. You will be expected to cooperate with all reasonable requests. If the changes are deemed to be longer term then this job description will be revised.

Signature of Job Holder: _____ Date: _____
Name in Capitals ( )

Signature of Manager: _____ Date: _____
Name in Capitals ( )