

Job Title	Gas Pipeline and Infrastructure Designer
Department	Capital Delivery
Reports to	Senior Technical Manager
Grade	Grade 5
Purpose & Overview	To undertake the design, assessment, modification and technical assurance of natural gas transmission and distribution pipelines and associated above-ground installations (AGIs) in accordance with UK legislation, industry standards and company procedures. The role is responsible for delivering safe, efficient and compliant engineering solutions for new build, diversion, reinforcement and asset modification projects whilst ensuring designs meet operational, commercial and regulatory requirements.
Key Accountabilities	Within the role, you will work closely with colleagues within Capital Delivery / Pipelines and alongside internal and external stakeholders. You will assist and contribute towards the management of gas transmission and distribution assets in accordance with the WWU Management System and Safety Case, including: • Produce, check and approve engineering designs for natural gas pipelines, above-ground installations and associated infrastructure. • Prepare and review design calculations including pipeline wall thickness, flexibility and stress analysis, support design, restraint calculations and material selection. • Develop engineering drawings and construction deliverables including: General Arrangement Drawings, P&IDs, Isometric Drawings, Construction Details & Material Schedules • Carry out engineering assessments of existing gas infrastructure and specify modifications, repairs and reinforcement works. • Undertake site visits, engineering surveys and constructability reviews. • Ensure designs comply with the relevant standards. • Undertake hydraulic assessments, pressure loss calculations and stress assessments where required. • Produce technical specifications, scopes of work and engineering reports. • Support procurement by preparing technical requisitions and evaluating supplier submissions.

	• Provide technical support during construction, commissioning and handover. • Review contractor design submissions and provide technical approval where delegated. • Participate in Hazard Identification (HAZID), Design Risk Assessments and Constructability Reviews. • Ensure engineering documentation is maintained in accordance with the company Management System. • Support continual improvement of engineering standards, procedures and technical guidance. • Act as Design Engineer or undertake the duties of Design Appraiser where authorised under the company's competency framework. • Support business planning, cost estimation and programme development for capital projects. • Build effective collaborative relationships with operations, maintenance, project management, regulators and external engineering consultants. working relationships through collaborative practices.
Technical Know-How & Skills	The role should demonstrate knowledge of: • Gas Safety (Management) Regulations 1996 • Pipelines Safety Regulations 1996 • Pressure Systems Safety Regulations 2000 • CDM Regulations 2015 • Health & Safety at Work Act 1974 • Environmental legislation • Relevant British Standards (BS EN, BS PD and ISO) • IGEM Standards (e.g., IGEM/TD/1, IGEM/TD/13)
Qualifications	A motivated individual who has an interest in mechanical/gas/electrical/instrumentation engineering, that, as a guide: • Degree (or equivalent) in Mechanical Engineering, Civil Engineering or related engineering discipline accredited by the Institution of Gas Engineers and Managers (IGEM), Institution of Gas Engineers and Managers, the Institution of Mechanical Engineers or the Institution of Engineering and Technology. • Demonstrable experience designing natural gas transmission or distribution pipeline systems.

- Strong understanding of UK gas industry legislation and engineering standards.
- Experience producing engineering calculations and technical documentation.
- Competent in AutoCAD or equivalent engineering design software.
- Knowledge of pipeline materials, welding, fittings, valves and pressure containing equipment.
- Understanding of pipeline stress analysis and flexibility assessment
- Is self-starting and performance focused.
- Is dedicated to achieving chartership whilst building a career in engineering or sustainability and environment.
- Takes pride in work and is motivated to deliver high performance ensuring safe working practices.
- Is a strong team player with excellent listening, communication, influencing and collaboration skills.
- Full UK driving licence.

Desirable:

- Chartered Engineer (CEng) or Incorporated Engineer (IEng), or actively working towards professional registration.
- Experience of AGI design.
- Experience using CAESAR II, AutoPIPE or equivalent stress analysis software.
- Knowledge of GIS and pipeline route selection.
- Experience of temporary works and construction engineering.
- Design Appraiser competency in accordance with GL5/G17.
- Experience within a Gas Distribution Network (GDN) or Gas Transmission business.