

cng services ltd

The UK's Independent Onshore Gas Development Company



CNG Services Ltd provides consultancy, engineering and project management services to developers of onshore UK gas reserves, from discovery to sales into the UK pipeline system

design, consultancy and project management

Owner's Engineer

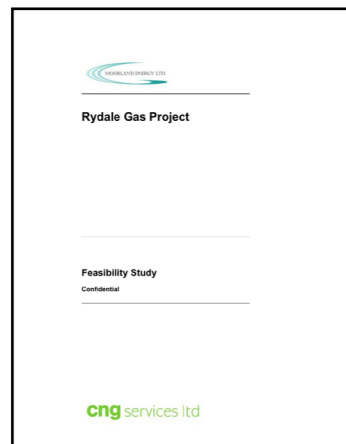
Our role is to support the client in all aspects of getting gas from the well-head to the market, including the following:

- Feasibility Study
- Contract support
- Planning permission strategy and appointment of planning consultants
- Pipeline routing study
- Appointment of FEED contractor and management of FEED
- Negotiations with LTS Operator or National Grid over NTS access
- Negotiations with Local Distribution Network Operator over electricity connections
- Gas sales
- Project Management

Feasibility Studies

We can provide a Feasibility Study that answers the key questions:

- What are the overall economics?
- Should we generate electricity instead of exporting gas?
- What processing of the gas is required and what will it cost?
- If exporting gas is the financially preferred route:
 - How can we get the gas to market?
 - Does the gas grid have capacity?
 - Can we move gas by road as CNG or mini-LNG?
- What are the planning issues and risks?
- Where should the processing plant be located?



This study typically takes one month and is the key first step in monetizing any gas reserves. CNG Services has completed a number of such studies and our methodology is well established.

Contract Support

CNG Services is independent from contractors who design and build pipelines, process plant and associated activities. Our skill is to know the market and identify which potential contractors and service providers can provide the necessary input. Our support in relation to appointment of all contractors includes:

- Contractor pre qualification
- Preparation of Tender Invitation Package(s)
- Bid evaluation on behalf of client
- Contract award by client

Planning Permission

- Appointment of planning consultant
- Identification of preferred locations for processing plant
- Identification of pipeline route corridors
- Pipeline route refinement
- Environment and planning issues including local authority liaison
- Support in relation to local community consultation



Pipeline Design and Routing

CNG Services provides extensive experience in working with high pressure gas pipelines, including connections to new power stations, large Industrial and Commercial customers, gas storage facilities and diversion of existing pipelines. We also provide expertise in the operations and maintenance of existing high pressure pipelines and their installations which includes gas supply pipelines to power stations.



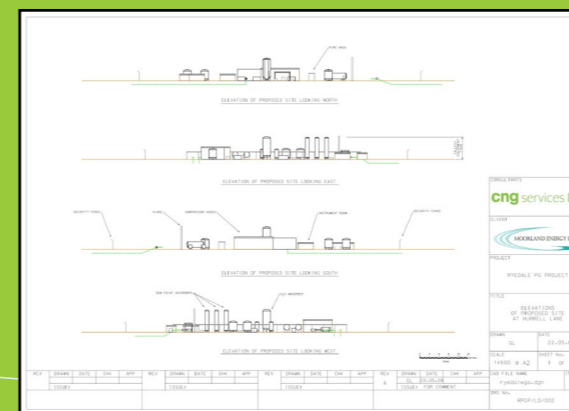
For onshore gas fields, our services include:

- Pipeline routing comprising route corridor selection, route refinement, consultation with land owners/occupiers, utility company liaison, avoidance of sensitive areas (SSSIs, archaeological sites) and possible future developments
- Gas pipeline design to IGEM/TD/1 Edition 5 Steel Pipelines and Associated Installations for High Pressure Gas Transmission or ASME B31.8 Gas Transmission and Distribution Piping Systems or BS8010 Code of Practice for Pipelines
- Processed liquids pipeline design to ASME B31.4 Pipeline Transportation Systems for Liquid Hydrocarbons
- Production of pipeline safety report

Front End Engineering Design

CNG Services is not a FEED contractor. Our role is to define a scope of work (based on the Feasibility Study) and then work with the client in an 'Owner's Engineer' role to select and appoint a FEED Contractor who will deliver the following:

- Specific technical studies
- Engineering of options
- Above ground installation design
- Gas metering design
- Safety case development



Connection to UK Gas Grid

In most cases, National Grid will own the nearest gas pipeline. CNG Services has extensive experience in relation to all aspects of the National Grid interface:

- Design and Build Agreement
- Network Entry Agreement
- Capacity in the NTS or local gas grid
- Commissioning Gas Agreement
- Metering System design
- Above ground installation design

In the event that the gas is going to connect into the lower pressure system owned by one of the other gas distribution networks then the general principles are the same.

Electricity supplies

In most cases, electricity supplies from the local Distribution Network Operator are required. CNG Services will help to establish the following:

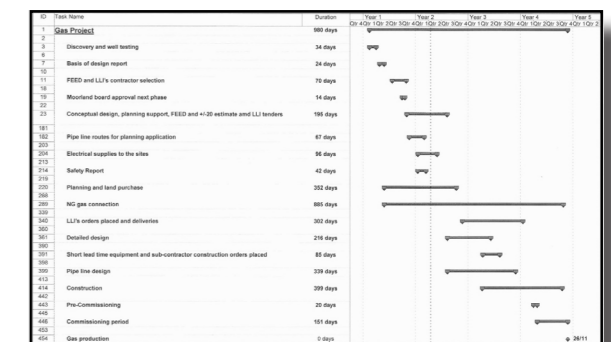
- Capacity
- Costs (non-contestable and contestable)
- Timetable
- Alternative options

Gas Sales

In relation to gas sales, CNG Services helps the client to answer the following questions:

- Should I become a gas shipper?
- How should I sell the gas?
- Which consultants can help sell the gas?

Project Management



In addition to the specific activities and deliverables set out above, CNG Services also provides support in relation to:

- Project programme
- Project capex estimates
- Bi-weekly/monthly reporting (as required)
- Action lists
- Risk identification and management

Selected Gas Projects:

Site/Project	Customers	CNG Services Scope
Ryedale Gas Project	Moorland Energy	<ul style="list-style-type: none"> • Owners engineer role • Project concept • Feed • Pipeline design • Planning process
Saltfleetby	Wingas Energy	<ul style="list-style-type: none"> • Concept challenge • Planning application support • Need Case expert at planning Inquiry
Teesside Gasport	Excelerate Energy	<ul style="list-style-type: none"> • Concept • Project strategy • Basis of design
Expander	Scotia Gas Networks	<ul style="list-style-type: none"> • Feasibility study • Conceptual design
Didcot & Adnams Biomethane to Grid Projects	Scotia Gas Networks/Centrica	<ul style="list-style-type: none"> • Design • Network Entry Agreements • Biomethane Sales



Michael Foulds

Michael has over thirty years experience in the petrochemical and power generation industries, experienced in planning, conceptual and detailed design, construction, commissioning and operations. This includes work on the Viking Gas Development Project and more recently on the Moorland Energy Ryedale Gas Project.



Michael Beddows

Michael is a Chartered Gas Engineer, a member of the Institution of Gas Engineers and Managers and has worked in the gas industry (British Gas, Transco) with high pressure gas pipelines and some liquid pipelines for over 30 years. He has worked on several overseas assignments on pipeline project work in locations including Hong Kong, Egypt, Indonesia and Abu Dhabi and is fully familiar with UK and International standards in the area of pipeline design, installation design, construction, commissioning and maintenance.



Iain Ward

Iain is a Chartered Gas Engineer with over 32 years experience in the UK gas industry, and has had senior roles in planning, construction, maintenance and operation of on-shore distribution and transmission gas assets. He has substantial experience in specification and leadership of gas control centres and the associated control systems. Iain has identified and managed various business improvement initiatives co-ordinating technical, operational, commercial and contractual considerations, deriving value for clients at all times.



Greg Lee

Greg is a Mechanical Designer with experience in designing pipelines and installations for the gas and petrochemical industries in both the UK and overseas. Greg is qualified and trained for the latest in design software and has a good understanding of UK and International Standards. This enables the computer generated drawings and models CNG Services produce to provide our clients with a deeper understanding of their project, from Feasibility through to Construction.



Martin Kinoulty

Martin is a solicitor with over thirty years experience of the gas industry. He has worked at the highest levels on legal, regulatory and managerial aspects of major onshore and offshore gas projects and gas transportation agreements. Between 1990 and 2002 Martin held senior posts at BG Storage, first as Director of regulations and then as Chief Operating Officer.



Sue Ellwood

Sue is an experienced commercial analyst who has worked in gas transmission for over 15 years, mainly in UK gas system operations and in the development of the commercial rules for use of the National Transmission System. She has an engineering degree and an MBA, and has held project management and business strategy roles. Sue advises on contractual and commercial issues related to gas sales, capacity and access to the gas grid, and provides economic modelling and analysis to support feasibility studies for our clients.



Ken Reid

Ken is a Chartered Engineer with design, construction and operational experience of gas transportation systems from beach to meter (including LNG Importation Terminals) with associated Network Code knowledge. Extensive management, commercial and negotiation experience with a reputation for successfully completing very high profile strategic work, including complex infrastructure projects, having a major impact on the Company and the UK Gas Industry.



Graham Hadfield

Graham is a qualified quantity surveyor with over 20 years experience in commercial management within the civil engineering, construction and utilities sectors, having held senior positions on major infrastructure schemes in the UK and overseas. He provides expertise in the development of procurement strategies particular to each project and client, preparing tender documentation, and the selection and drafting of appropriate forms of contract for prospective contractors. Familiar with the administration requirements of the many standard forms of contract in use within the industry and the management of contractors from tender to final account stage.



Dave Lander

Dave Lander is a Chartered Chemist and a specialist in natural gas quality. He has held senior roles in the Network Strategy Directorate of the UK Distribution business of National Grid, where he provided Gas Quality expertise within the company and developed policy and standards in the gas quality area for implementation throughout the company. He is an active participant in BSI/ISO standards committees on Natural Gas and Gas Analysis and is a UK representative on CEN Working Groups currently developing European standards for natural gas quality and biomethane for grid injection



John Baldwin - Managing Director

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