

At A Glance

European Gas Network Rules

Overview

In a competitive gas market, shippers need common rules that give them efficient and non-discriminatory access to the transportation system. Market participants need incentives that ensure the safe operation of the gas transportation system, but that are not so unduly penal that they discourage efficient entry into the market. In designing gas network rules, economic principles are essential in establishing the correct balance of incentives.

NERA is at the forefront of developing gas network rules that ensure this balance. NERA economists combine rigorous economic thinking with practical experience gained from working in numerous gas jurisdictions around the world.

Key Areas of Expertise

NERA experts have comprehensive experience in all areas of gas network rules and codes. We have assisted gas regulators, gas transmission companies, and other market participants in the design of new gas rules, and in modifying existing rules to accommodate new gas market arrangements such as the EU second gas directive. NERA also provides expert advice to new entrants to help them understand the gas network rules in a particular jurisdiction and the likely evolution of the current arrangements. A thorough understanding of the rules and how investments will be impacted is fundamental to realising the value of gas assets. Our network rules design experience covers a number of gas jurisdictions including Great Britain, Ireland, the Netherlands, Italy, and Singapore.

NERA's expertise on gas network rules includes the following areas:

Balancing Arrangements

However efficiently shippers purchase (under long-term contracts) and trade (bilaterally in the short-term) gas, imbalances will arise, often because demand is higher

or lower than expected, deliveries are higher or lower than expected, or both. Shippers need clear, objective arrangements to address these imbalances. NERA has advised market participants in developing balancing regimes that provide efficient ways for shippers to restore their individual balances, and for the gas transporter to correct physical imbalances on the system. In particular, NERA has extensive experience working closely with engineers in determining the most appropriate balancing period, imbalance trading principles, market-based mechanisms for the provision of balancing gas, imbalance prices and tolerances, and the level of information flows between participants for different gas regimes.

Nomination Arrangements

Nominations are notices to transportation service providers of how much gas the shipper wishes to transport, when and for how long the shipper wants the gas transported, where the gas will be entering the pipeline system (receipt point), and where it will be delivered (delivery point). These notices also provide the information necessary for the transportation service provider to schedule flows in a safe and efficient manner. NERA works with market participants



in each jurisdiction to develop nomination rules that are as flexible as possible (consistent with the safe operation of the system) by taking into consideration the particular characteristics of the gas market arrangements being proposed, the configuration of the transport system, and any implications for the electricity market and for interconnected gas markets.

Capacity Rights

An integral part of allowing open access on pipeline facilities is defining the rights that users receive when they pay for transportation access. There are a number of methods of defining capacity rights in a transmission network. In particular, capacity rights can be defined on a point-to-point, zone-to-zone, or entry-exit basis. In deciding the most appropriate method of defining capacity rights in a particular jurisdiction, it is necessary to consider the complexity of the network, the level of congestion, and the amount of physical flexibility in the different parts of the system. NERA has worked with companies, government bodies, and engineers in determining the most appropriate way of defining capacity rights in different gas markets as well as the rules for trading these capacity rights between market participants. Our experience covers entry-exit, zone-to-zone, and point-to-point gas jurisdictions.

Publications

Newsletters

NERA produces two newsletters on the energy sector. *The Global Energy Regulation Newsletter* aggregates energy regulation news from around the world. *Energy Regulation Insights* give NERA's views on the economics behind topical developments in the energy sector. Subscribe at www.nera.com/newsletters.

Client Experience

UK Gas Acquisition

As part of a wider range of regulatory advice, NERA advised a client on the impact of gas market arrangements on the proposed purchase of gas transmission and distribution assets. We evaluated the likely changes to the market rules that would be necessary to accommodate the market changes and the consequential impact on our client's purchase.

Development of the Network Code for SNAM Rete Gas (SRG)

SRG commissioned NERA to draft specific sections

of its proposed Network Code to be submitted to the Italian regulator.

Singapore Gas Market Arrangements

NERA advised Singapore's Energy Markets Authority on a complete package for reforming its gas market, and were part of the multi-disciplinary team which drafted the primary and secondary legislation and the Network Code. Our work included the design of the gas market arrangements, including gas balancing, nominations, and capacity right definition and trading.

Irish Gas Code of Operations

As part of a wider range of regulatory advice, the Commission for Energy Regulation (CER) commissioned NERA to review the existing Code of Operations. As part of this advice, NERA helped the CER to identify the implications of adopting an entry-exit regime for the definition of capacity rights and for balancing arrangements.

Development of UK Network Code

As part of the establishment of gas market arrangements, NERA worked for Transco to develop the original Network Code.

Gas Transport Services (GTS)

NERA reviewed the entry-exit arrangement adopted by a gas transportation company in the Netherlands.

About NERA

NERA Economic Consulting (www.nera.com) is a global firm of experts dedicated to applying economic, finance, and quantitative principles to complex business and legal challenges. For half a century, NERA's economists have been creating strategies, studies, reports, expert testimony, and policy recommendations for government authorities and the world's leading law firms and corporations. With its main office in New York City, NERA serves clients from more than 20 offices across North America, Europe, and Asia Pacific.

Contacts

Graham Shuttleworth

Director

+44 20 7659 8654

graham.shuttleworth@nera.com