# At A Glance **European Gas Markets**

### **Our Firm**

Founded in 1961, NERA Economic Consulting is an international firm of economists that specialises in helping clients understand and design markets. Our work combines rigorous economic thinking and quantitative analysis with practical experience gained from applying these tools to real gas, electricity, and other energy markets.

With European offices based in London, Brussels, Madrid, Frankfurt, and Rome, our economists advise energy companies, merchant banks, law firms, governments, and regulators throughout Europe. We help our clients understand and respond to the regulatory and competitive challenges created by market liberalisation at both a national and a European level.

# **Key Areas of Expertise**

### **Market Design and Network Rules**

NERA experts have comprehensive experience with all areas of gas markets and network rules and codes. We have market design experience in a number of jurisdictions including Great Britain, Ireland, the Netherlands, Belgium, France, Italy, and Singapore. We help regulators and companies design and understand how rules affect them and competition in the market. In particular, we have detailed experience in balancing arrangements, nomination arrangements, and capacity rights.

# Tariffs, Price Control Regulation, and Regulatory Proceedings

We have extensive experience helping companies with gas supply and transportation tariffs and price control regulation. In particular, we advise companies on cost definition, incentive mechanisms, cost of capital, benchmarking, and yardstick competition. This advice is based on the application of clear economic principles and an understanding of the European and national regulatory requirements.

### **Litigation and Commercial Arbitration**

Liberalised energy markets rely on long-term contracts, but in ever-changing conditions disputes arise over interpretation of terms. NERA experts provide straightforward explanations of contract intent in terms of economic incentives and risk allocation and management. We provide clear analysis of any damages arising from breach of contract.

### **Mergers and Acquisitions**

NERA provides impartial pre-transaction and transaction services, including market assessments, investment search and selection, and regulatory and economic due diligence. We review contracts, provide asset valuations, and advise on likely changes to the regulatory regime, and audit clients' valuation models as part of the transaction process.

### **Liquefied Natural Gas**

NERA experts have developed strong expertise with liquefied natural gas (LNG) issues and their interactions with piped gas supplies. We work on feasibility studies for new infrastructure, assessing the likely demand for LNG, the profitability of aspects of the LNG value chain,





and the significance of the contractual conditions. We also help clients with regulatory analysis for gas and LNG facilities in particular, as well as advising on strategic and commercial issues

# **Client Experience**

### **Market Design and Network Rules**

Since our pioneering work on the design of the gas Network Code in the UK in the 1990s, we have helped clients across Europe on the design and operation of restructured gas markets. Our clients include the CER (in Ireland), Gasunie (the Netherlands), SNAM Rete Gas (Italy), DEPA (Greece), Gastra, and Statnett in Scandinavia. In energy auctions, we have helped OMV Erdgas design a "gas release" auction in Austria.

# Tariffs, Price Control Regulation, and Regulatory Proceedings

We have advised Gasunie, SNAM Rete Gas, Ruhrgas (Germany), Iberdrola (Spain), RONI (Slovakia), and others on aspects of price regulation, including cost definition, tariff design, and benchmarking. In the UK, we have assisted network companies at every OFGEM price review, and also in appeals before the Competition Commission. In public policy, we have advised the UK government on security of supply in gas markets, helped the CER to design the regulation of gas transmission and gas distribution tariffs offered to shippers, and appraised the principles for gas balancing for European energy regulators.

### **Litigation and Commercial Arbitration**

We have assessed contract damages in connection with the bankruptcy of TXU (UK), using a forward-looking appraisal of all aspects of market evolution. We assisted a major European pipeline company to assess the value of lost capacity in their successful resolution of a damages claim by a major shipper.

### **Mergers and Acquisitions**

We helped Gasunie define a methodology for valuing its network assets for regulatory purposes. We have advised a major international bank on the valuation of Transco's distribution networks in preparation for asset divestment. We have carried out market assessments and regulatory due diligence for banks and investors, including Deutsche Bank in Italy and the UK, DB Capital Markets in the UK, Star Capital in the UK, BNP Paribas in Lithuania, and ExxonMobil in Europe.

#### **Liquefied Natural Gas**

NERA has conducted a number of feasibility studies for companies considering investments in LNG projects in Spain, one of the largest markets for LNG in the world. NERA has worked for a Spanish LNG terminal company to develop a feasibility study of natural gas projects in eastern Spain, including analysis of the profitability of a regasification plant. Our experts have also carried out a feasibility study for Atlantic LNG on proposals to build a liquefaction plant in Trinidad and Tobago. NERA analysed price and contractual conditions for exporting LNG to Europe and the US.

NERA advised one of Spain's leading electricity generation and distribution firms on strategic and commercial gas issues including evaluation of LNG supplies, costs, tariffs, and contractual offers. Our experts have also advised COM Energy Enterprises on the demand for natural gas peaking services in New England.

### **Europe-Focused Publications**

NERA regularly produces scholarly, peer-reviewed publications that reflect our work and thinking in complicated regulated environments. Those specifically including analyses of European gas markets include the following:

- J.D. Makholm, "Regulation of Natural Gas in the United States, Canada, and Europe: Prospects for a Low Carbon Fuel," *Review of Environmental Economics and Policy*, Vol. 9, Issue 1, Winter 2015, pp. 107–127.
- J.D. Makholm, *The Political Economy of Pipelines: A Century of Comparative Institutional Development*, The University of Chicago Press, Chicago and London, 2012. Chinese-language edition published by the Petroleum Industry Press, Beijing, 2016.
- J.D. Makholm, "Seeking Competition and Supply Security in Natural Gas: the US Experience and the European Challenge," in F. Lévêque, J-M. Glachant, J. Barquín, C. von Hirschhausen, F. Holz, and W.J. Nuttal (eds.), Security of Energy Supply in Europe, Edward Elgar, Cheltenham, UK, 2010, pp. 21–55.





### **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 over 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. We bring academic rigor, objectivity, and real world industry experience to bear on issues arising from competition, regulation, public policy, strategy, finance, and litigation.

NERA's clients value our ability to apply and communicate state-of-the-art approaches clearly and convincingly, our commitment to deliver unbiased findings, and our reputation for quality and independence. Our clients rely on the integrity and skills of our unparalleled team of economists and other experts backed by the resources and reliability of one of the world's largest economic consultancies. With its main office in New York City, NERA serves clients from more than 25 offices across North America, Europe, and Asia Pacific.

### Contacts

#### **Sean Gammons**

Managing Director London: +44 20 7659 8564 sean.gammons@nera.com

### Dr. Jeff D. Makholm

Managing Director Boston: +1 617 927 4540 jeff.makholm@nera.com