

Dr. Jeff D. Makholm

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Dr. Makholm specializes in the economics of regulated infrastructure industries in the energy (electricity, gas, and petroleum products), transportation (pipelines, railroads, and airports), water, and telecommunications sectors. He has directed projects on competition, pricing, financing, privatization, and industrial development for many utilities and other infrastructure businesses in the US and more than 20 other countries. Dr Makholm was commended in Who's Who Legal Arbitration Expert Witness Guide 2016 for his appearances as an expert witness in LCIA and ICSID cases.

In the US, Dr. Makholm has directed cases regarding tariffs, cost of capital, regulation, planning, competition, and restructuring for regulated businesses in many state and federal regulatory jurisdictions. Beyond the US, he has assisted regulated industries, governments, and the World Bank with regulatory laws, proposed financing plans, and the pre-privatization restructuring of regulated businesses.

Dr. Makholm has provided expert testimony and reports on over 150 occasions for electricity companies, gas distributors, gas and oil pipeline companies, or regulatory bodies involved in administrative, civil, and international arbitration cases concerning competition and market power, tariff design, financing, and cost of capital. He has appeared as an expert witness before numerous regulatory bodies and parliamentary panels abroad, including before the LCIA and the ICSID. He participated in key hearings before the Federal Energy Regulatory Commission, which led to US gas and electricity industry restructuring. He has also testified on market and regulatory issues before the Supreme Court in Victoria, Australia and before the High Court and Parliament in New Zealand.

In addition, Dr. Makholm participated in key gas industry reforms in Europe, where he directed three major restructuring projects. In Central and South America, he worked to reform and structure efficient and competitive gas industries. On behalf of the World Bank, Dr. Makholm led the first group of Western economists to China to study and recommend reforms to that country's extensive gas industry. He has also been heavily involved in the restructuring, pricing, and privatization of the gas and pipeline industries in New Zealand, Australia, Russia, and a number of Asian countries.

Education

PhD and MA in economics, University of Wisconsin, Madison

(major field of industrial organization and minor field of econometrics/public economics; dissertation titled "Sources of Total Factor Productivity in the Electric Utility Industry")

MA and BA in economics, University of Wisconsin, Milwaukee

Publications

- *Polar Vortexes in New England: Missing Money, Missing Markets, or Missing Regulation?*
- *The Once and Future Argentine Energy Sectors*
- *Monkey-Wrenching Natural Gas Pipelines*
- *Prudence: Under Strain in California*
- *Why Publitize? Part II: When Public Ownership Gained Ground in the US Electricity Industry*
- *NERA Experts Bring Economic Insights to the Latest Investment Treaty Arbitration Review*
- *Why Publitize? Prospects for Undoing Investor-Ownership of Electric Utilities*
- *Gas Industry's Version of Demand Response Cures Its "Duck Curve"*
- *Gas Wars in Ukraine Illustrate Europe's Vulnerability to Russian Energy Dominance*
- *Getting to Zero Carbon Emissions in the Electric Power Sector*
- *After NAFTA: New Risks to North American Gas Trade?*
- *Natural Gas and Greenhouse Gases—What's the Connection?*
- *Incentive Regulation in the United States: Current Trends and a Look Back*
- *The New "Three Ds" in Regulation—Decarbonization, Decentralization, and Digitization*
- *NERA Experts Contribute to Latest Investment Treaty Arbitration Review*
- *Incentive Regulation 3.0 for Electric Utilities*
- *The Seemingly Futile Search for the "Missing Money"*
- *Certification of US Gas Pipelines: Assault on a "Modern Miracle"?*
- *Electricity Deregulation Under Siege II: Temptation of the Kleptocrats*
- *Where to Regulate Electricity? Energy Secretary Rick Perry's Proposed Rulemaking*
- *Institutions, to Property Rights, to High-Technology Gas Markets*
- *Regulating Utility Efficiency "Fast and Slow" - The Current Australian Problem*
- *Jeff D. Makhholm, PhD, Testifies Before the State of New York Public Service Commission's to Assess Certain Aspects of the Residential and Small Non-Residential Retail Energy Markets in New York State*
- *Electricity Deregulation Under Siege*
- *Mysterious Cost of Capital for Energy Utilities*
- *Climate Change, "Grid Neutrality," and Electricity Distributors*
- *The Political Economy of "P3" Public-Private Partnerships: Chilean Lessons for Rebuilding US Infrastructure*
- *Brexit and Divestiture Provides New Hope for "British" Gas*
- *A Square Regulatory Peg in a Round Industry Hole: Europe's Gas Industry Problems*
- *2011 Speech Revisited—Whither the "Fourth Gas Package" for the EU: Dealing with Paralysis in Europe's Gas Industry*
- *When Worlds Collide: Universal Challenges in Natural Gas and Electricity Markets*
- *The REvolution yields to a more familiar path: New York's Reforming the Energy Vision (REV)*
- *The Politics of U.S. Oil Pipelines: The First Born Struggles to Learn From the Clever Younger Sibling*
- *Will LNG Rescue World Gas Market? Maybe a Little*
- *Distributed Energy and Low Carbon vs. Consumers, Regulators, and Tin Men*
- *There Is But One True Hub, and His Name Is Henry*
- *A Petroleum Tanker of a Different Color: Obstacles to an LNG-based Global Gas Spot Market*
- *Choose your path: the future for Australia's gas market*
- *El Niño's Uneven Disruption of World's Electricity Systems*
- *Why Does Most Shale Gas Worldwide Remain in the Ground?*
- *Pipeline Capacity Rights to Support a Competitive Gas Market: Theory and Applications*
- *Utility Regulation Principles Vary Widely Country to Country*
- *A Half-Century of Computing the Cost of Capital for Utilities at NERA*
- *"Entry/Exit" Pipeline Pricing in Gas "Islands" Enables EU to Resist Competition*
- *The Political Economy of Pipelines: A Century of Comparative Institutional Development*

- *Zone of Reasonableness: Coping with Rising Profitability a Decade after Restructuring*
- *Fueling the Price of Power (and Gas): The Rising Profitability of Pipelines and the Need for Collective Action*
- *'Decoupling' for Energy Distributors: Changing 19th Century Tariff Structures to Address 21st Century Energy Markets*
- *Allowed Return on Equity in Canada and the United States: An Economic, Financial, and Institutional Analysis*
- *Electricity Transmission Cost Allocation: A Throwback to an Earlier Era in Gas Transmission*
- *Elusive Efficiency and the X-Factor in Incentive Regulation: the Törnqvist v. DEA/Malmquist Dispute*
- *Seeking Competition and Supply Security in Natural Gas: The US Experience and European Challenge*
- *The Theory of Relationship-Specific Investments, Long-Term Contracts and Gas Pipeline Development in the United States*
- *Ex Ante or Ex Post? Risk, Hedging and Prudence in the Restructured Power Business*
- *International Arbitration in Regulated and Related Businesses: Why Hire Economists?*
- *The Thaw: the End of the Ice Age For American Utility Rate Cases - Are You Ready?*
- *In Defense of the 'Gold Standard'*
- *Incentive Regulation Meets Electricity Transmission on a Grand Scale: FERC Order No. 2000 and PBR*
- *Benchmarking, Rate Cases and Regulatory Commitment*
- *ISOs Not the Answer for Gas*
- *Price Cap Plans for Electricity Distribution Companies Using TFP Analysis*
- *X Marks the Spot: How to Calculate Price Caps for the Distribution Function*
- *Economic Regulation of Utilities and Network Industries Worldwide*
- *Rocks on the Road to Effective Regulation: The Necessary Elements of Sound Energy Regulation*
- *Regulating Argentina's Gas Industry: A Report Prepared for The Ministry of Economy and the World Bank*
- *Profit Sharing and "Sliding Scale" Regimes*
- *FERC Takes the Wrong Path in Pricing Policy*
- *The Distribution and Pricing of Sichuan Natural Gas (Chinese text)*
- *Gas Pipeline Capacity: Who Owns It? Who Profits? How Much?*
- *Secondary Market Can Compete*
- *Why Privatize? Prospects in Developed and Underdeveloped Economies*
- *Calculating Fairness*
- *Natural Gas Pricing: The First Step in Transforming Natural Gas Industries*
- *Four Common Errors in Applying the DCF Model in Utility Rate Cases*
- *The Risk Sharing Strawman*
- *Pareto Optimality Through Non-Collusive Bilateral Monopoly With Cost-Of-Service Regulation*
- *The FERC Discounted Cash Flow: A Compromise in the Wrong Direction*

Practice Areas

Commercial Litigation and Damages

Energy

International Arbitration

Regulatory Economics

Survey Research, Design, and Analysis

Transport

Valuation

Water

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. With its main office in New York City, NERA serves clients from more than 25 offices across North America, Europe, and Asia Pacific.