

DOCKETED

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CURRICULUM VITAE
Benjamin Schlesinger, Ph.D.

SUMMARY

Dr. Benjamin Schlesinger, founding president of Benjamin Schlesinger and Associates (BSA), is one of North America's leading independent energy consultants, specializing in gas and electricity marketing, pricing, infrastructure, trading practices, strategic planning, and power plant development worldwide. Dr. Schlesinger has nearly four decades of experience in managing and carrying out engineering/economic analyses of complex energy issues, policies and programs, commodity movements, pricing and values. His more than 600 clients have included major U.S. and other public agencies and utilities, as well as the top commercial, manufacturing, energy trading and producing, private power, and educational and financial services companies globally. A former vice-president of the American Gas Association, Dr. Schlesinger has testified before the U.S. Congress and in 16 states and provinces on the direction of the gas industry, gas contracting, purchase and sales prices, royalty valuations, market value, hedging and risk management, and related industry practices.

EDUCATION

- Stanford University, Stanford, California, M.S. (1969) and Ph.D. (1975), Industrial Engineering, now Department of Management Science and Engineering.
- Dartmouth College, Hanover, New Hampshire, A.B. (1967) and B. Engineering (1968).

EXPERIENCE

3/84-Present PRESIDENT, Benjamin Schlesinger and Associates (BSA), Bethesda, MD.

Dr. Schlesinger's consulting experience in his firm extends globally to pipeline natural gas, LNG, liquids, and electricity generation fuel pricing, supply, contracting, commercial mechanisms, market forecasting and regulatory issues. He has advised banks and development clients on energy markets, natural gas transportation and storage, and related economic strategies in Japan, the Philippines, South Korea, Hong Kong, Mexico, the U.S., Canada, Venezuela, Colombia, Argentina, Chile, the UK, France, Netherlands, Germany, Norway, Sweden, Denmark, Poland, the Russian Federation, Kazakhstan, Turkmenistan, Moldova, Romania, Bulgaria, Israel, Saudi Arabia, Ghana, Oman and Algeria.

Major assignments:

- Assessed natural gas procurement plans, prices and policies for more than 100 gas and electric utilities and large-scale power projects throughout the Americas and Europe; areas of focus include fuel supply, transportation, distribution, pricing and power competition and pipeline rates in assignments for power plant developers, investors, lenders, utilities and regulators; and worked extensively with FERC and other regulatory staff in these efforts.
- Directed energy sales and purchase agreement (SPA) contract negotiations for industries, suppliers, generators, gas and electric utilities, marketers and municipal agencies in North America, Europe and Asia, e.g., including advising gas purchase negotiations on behalf of the City of Tallahassee, the Philippine NPC, and other electric utilities.

- Analyzed pipeline and market economics, finance, and market mechanisms for natural gas buyers, sellers and lenders, including liquefied natural gas (LNG) project finance and strategic analyses in conjunction with 20 existing, expanded or proposed LNG import and export terminals, peak shaving plants, and receiving/regasification plants globally.
- As part of the foregoing assignments, assessed and upgraded feed gas plans for gas buyers through new U.S. Gulf Coast LNG export terminals, including review of existing onshore and offshore gas resources, availability of capacity on pipelines in the region, and rates for existing and expanded pipelines and gas storage facilities.
- Advised the U.S. Minerals Management Service (MMS, now the Bureau of Ocean Energy Management) in development of the first royalty-in-kind program for natural gas produced in the Gulf of Mexico OCS, including identifying key trading points, pipeline rates and transportation costs, and likely purchasers for the government's royalty share volumes.
- Advised the New York Mercantile Exchange (NYMEX) on the design and development of the highly successful natural gas futures contract for delivery at Henry Hub as well as NYMEX's suite of basis swap contracts; member from 19984-2000 of NYMEX's Natural Gas Advisory Committee.
- As a US delegate to the UN Economic Commission for Europe Sustainable Energy Division, participated since 1991 in the Gas Expert's Group, the Working Party on Gas, and co-founded in 1994 (along with the Russian Federation representative) the Center for Promotion and Development of Market-Based Gas Industries in Economies in Transition, known today as the UNECE Gas Center.
- Advised Tokyo Gas, Toho Gas, Osaka Gas, Tokyo Electric, Teikoku Gas, Japan Gas Association, Mitsui, Mitsubishi, and other Japan entities in natural gas regulatory policies, LNG procurement, fuel strategies for gas-fired power plant development, natural gas vehicles, and other key policies.
- Co-authored analytic studies for the Canadian Energy Research Institute (CERI) dealing with added gas supplies to Eastern Canada and the US northeast, and challenges in financing pipeline capacity within the context of short-term transportation contracting.
- Created and delivered a unique "Natural Gas 101" course overviewing basic gas economics, technologies and commercial operations for FERC enforcement staff, the Electric Power Research Institute (EPRI), the US Association for Energy Economics National Capital Area Chapter (NCAC-USAAE), BP, USAID, the US Trade and Development Agency, and a number of independent consulting and research groups.
- Wrote and, since 2009, has taught a graduate course in energy economics at the University of Maryland's School of Public Policy, and during the 1990s and 2000s instructed energy industry and regulatory professionals on energy markets and contracting in the unique "Alphatania" courses hosted by Gas Strategies of London.

As listed in the attachment, Dr. Schlesinger has testified as an expert on major gas industry economic and regulatory issues on behalf of private and public clients before the FERC, the U.S. Congress, Department of Energy, Environmental Protection Agency, and utility regulators and panels in Alaska, Arizona, California, Connecticut, D.C., Florida, Illinois, Louisiana, Maryland, Massachusetts, Mississippi, New Mexico, Ohio, Ontario, Texas and West Virginia.

7/82-3/84 PRINCIPAL, Booz, Allen & Hamilton, Inc., Bethesda, MD

- Lead consultant in the firm's natural gas industry practice, including direction of gas supply, marketing, and business strategy assignments for gas utilities, pipeline companies, and other private and public clients. Major accomplishments:
- Together with the Energy Futures Group, Inc. created and conducted a pioneering analysis of natural gas spot markets, trading, and brokerage risks and opportunities for a group of 20 gas pipelines, producers, and utilities.
- Directed an analysis of worldwide North Slope gas markets and transportation alternatives for the State of Alaska; testified before legislative committee.

2/77-7/82 VICE PRESIDENT, Policy Evaluation and Analysis, American Gas Association (AGA), Arlington, VA.

- Responsible for AGA's executive-level Gas Supply, Demand and Reserves Committees, including formulating policy and preparing forecasts of gas supply, demand and price.
- Directed an analysis staff of 26 that produced more than 80 major studies used to underpin all of AGA's government relations, international, marketing and consumer communications (1982 group budget to \$1.5 million). Key technical accomplishments: Led macroeconomic analysis of major potential oil supply disruption; created gas-use strategy to reduce air emissions from coal boilers; analyzed coal gasification trade-offs, including air, health and safety.

2/76-2/77 CHIEF ENVIRONMENTAL ENGINEER, Office of Commercialization, Energy Research and Development Administration (ERDA), Washington, D.C.

- Contributed to direction and leadership of a policy and technical nature on all major environmental, health and safety issues related to commercializing coal gasification and liquefaction, oil shale, and biomass energy technologies.
- Worked directly with the Deputy Administrator toward defining ERDA's position on the Clean Air Act Amendments of 1977. Maintained liaison between his office and the EPA, Interior, NIOSH, and the Water Resources Council.

10/74-2/76 Ph.D. and post-doctoral studies at Stanford University, sponsored by the U.S. Geological Survey.

- Completed and refined Ph.D. dissertation on Western coal development at Stanford University, funded by the U.S. Geological Survey, Resource and Land Investigations Program.
- Nominated for IEEE Franklin Taylor Award, 1975.

3/70-6/75 PROJECT ENGINEER, Environmental Services Department, Bechtel Corp., San Francisco, California.

- Supervised economic and environmental analyses, and site assessments for major energy and transportation construction projects ranging in capital cost from \$5 million to \$4 billion. Managed

environmental impact assessments for a 600-mile crude oil pipeline through Quebec and New York state, a full-scale U.S. uranium enrichment plant, and other major projects.

- Participated in five nuclear power plant environmental reviews. Developed toxic waste database for the Santa Ana Watershed Planning Agency. Analyzed crop pattern strategy and prepared an industrial development plan for the Setif Region, northern Algeria.

PROFESSIONAL AND CIVIC ACTIVITIES

- Dr. Schlesinger is a Senior Fellow and Past President (in 2011) of the U.S. Association for Energy Economics, and participates in the Brookings Institution's LNG Task Force.
- In addition to his teaching responsibilities as an Adjunct in the University of Maryland's School of Public Policy, Dr. Schlesinger has lectured on gas industry issues in courses and special programs at Johns Hopkins SAIS, Princeton University, Stanford University, Columbia University, Harvard University, CUNY, University of Pennsylvania, Syracuse University, and more than 300 executive seminars throughout North America, Europe, Asia and the Middle East.
- Dr. Schlesinger has appeared on Platts Energy Week, Bloomberg News, CNN Business Line, CNN International, and other media, and his opinions and analysis of natural gas industry and related economic developments have been quoted in The New York Times, The Wall Street Journal, The Washington Post, Business Week, and other publications.

EXPERT WITNESS TESTIMONY

The following is a list of expert witness testimony delivered by Dr. Benjamin Schlesinger in appearances before courts or administrative bodies:

- Federal Energy Regulatory Commission, 2013, for Ultra Resources, Inc., in Rockies Express Pipeline LLC, re the economics, structure and operation of fuel trackers in REX's pipeline tariff (Docket No.s RP11-1844-000 and RP12-399-000).
- Florida Public Service Commission, 2009, for Florida Gas Transmission, re: Determination of Need for Florida EnergySecure ("FES") Pipeline proposed by Florida Power & Light Company (Docket No. 090172-EI), regarding pipeline economics, risks and costs.
- U.S. Bankruptcy Court, Northern District of Texas (Dallas Division), in 2008, on behalf of McCommas Landfill Gas in Chapter 11 Cases 07-32219-HDH and 07-32222-HDH, regarding natural gas markets and spot and long-term gas prices in Northeastern Texas, and world oil prices.
- Regulatory Commission of Alaska, Anchorage, AK, 2006, for Tesoro Alaska Corporation, in the matter of the gas sales agreement between Enstar Natural Gas Company, a Division of SEMCO Energy Inc., and Marathon Oil Company (U-06-002), re: fair market value of natural gas in Cook Inlet.
- U.S. District Court, Northern District of Texas, Fort Worth, in Mirant bankruptcy proceedings (2005), Case No. 03-46590, on behalf of the Equity Committee, re: natural gas and oil price forecasts.
- Arbitration in Dallas, TX, 2004, for Delta Energy, in Brazos Electric Power Cooperative, Inc. v. Tenaska IV Texas Partners, L.P., re: gas purchases for power generation (Commercial Arb. No. 71 198 00323 01, American Arbitration Assn.).
- Arbitration in Houston, TX, 2001, for Duke Energy v. ExxonMobil, re: energy trading and marketing business, commercial context of joint venture, and industry terms used in contract (American Arbitration Assn. Cause No. 50-T-198-00485-00).
- Arbitration in Washington, DC, 2001, for North Carolina Natural Gas v. Transcontinental Gas Pipe Line, re: monthly fees in firm service agreement and gas spot market volatility.
- Arbitration in Chicago, IL, 2001, for Thelen Reid & Priest, LLP, in Androscoggin Energy, LLC v. Thelen Reid & Priest, LLP, re: damages, mitigation, physical and financial transactions, and value of natural gas and transportation services (No. 51-Y-194-00-108-00).
- Federal Energy Regulatory Commission, 1996, for Koch Gateway Pipeline Company, re: commercial mechanisms in the gas industry, in market-based rates proceeding (Docket No. RP95-362-000).

- U.S. District Court, Huntington, WV, 1996, for Waco Oil & Gas Co. v. NGC Corporation, re: damages, mitigation, and value of natural gas physical and financial transactions (Civil Action No. 1:95-CV-46).
- Federal Energy Regulatory Commission, 1995, for Pacific Gas Transmission, re: competitive benefits of PGT expansion capacity (Docket No. RP94-149-000).
- Arbitration in Massachusetts, 1995, for Dartmouth Power Associates, L.P., re: indexation and filed charges for gas transportation from Canada to the U.S.
- Ontario Energy Board, 1993, for Union Gas Limited, re: EBRO 476-06/Gas Cost Recovery Proceedings.
- Claims mediation proceeding re: Columbia Gas, 1993 and 1995, for Columbia Gas System, re: long-term gas contracting practices and pricing.
- Public Service Commission of Maryland, 1992, for Panda Energy Corporation, re: gas price forecasts and gas industry contracting practices.
- California Public Utilities Commission, 1992, in en banc proceeding on gas procurement, re: risk management in long-term natural gas contracting: practices in the 1990s.
- Florida Public Service Commission, 1991, for Florida Power Corporation, re: Determination of Need for Electrical Power Plant and Related Facilities (Docket No. 910759-EI).
- Federal Energy Regulatory Commission, 1990, in Tarpon Transmission Company (Docket No. RP84-82-004), re: offshore pipelines.
- Arizona Corporation Commission, 1989, for Southwest Gas Corporation (Docket No. U-1551-89-102 and 103), re: marketing fees in gas procurement transactions.
- U.S. District Court for State of Mississippi, 1988, for Piney Woods Country Life School in Piney Woods v. Shell Oil Company, re: market value of natural gas (Case No. 89-4397).
- Department of Public Utility Control, State of Connecticut, 1987, for O'Brien Energy Systems and ANR Venture Management, re: Connecticut Natural Gas's proposed transportation rate (Docket No. 87-08-20).
- Public Service Commission of Maryland, 1987, for Baltimore Gas & Electric, re: gas price forecasts (Case No. 8053).
- Arbitration in Louisiana, 1987, for Panhandle Eastern Pipeline Company, re: gas supply contract prices.
- Federal Energy Regulatory Commission, 1987, for Transcontinental Gas Pipe Line Corp., re: prudence of take-or-pay contracts (RP87-7-000).

- Federal Energy Regulatory Commission, 1987, for Trunkline Gas Co., re: prudence of take-or-pay contracts (RP87-15-000).
- Federal Energy Regulatory Commission, 1987, for Williston Basin PL, re: prudence of take-or-pay contracts (CP82-487-000).
- Federal Energy Regulatory Commission, 1986, for Panhandle Eastern PL, re: affiliate marketers (CP86-232-000, et al).
- Federal Energy Regulatory Commission, 1986, for Southern Natural Gas, re: prudence of take-or-pay contracts (RP86-63-000).
- Federal Energy Regulatory Commission, 1985, for Trunkline LNG Co., re: prudence of take-or-pay contracts (RP81-85-000).
- Federal Energy Regulatory Commission, 1985, for Panhandle Eastern, re: prudence of take-or-pay contracts (TA84-1-28-002).
- Federal Energy Regulatory Commission, 1985, for Trunkline Gas Co., re: prudence of take-or-pay contracts (RP83-93-000).
- Arbitration proceedings in Louisiana and Texas, 1985-1986, for Columbia Gas Transmission Co., re: market value of gas.
- Public Utilities Commission of Ohio, 1984-1985, for Columbia Gas of Ohio, re: gas cost recovery issues and supply planning (84-6-GA-GCR).
- U.S. Bankruptcy Court, Houston, TX, 1984, for Natural Gas Clearinghouse, re: gas spot markets.
- Public Service Commission of New Mexico, 1984, for N-Ren Corp., re: industrial service rates (Case No. 1824).

PUBLICATIONS, PAPERS, ARTICLES

More than 200 articles, speeches, and reports on gas supply/demand and pricing policy, coal gasification, environmental impacts, and LNG, including papers recently published in (or delivered at):

“Cheap Batteries – Can Electricity Storage Threaten Natural Gas Sales?,” Natural Gas and Electricity Journal, Wiley Periodicals, Inc., April 2016

“Electric Vehicles May Reduce Oil Imports While Stabilizing Grid,” Natural Gas and Electricity Journal, Wiley Periodicals, Inc., March 2014

“How Will The Economic Crisis Affect Natural Gas Prices?” Natural Gas and Electricity Journal, January 2009

“Can Cross-Atlantic Gas Price Arbitrage Explain LNG Import Levels?” Natural Gas and Electricity Journal, December 2007

“Oil-Gas Price Linkage - Situation from the North American Perspective,” Gas Matters, London – July 2007

Heavy Gas Demand Coming from Coal-Fired Power Plant Cancellations, Natural Gas & Electricity Journal, June 2007.

Puzzle of What Causes Peak-Shaving Prices, Natural Gas & Electricity Journal, February 2007.

LNG Supply Surge to Affect Prices in North America? How?, Natural Gas & Electricity Journal, November 2006.

The LNG Rush, Hart Publications, Oil and Gas Investor, October 2005.

The LNG Rush, The Energy Policy Act of 2005, High Commodity Prices and Increasing Competition Make for an Interesting LNG Stew in North America, Hart Publications, Oil & Gas Investor, October 2005.

Were Super-High Northeast January Gas Prices Really Necessary? Could LNG Help?, Natural Gas & Electricity Journal, May 2004.

Ready or not: The North American gas market and the challenges it faces in the coming years, Hydrocarbon Engineering, Volume 8 Number 12 – December 2003.

Trading and Marketing Industry – What Happened, Natural Gas & Electricity Journal, February 2003.

US and World Gas Markets – Ready to Meet Big Time, Platts Journal, 2003.

Henry Hub is the Benchmark, but Differentials with Other Markets Can Have a Life of Their Own, NYMEX Energy In the News, Volume 2-2002.

Meltdown in The Trading and Marketing Industry, 2002 Natural Gas Yearbook, Wiley Publications, 2002.

Next Tier Energy Marketers Score Gains/Hold Own in 1998, Natural Gas & Electricity Journal, October 1999.

Power-Marketing Firms Continue to Grow, Natural Gas & Electricity Journal, March 1999.

Electricity Commodity and Futures Trading: "Gas by Wire", Natural Gas & Electricity Journal, December 1998.

Natural Gas Industry Trends: Commoditizing Everything in Sight, Energy In the News, Summer/Fall 1997.

Gas Mart '96 National Trade Fair for Natural Gas on Introduction to Natural Gas Markets: 1996 Update; Nashville, Tennessee - April 1, 1996.

American Gas Association's Analysis of Gas Distributors' Uses of Financial Market Mechanisms; Contract No. 15-93-00; October 27, 1994

Executive Enterprises, Inc., Natural Gas Futures Conference, Risk Management for the Natural Gas Industry on Commoditization of North American Gas Markets: Trading Gas - Trading Capacity; Houston, Texas - September 30, 1993.

Natural Gas Article on Natural Gas Vehicle Programs Offered by Gas Utilities - May 1992

Chapter 87: § 87.02 Natural Gas Markets and Trading, Benjamin Schlesinger, Ph.D., Energy Law and Transactions, Matthew Bender & Company, 1991 et. seq.

Oil and Gas Analyst - (1983)

The Energy Journal; co-edited special gas energy issues volume - 1982 and 1983

Environmental Science and Technology - 1980

PRESENTATIONS, TALKS, OPEN CLASSES

(forthcoming) “Challenges and Opportunities in the Transport Sector,” Dual Plenary Chair, 34th USAEE/IAEE North American Conference, Tulsa, OK, October 24, 2016

(forthcoming) “Technological Change and Natural Gas in Transportation Markets,” Plenary Session, International Association for Energy Economics (IAEE), Bergen, Norway, June 21, 2016

“Henry Hub and Changing Liquidity in the North American Gas Market,” American Public Gas Association (APGA), Annual Gas Supply Conference, Tucson, AZ, January 26, 2016

“Overview of Natural Gas Markets and Hub Liquidity, Part II – Looking Ahead: Strategic Implications for Gas Markets,” Platts 14th Annual Gas Storage Outlook, Houston, TX, January 11, 2016

“Natural Gas 101: Mid-Stream Trading, Regulation & Commerce,” Department of Civil and Environmental Engineering, Princeton University, November 17, 2015

“The Gas Chain: Pricing, Infrastructure, Commerce, LNG and the Market Outlook,” Federal Energy Regulatory Commission, Office of Energy Market Regulation (FERC/OEMR), Staff Training Presentation, Washington, DC, October 20, 2015

“Shale Gas and Oil: Economic, Commercial and Environmental/Carbon Implications,” 18th Annual Meeting of the Saudi Economic Association Riyadh, Saudi Arabia, April 8, 2015

“US Shale Gas – Economic, Commercial and Environmental/Carbon Implications,” 5th United Nations Economic Commission for Europe (UNECE) Gas Center, Industry Forum Outlook for Long-Term Contracts in a Globalizing Market, Palais des Nations, Geneva, Switzerland – 19 January 2015

“US Shale Revolution–Economic, Environmental & Global Policy Implications,” Electric Power Research Institute (EPRI), 33rd Annual Seminar on Fuels, Power Markets, and Generation Planning Washington, DC, November 12, 2014

“Natural Gas Markets 101: Discussion Guide for ICF Staff,” ICF Incorporated, Fairfax, VA, September 22, 2014

“US Shale Revolution–Environmental and Global Implications,” Office of Policy Analysis & Public Diplomacy (ENR/EGA/PAPD) Bureau of Energy Resources, U.S. Department of State, Washington, DC, June 26, 2014

“US Shale Revolution–Environmental and Global Implications,” Council of Industrial Boiler Owners/Operators (CIBO) Technical Focus Group, Energy & Environmental Committee Meetings Arlington, VA - September 9, 2014

“Changing Role and Value of Gas Storage in the US: Issues Summary,” Platts 12th Annual Gas Storage Outlook Conference, Houston – January 13, 2014

“Energy Market Upheaval: The Shale Revolution,” Conference on New Energy Recovery Technologies: Midwest and Global Industry Impacts, Federal Reserve Bank of Chicago, Detroit Branch, April 8, 2013

“The Shale Revolution: A Framework for Energy Challenges in Ohio,” CE3’s 2013 Energy Webinar Series: “Ohio’s Transmission & Distribution Future” hosted by the Consortium for Energy, Economics & the Environment (CE3), Ohio University Voinovich School, April 2, 2013

“Global Gas Markets and the Shale Revolution,” International Finance Corporation (IFC), The World Bank, December 2, 2012

“Global Gas Markets: ‘Pulling in Opposite Directions at the Same Time,’” Energy Information Administration (EIA) 2012 International Natural Gas Workshop, August 23, 2012

“The Future of Natural Gas: Opportunities and Risks,” EEI-AGA 2012 Accounting Leadership Conference, Sheraton New Orleans – June 25, 2012

“Natural Gas Markets in Perspective,” FERC Division of Energy Market Oversight, Annapolis, MD – Wednesday, April 25, 2012

“Global Gas Markets: Life at the Tipping Point!” CERI 2012 Natural Gas Conference Going Global - Shifting the Focus of the Gas Industry, TELUS Convention Centre, Calgary, Alberta, Canada, February 28, 2012

“Natural Gas and Green Energy: Transition to...More Natural Gas?” German Conference at Harvard – Energy Panel: Full throttle towards green energy - Germany visionary or misguided?, Cambridge, MA – February 17, 2012

“LNG Imports into Europe and Long-Term Contract Pricing of Pipeline Gas,” Gastech Conference Amsterdam, Netherlands – March 23, 2011

“Global Implications of LNG and Unconventional Natural Gas: Price Uncertainties,” Resources for the Future – Natural Gas Forum, Washington, DC– April 7, 2010

“U.S. and World LNG Markets and their Impact on Atlantic Canada,” The Canadian Institute East Coast Energy Conference, Halifax, NS – February 22, 2010

“Global Energy Markets and Strategic Implications of Shale Gas Development,” NCAC-USAAE Annual Spring Policy Conference, Washington, DC – March 9, 2010

“Gas Markets and Renewable Energy: the Synergies,” Tampa Bay Green Business Summit, Tampa, Florida – October 27, 2009

“Industrial Natural Gas – Pricing, Technology and Project Development,” 31st Annual Meeting, Council of Industrial Boiler Owners, San Antonio, TX – October 15, 2009

“Carbon Capture and Sequestration and Enhanced Oil Recovery - Breaking the CCS-EOR Barrier,” Society of Petroleum Engineers, National Capital Section, Arlington, VA – February 19, 2009

"CCS from Coal to Pipelines to Enhanced Oil Recovery: A Primer," 28th USAEE North American Conference, New Orleans – December 4, 2008

Outlook for Natural Gas Prices: Credit Markets and Liquidity, New York Energy Forum, November 11, 2009

A Perspective on the US Federal System and Implications for Regulatory Structures and Markets in Natural Gas and Electricity, Center for Energy, Marine Transportation and Public Policy
Columbia University School of International and Public Affairs (SIPA), New York – October 6, 2008

Background: Natural Gas and Petroleum Market Prices, Energy and Environmental Lenders Group, Washington, DC – October 3, 2008

"Mitigating Risks in Gas Storage Development – Markets, Pricing and Strategy," The Canadian Institute Natural Gas Storage Conference, Toronto – October 1, 2008

"Developments in Northeast US and their Impact on Atlantic Canada," The Canadian Institute Atlantic Energy Conference, Halifax, NS – May 29, 2008

Natural Gas and LNG Update, Johns Hopkins University SAIS Energy Seminar, Washington, DC – November 2007

"North American Gas Pricing Effects of LNG Trade - Seasonal Market Entry," 27th USAEE/IAEE North American Conference, Houston, September 18, 2007

Gas Prices – LNG and the North American Basis Gradient, Platts 6th Annual LNG Conference
Hilton Houston Post Oak, Houston – May 21, 2007

16th Annual North American Natural Gas & Power Markets Conference and Trade Show
Toronto – May 1, 2007

The Coming Natural Gas Industry Transformation, INGAA Foundation Midyear Meeting
Hyatt Regency Lost Pines Resort, Austin, TX - April 26-27, 2007

North American Natural Gas – Pricing, Infrastructure and the Impacts of LNG, Program in International Energy Management and Policy, Center for Energy, Marine Transportation, and Public Policy, School of International and Public Affairs, Columbia University, March 22, 2007

Development of Global Gas Markets – LNG as the Catalyst, Canadian Energy Research Institute (CERI) North American Gas Conference, Calgary – March 5, 2007

Update on North American Energy Markets: January 2007, UNECE Working Party on Gas
Geneva - January 23, 2007

Natural Gas Prices - The Deep Volatility is Back, GasFair PowerFair 2007

Gas Prices - The Deep Volatility is Back, Canadian Enerdata's 2007 Oil & Gas Market Outlook

Calgary, Alberta – December 5, 2006

Summer 2006 Gas Market Update: Supplies Up, Demand Down - Hey, Price Works!, 5th Annual Atlantic LNG & CNG Symposium, Halifax – July 19, 2006

Summer 2006 Gas Market Update: Supplies Up, Demand Down - Hey, Price Works!, Deutsche Bank Conference, Washington – July 18, 2006

North American Natural Gas Market Outlook: Crossroads, U.S. Energy 18th Annual Energy Conference, Sofitel Minneapolis Hotel, Bloomington, MN – May 12, 2006

North American Natural Gas Market Outlook: Crossroads, CIBC Annual Commodity Products Conference, Banff Springs Hotel – May 4, 2006

North American Natural Gas Market Outlook: Shifting Sands, GasFair PowerFair 2006 Toronto – April 19, 2006

Market Update: “Time to Re-Write the Models Again?” 2006 EIA Energy Outlook and Modeling Conference, Washington, DC – March 27, 2006

Market Update: “How Well Will New LNG Projects Feed Growing Gas Demand?” Winter 2006 Atlantic LNG & CNG Symposium, Halifax – February 27, 2006

“Natural Gas Outlook: What’s Reasonable?” The Energy Forum, New York – February 21, 2006

LNG and Natural Gas Markets: Economics and More, Strategic Research Institute, 6th Annual LNG: Economics & Technology, Houston – January 31, 2006

Natural Gas For Electricity Generation in the U.S. – Issues and Trends, Round Table on “Gas to Power”, 16th Annual Session of the UNECE Working Party on Gas, Geneva – January 24, 2006

Natural Gas and LNG Update: Surviving the Next 2-5 Years, Johns Hopkins University SAIS Energy Seminar, Washington, DC – December 14, 2005

LNG and Natural Gas Markets: Economics and More, Hart’s 2nd Annual Global LNG Outlook October 26-27, 2005, Renaissance Hotel, Greenway Plaza, Houston, TX

Natural Gas Market Outlook – Prices, Infrastructure and the Regulatory Environment, Program in International Energy Management and Policy Center for Energy, Marine Transportation, and Public Policy, School of International and Public Affairs, Columbia University, October 18, 2005

The LNG Rush, The Energy Policy Act of 2005, high commodity prices and increasing competition make for an interesting LNG stew in North America, Benjamin Schlesinger, Hart Publications, Oil & Gas Investor, October 2005

Natural Gas Market Outlook – LNG and Infrastructure Investments in 2006, Milbank Tweed, Energy and Power Conference, Las Vegas – September 27, 2005

Natural Gas Market Outlook – LNG Opportunities and Implications. Infonex LNG Conference
Vancouver – September 28, 2005

LNG Returns to North American Markets: Economics, Commerce and Rationale, American Gas
Association Investors Luncheon, New York – July 6, 2005

LNG in Eastern Canada and New England: Market Update, Atlantic LNG & CNG Symposium
Halifax – June 27, 2005

LNG Returns to North American Markets: Economics and Rationale, Insight Information Co. LNG
Forum, Calgary – May 31, 2005

North American Gas Markets and Players: An Overview. Program in International Energy
Management and Policy Center for Energy, Marine Transportation, and Public Policy
School of International and Public Affairs, Columbia University, Bethesda, MD, March 1, 2005

Update on North American Energy Markets, UNECE Working Party on Gas, Geneva - January 19,
2005

Acquisitions and Divestitures: Prospects for Mid-stream Activity, Benjamin Schlesinger, University of
Texas – Continuing Legal Education, 3rd Annual Gas and Power Institute
Houston, November 11, 2004

Impacts of Increasing LNG Imports into North America, Hart's Global LNG Outlook 2004
New Orleans, October 13, 2004

Gas Supply-Demand: Surprise!, Platts Power Marketing Conference: A New Day for the Trader
Houston, October 11, 2004

Impacts of Increasing LNG Imports into North America, The Canadian Institute's Energy Marketing
Strategies Conference, Calgary, September 21, 2004

North American Gas Markets –Living in the Price Stratosphere, Future Natural Gas Supply and Price,
Toronto, May 19, 2004

LNG: Back to the Future, Promises and Pitfalls. IAEE-NCAC Evening Energy Briefing
Washington – March 18, 2004

Increasing LNG Competition: Project Developments and Impacts on Rocky Mountain Gas, 3rd Annual
Rocky Mountain Gas Symposium, Denver – February 12, 2004

Outlook for Gas and Power Markets, 2nd Annual Gas and Power Institute, University of Texas School
of Law, Houston – November 7, 2003

North American Gas Market Issues – Life After the Crash, 12th Annual North American Natural Gas
& Electricity Markets Conference & Trade Show, August 18-19, 2003 – Toronto, Ontario, Canada

LNG Update: The North American Imperative, Institute of the Americas, Twelfth Annual Latin American Energy Conference, Navigating and Managing Turbulent Times, May 19-20, 2003, La Jolla, California USA

North American Gas Markets: An Overview, Program in International Energy Management and Policy, Center for Energy, Marine Transportation, and Public Policy, School of International and Public Affairs, Columbia University, March 25, 2003

LNG: It's Potential Impact On North American Markets, Canadian Energy Research Institute (CERI), North American Natural Gas Conference, Calgary, March 3, 2003

Update on North American Energy Markets, Hart's Energy Markets Executive Forum: Credit Risk in the New Energy Arena, New York - January 29, 2003

Physical and Financial Energy Markets – Status and Direction. IPAMS, Denver, November 14, 2002

Redesigning the Market: It IS broke, and it's fix-it time!, Platts Day Of The Trader + Power Mart '02, New Orleans, October 22, 2002

Energy Crisis in the USA: Causes and Lessons, Capital Chapter IFMA, TECHDAY 2001
May 23, 2001

“U.S. Natural Gas – Is There A Supply Problem In the 2000s?,” Oxford Energy Forum, Oxford, UK, February 2001

Fueling Deregulated Electric Power: Global Competition, The Energy Bar Association
Capital Hilton, Washington, DC, May 4, 2000

Gas Market Mechanisms in North America: Update and Issues, Energy Intelligence Group (EIG) OIL & MONEY CONFERENCE, London, November 17, 1999

North American Gas Markets: Update and Issues, GASFAIR & POWER CONFERENCE
Toronto, April 20, 1999

Changing Gas Market Mechanisms in North America: Update and Issues, IV IEA International Conference on Natural Gas, Ritz-Carlton Cancun, Mexico, December 6, 1999

Gas Daily Northeast Gas Conference; Boston, June 9-10, 1993

Gas Daily, SE/Mobil Bay Gas Conference; New Orleans, February 3-4, 1993

Executive Enterprises, Inc. Conference on Moving Canada Gas to North America; Calgary, Alberta, September 11, 1992

Gas Daily, Northeast Gas Markets Electric Generator's Concerns about Greater Use; Boston, June 16, 1992

Gas Expo 92', Gas Inc.; Las Vegas, January 29, 1992

Gas Daily, Financing IPPs and Cogeneration; Houston, December 3, 1991

EPRI Fuel Supply Seminar; Albuquerque, New Mexico, October 10, 1991

Gas Daily, Competing in the European Energy Market; Vienna, Austria - May 30-31, 1991

Gas Daily, First Natural Gas Vehicles Conference; Chicago, April, 1991

Gas Daily, Southeast/Mobile Bay, Orlando, Florida - December 3-4, 1990

Gas Daily, LNG: Building Markets for the 90's, Washington, D.C. - November 1-2, 1990

Gas Daily's Third Annual European Natural Gas Conference, "Competing in the European Gas Market: The Birth of a Single Energy Market?," London, May 31-June 1, 1990

Gas Daily, Gas Storage Strategies; Houston, April 17-18, 1990

Gas Daily, Natural Gas & the Environment, Washington, D.C., January 18-19, 1990

Gas Daily, Gas Transportation; Houston, January 11-12, 1990

Gas Daily, Gas Futures Trading; Houston, January 8-9, 1990

Gas Daily, Gas Buyers' Guide Conference: 1991: "Removing Internal Trade Barriers--Who Will Be the Winners and Losers in Energy?," "Zaventem, Belgium - June 8-9, 1989

International Association of Energy Economics, Natural Gas Market Outlook: Recontracting for the 1990s; Houston, Texas - Fall 1988

Gas Daily European Energy Privatization and Deregulation; Amsterdam, Holland - September 22-23, 1988

Ninth International Conference of the International Association of Energy Economists, "World Energy Markets: Coping with Instability", Calgary, July 8, 1987

The Seventh Annual Natural Gas Conference Executive Enterprises, Inc.; Washington, D.C. - January 26, 1987

Executive Enterprises Conference on Natural Gas Contracting Issues and Litigation in the Wake of Order 436; Houston, April 8, 1986

Executive Enterprises, Inc. Fourth Annual Natural Gas Policy, Pricing, and Marketing Conference; Washington, D.C. - January 23-24, 1984

Conferences sponsored by the Oil Daily, Inside Oil and Gas, Executive Enterprise and the Energy Bureau - (1981-84)

Natural Gas Association of Oklahoma - October, 1983

McGraw-Hill/Inside FERC Conference on Natural Gas: Making the Transition to Competitive Markets; New Orleans, April 12, 1983

Paine-Webber gas producers conferences - (1982 and 1983)

American Enterprise Institute Conference on Gas Decontrol Issues - 1982

New Jersey Bar Association, 1981

11th World Energy Conference, Munich, Germany - 1980

Hoover Institution/SE₂ Colloquium on Contingency Planning for an Energy Emergency - 1980

Power Engineering (roundtable with Sen. James McClure, Rep. Mike McCormick, and others - 12/79)