#### VINCENT J. KAMINSKI

## 10 SNOWBIRD PLACE THE WOODLANDS, TX 77381

(281) 367 5377 vkaminski@aol.com

#### PROFESSIONAL EXPERIENCE: BUSINESS ENVIRONMENT

## Citigroup Commodities, Houston, Texas

2005 - 2006

Managing Director, Quantitative Modeling

Managed a group of quantitative analysts responsible for development of option valuation, price and credit risk management models for energy trading. Extensive market data analysis for independent and in-business risk management groups. Hiring and training of junior staff.

#### Sempra Energy Trading, Stamford, Connecticut

2004 - 2005

Managing Director, Quantitative Modeling and Middle Office

Consultant (since October 15, 2004)

Development of option pricing models and quantitative models for structuring complex natural gas, crude oil and electricity transactions. Extensive work in the area of valuation and risk management of natural gas storage and electricity full requirements deals. Validation of quantitative valuation models (during my consulting engagement). Daily oversight over independent validation of forward price and volatility curves for the US, Canadian and European energy commodity markets.

#### Reliant Resources, Houston, Texas

2003 - 2004

Senior Vice President, Commercial Analytics

Managed a group of 25 professionals responsible for transaction structuring and asset valuation. Main projects included assessment of the impact of changes of natural gas prices on the company's overall liquidity position and modeling the operations of power generation plants under different market conditions.

# Citadel Investment Group, Chicago, Illinois

2002 - 2003

Managing Director, Quantitative Research

Leader of a core team of ten energy professionals hired by Citadel, one of the largest hedge funds in the US, to create from scratch an energy trading operation (natural gas and power). The responsibilities included defining priorities for specific markets and opportunities, helping to interview and hire traders, setting up an infrastructure of fundamental and market data analysis, and selecting, customizing, and validating trade capture system (Open Link). Additional responsibilities included development of customized option valuation and risk management models. The operation grew in one

year to about 50 employees. Frequently responded to ad-hoc requests for energy information and education from the equity, distressed and high yield trading areas of Citadel.

# **ENRON Corp.**, Houston, Texas Managing Director – Research Group

1992 - 2002

Manager of the Research Group of fifty PhD/MS professionals. Responsibilities included: modeling exotic options, hedging commodity price and interest rate exposures, development of risk management systems (VaR for market, credit and operational risks), development of tools for valuation of long-term commodity contracts and fixed assets using real options technology. The research philosophy emphasized the importance of joint modeling of markets and operations of physical assets. Management of extensive effort in modeling fundamentals underlying the energy markets, including launching of the first weather forecasting group in the merchant energy business. Most projects initiated in my group represented a pioneering effort in the area of energy risk management and valuation of commodity related transactions.

# **Salomon Brothers Inc., Research Department**, New York

1986 - 1992

Bond Portfolio Analysis Group Vice-President

Insurance Assets / Liabilities and Structured Portfolios Group. Development of portfolio simulation and optimization models for P/C and life insurance companies. Design and implementation of original, large scale optimization models (linear and non-linear), including derivation of algorithms and development of computer code. Modeling options embedded in fixed income instruments and in liabilities of insurance companies. Publications on portfolio management for P/C insurance companies. Part-time involvement in Eastern Europe related projects. Part-time consultant after resignation.

# **ATT - Communications,** Bedminster, New Jersey

1983 - 1985

Econometrician

Market Analysis and Forecasting Group. Application of econometric techniques to forecasting of demand for telecommunications services. Research in the field of applied econometrics, development of econometric software. Original contributions in the field of forecasting telephone traffic flows in networks between the system nodes and in the field of estimation of random regression coefficients.

**STSC, Inc.**, Houston, Texas Applications

1981 - 1983 Consultant

RESUME OF V. J. KAMINSKI

Page 3 of 14

Computer programmer in the top US company specializing in APL software. Responsible for analysis, design and implementation of APL-based real time decision support systems. Customer education and sales support.

**Citibank**, New York, International Banking Group Office of Senior Advisor for International Operations

1976 - 1977

Economic research in the field of private bank lending to the developing countries. Applications of econometric and multivariate statistical methods to evaluation of credit worthiness of debtor countries.

#### PROFESSIONAL EXPERIENCE: ACADEMIC ENVIRONMENT

## Main School of Planning and Statistics, Warsaw, Poland

1973 - 1976

1978 - 1980

Teaching assistant and professor in the Socio-Economic Department. Courses on microand macro-economic theory and history of economic thought. Field of specialization: mathematical economics. Participation in research projects and supervision of student MS dissertations.

## University of Port Harcourt, Port Harcourt, Nigeria

1980 - 1981

Lecturer in the School of Social Sciences (under the program of economic assistance to Nigeria).

#### Rice University, Houston, TX

2000 - 2006

Adjunct Professor

Jesse H. Jones Graduate School of Management

Teaching courses on energy markets and energy derivatives

Rice University Present

Jesse H. Jones Graduate School of Business

Professor of continuous education, specialization in energy markets and risk management for the energy companies.

#### **EDUCATION**

**MS**, 1970, Main School of Planning and Statistics, Warsaw, Poland, Department of Foreign Trade, International Economics Major.

**Post-Graduate Student**, Main School of Planning and Statistics, Warsaw, Poland, Socio-Economic Department, 1971 - 1973.

RESUME OF V. J. KAMINSKI

Page 4 of 14

**PhD**, 1975, Main School of Planning and Statistics, Warsaw, Poland. PhD in the field of economic theory.

**MBA**, 1978, Fordham University, New York, Graduate School of Business Administration. Finance / Quantitative Methods Major.

**University of Houston**, College of Natural Sciences and Mathematics, Houston, Texas. Rutgers University, New Jersey, 1982 - 1985. Non-degree courses (graduate and undergraduate courses) in mathematics and statistics.

**New York University**, Courant Institute, New York, 1988-1992. Enrolled in graduate program in mathematics. Completed courses required for MS in mathematics (including one course at Rice University, Houston).

#### IT EXPERIENCE

APL, C programming languages Statistical and mathematical modeling packages: SAS, Mathematica

#### Additional Information

The recipient of the James H. McGraw Award for Energy Risk Management, 1999

#### **HOBBIES**

Classical music, languages, mathematics, skiing, running

#### REFERENCES

Excellent personal and professional furnished on request.

#### PERSONAL INFORMATION

Married, one child, US citizen

#### **SELECTED PUBLICATIONS**

Managing Energy Price Risk, Risk Books, London 1999, all the four editions, editor and coauthor

The Challenge of Pricing and Risk Managing Electricity Derivatives, in: The US Power Market, Risk Publications, London 1997

RESUME OF V. J. KAMINSKI

Page 5 of 14

Energy Derivatives: Pricing and Risk Management, Lacima Publications, London 2000, contributor

Les Clewlow, Chris Strickland and Vince Kaminski, Extending Mean-Reversion Jump Diffusion, Energy & Power Risk Management, February 2001

Les Clewlow, Chris Strickland and Vince Kaminski, *Analysis for Achievement*, Energy & Power Risk Management, March 2001

Les Clewlow, Chris Strickland and Vince Kaminski, *The Many Shapes of Volatility*, Energy & Power Risk Management, April 2001

Les Clewlow, Chris Strickland and Vince Kaminski, *Valuation of Swing Contracts*, Energy & Power Risk Management, July 2001

Les Clewlow, Chris Strickland and Vince Kaminski, *Risk Analysis of Swing Contracts*, Energy & Power Risk Management, October 2001

Energy Modeling, Advances in the Management of Uncertainty, Risk Books, London 2005, editor and coauthor

Energy Markets, Risk Books, London 2013, author

Regular monthly columns, Energy Risk magazine (32 as of March 2017)

#### **CONFERENCE PRESENTATIONS**

Capital-At-Risk: Measurement of Risks Embedded in the Derivatives Portfolios of Energy Companies, Managing Energy Risk, March 8, 1995, New York City, New York

End-User's Forum: Applications of Credit Derivatives to Meet the Needs of End User, Credit Derivatives, March 14, 1995, London, UK

Layman's Guide to the Rocket Science of Options: Price Volatility, Valuation Models and Other Topics, Pricing in Today's Bulk Wholesale Electric Power Spot & Term Markets, May 3, 1995, San Francisco, California

Taxonomy of the End User, Credit Derivatives, September 20, 1995, London, UK

Aggregating Commodity, Interest Rate and Credit Risk Exposure into VaR Calculations, Value-at-Risk and Global Risk Management Strategies, September 27, 1995, London, UK

RESUME OF V. J. KAMINSKI

Page 6 of 14

Credit Derivatives and Management of Credit Risk, Credit Derivatives, September 17, 1996, New York City, New York

Pricing, Hedging, Trading and Risk Management of Electricity Derivatives, Risk Training Courses, December 12-13, 1996, New York City, New York

*Pricing, Hedging, Trading and Risk Management of Electricity Derivatives,* Risk Training Courses, January 30-31, 1997, London, UK

Coping with the Complexities of Applying VaR to the Electricity Industry, POWER '97, July 9, 1997, Houston, Texas

Applying Value-at-Risk to the Energy Industry, Understanding and Applying Financial Mathematics to Energy Derivatives, Energy and Power Risk Management Training Courses, February 6, 1998, London, UK

Applying Value-at-Risk to the Energy Industry, Understanding and Applying Financial Mathematics to Energy Derivatives, Energy and Power Risk Management Training Courses, February 27, 1998, Houston, Texas

New Techniques and Applications for Pricing Electricity Derivatives, Power98, June 24, 1998, Houston, Texas

Applying Value-at-Risk to the Energy Industry, Understanding and Applying Financial Mathematics to Energy Derivatives, Energy and Power Risk Management Training Courses, September 2, 1998, Houston, Texas

Overcoming the Unique Difficulties of Calculating Value-at-Risk in the Energy Industry, Understanding and Applying Financial Mathematics to Energy Derivatives, Energy and Power Risk Management Training Courses, December 3, 1998, Houston, Texas

Blending BTUs into Single Capital Market Products, Global Energy Deregulation and Risk Management, ESAI/Johns Hopkins Executive Conference, March 26, 1999, Washington D.C.

Challenges in Quantitative Modeling in the Energy Industry, Texas Finance Festival, April 24, 1999, Kerrville, Texas

The Challenge of Pricing Energy Commodity Options: A Practitioner's Perspective, Erasmus University, June 1, 1999, Rotterdam, The Netherlands

Structuring and Applying Energy Derivatives, Risk99, June 9, 1999, Boston, Massachusetts

RESUME OF V. J. KAMINSKI

Page 7 of 14

Key Techniques to Accurately Estimate Volatility, POWER '99, June 22, 1999, Houston, Texas

Analyzing Approaches to Weather Derivatives Valuation, Understanding and Applying Financial Mathematics to Energy Derivatives, Energy and Power Risk Management, September 3, 1999, Houston, Texas

Risk Management, Pricing and Trading of Electricity Derivatives, Workshop with Helyette Geman and Alexander Eydeland, Power Risk '99, October 8, 1999, Frankfurt, Germany

Real Decisions Based on Real Options in the Resource Industries, New Approaches to Value Analysis, EVA, Real Options and ROV, December 13, 1999, New York City, New York

Real Options Valuation in the Energy Industry, Mastering the Real Options Approach, February 22, 2000, London, UK

A Market Practitioner's Perspective of the Restructuring US Energy Market and Implications for the Future of Energy Trading, Keynote Address, Power 2000, May 9, 2000, Houston, Texas

Effectively Applying Weather Derivatives, Risk2000, June 14, 2000, Boston, Massachusetts

The Challenge of Valuation of Energy Related Derivatives, Risk2000, June 14, 2000, Boston, Massachusetts

Industry Briefing – Lessons Learned From the Restructuring US Energy Markets, Australian Energy Risk, July 18, 2000, Sydney, Australia

Measuring and Applying Value-at-Risk to the Energy Industry, Australian Energy Risk, July 19, 2000, Sydney, Australia

Practical Techniques to Price Exotic Energy Options, Energy and Power Risk Management Training Courses, August 31, 2000, Houston, Texas

Practical Techniques to Price Exotic Energy Options, Energy and Power Risk Management Training Courses, September 21, 2000, London, UK

State Of-the-Art Volatility and Correlation Estimation Techniques for Multiple Energy Portfolios, Power Risk 2000, October 5, 2000, Paris, France

RESUME OF V. J. KAMINSKI

Page 8 of 14

Volatility of Electricity Prices - Measurement and Analysis of Underlying Causes, Carnegie Mellon University, November 3, 2000, Pittsburgh, Pennsylvania

Measuring Energy Risk, 2nd Annual Risk Management Convention and Exhibition, Global Association of Risk Professionals, February 13, 2001, New York City, New York

Modeling Price Volatility in the US Power Markets, (with Tanya Tamarchenko), Energy and Power Risk Management, May 14, 2001, Houston, Texas

Practical Techniques to Price Exotic Energy Options, Understanding and Applying Financial Mathematics to Energy Derivatives, Energy and Power Risk Management, June 28, 2001, London, UK

Analyzing Approaches to Weather Derivatives Valuation, Understanding and Applying Financial Mathematics to Energy Derivatives, Energy and Power Risk Management, June 29, 2001, London, UK

Measuring Energy Risk - Tackling Price Volatility, Adapting VaR, Scenario Modeling and Regulatory Requirements, 3rd Annual Risk Management Convention and Exhibition, Global Association of Risk Professionals, February 12, 2002, New York City, New York

*The Future of Energy Markets*, Bachelier Finance Society International Congress, June 15, 2002, Aghia Pelaghia, Crete, Greece

Enhancing Shareholder Value through Effective Risk Management and Financial Management Techniques, 4th Annual Risk Management Convention and Exhibition, Global Association of Risk Professionals, February 11, 2003, New York City, New York

The Future of Power Marketing and Trading, CERA Week, February 13, 2003, Houston, Texas

Integrating Market and Credit Risks for Energy, Energy and Power Risk Management, May 12, 2003, Houston, Texas

Panel Discussion: Rebuilding Investor Confidence: The Downward Sentiment in the Industry – How Will the Industry Bring About Change? Energy and Power Risk Management, May 14, 2003, Houston, Texas

Why Have So Many Merchant Generators Failed Financially? Price Risk and the Future of the Electric Markets, October 10, 2003, Princeton University, New Jersey

*Market Risk - Special Focus on Energy,* 2<sup>nd</sup> Asset Management Forum, Global Association of Risk Professionals, November 17, 2003, London, UK

RESUME OF V. J. KAMINSKI

Page 9 of 14

The Uncertainties of Natural Gas Supply & Demand. Future Potential of LNG, University of Texas, February 20, 2004, Austin, Texas

Using Alternate Models for Energy Prices in Computing Var: Building Appropriate Forward Curves, Value-At-Risk for the Energy Industry, March 18, 2004, Houston, Texas

What Methodology Should You Use to Accurately Value Your Assets and Why Can the Results Vary So Much? Panel Discussion, Energy Risk USA, May 18, 2004, Houston, Texas

Contrasting Different Models for Pricing, Hedging and Trading Energy Derivatives: Implementation Challenges and Cost Benefits Trade-Offs, Energy Risk USA, May 19, 2004, Houston, Texas

*Implications of Crude Oil Futures Contracts: A Debate,* Panelist, 2005 Energy Finance Conference, Center for Energy Finance Education and Research (CEFER) and Conoco Philips, February 18, 2005, Houston, Texas

Full Requirements Deals in the US Power Industry, Energy Risk Europe, March 10, 2005, Amsterdam, The Netherlands

Alternative Approaches to Modeling VaR in the Energy Industry, VaR and Beyond, April 14, 2005, Houston, Texas

Risk Management in Energy Markets, Presentation to the Stamford Chapter of PRMIA, April 27, 2005, Stamford, Connecticut

Quantitative Roundtable Discussion, Energy Risk USA, May 10, 2005, Houston, Texas

*Real and Financial Structured Products*, Energy Derivatives and Structured Products in Energy Markets, February 17, 2006, Houston, Texas

Modeling Extreme Events in the Energy Markets, Energy Risk USA, May 18, 2006, Houston, Texas

Managing Energy Price Risk: New Challenges and Solutions, Taiwan Academy of Banking & Finance, June 23, 2006, Taipei, Taiwan

Managing Energy Price Risk: New Challenges and Solutions, Tsinghua University, June 30, 2006, Beijing, China

Gala Reception Address, 35<sup>th</sup> AIESEC Alumni Congress, Association International des Etudiants en Sciences Economiques et Commerciales, August 30, 2006, Warsaw, Poland RESUME OF V. J. KAMINSKI

Page 10 of 14

To Hedge or Not to Hedge, Pre-Congress Seminar, Energy Risk Europe, October 2, 2006, London, UK

Managing Energy Credit Risk in the US Markets, Energy Risk Europe, October 4, 2006, London, UK

Management of Credit Risk and the Future of US Energy Trading, WeatherBug 2006-2007 Winter Outlook, October 19, 2006, New York City, New York City, New York

Energy and Financial Companies: ERM Convergence, 2007 Enterprise Risk Management Symposium, March 29, 2007, Chicago, Illinois

Managing Energy Price Risk: New Challenges and Solutions, Sino-US Symposium on Energy Market Development and Risk Management, April 28, 2007, Houston, Texas

Special address: Increasing integration and globalization of the energy markets, Energy Risk USA 2007 Conference, May 15, 2007, Houston, Texas

Keynote Address, Energy Risk Europe 2007 Conference, October 2, 2007, London, UK

Risk Management and Its Discontents, Risk Management in the Energy Industry, Energy Industry Directors Conference, Rice University and Fulbright & Jaworski, L.L.P., October 10, 2007, Houston, Texas

Keynote Address, Energy Risk USA 2008 Conference, June 11, 2008, Houston, Texas

Modeling of Liquidity for Oil, Gas and Power, Energy Risk USA 2008 Conference, June 11, 2008, Houston, Texas

On the Frontier of Energy Risk Management, Panel Discussion, Energy Risk USA 2008 Conference, June 11, 2008, Houston, Texas

New Tools of Fundamental Analysis in the Natural Gas Market, Energy Risk USA 2009 Conference, May 19, 2009, Houston, Texas

Panel discussion. What is the "Life Cycle" of a Structured Energy Transaction (SET) in the industry? Energy Risk USA 2009 Conference, May 19, 2009, Houston, Texas

Keynote Address, Financial Crisis and the Impact on Energy Trading, Energy Risk USA 2009 Conference, May 20, 2009, Houston, Texas

Keynote Address, New Developments in Natural Gas Forecasting, Bentek Energy Market Fundamentals Symposium, June 4, 2009, Houston, Texas

RESUME OF V. J. KAMINSKI

Page 11 of 14

The Use of Currency Derivatives in Latin America, Seminar sponsored by Banco de Crédito del Perú, September 22, 2009, Lima, Peru

*Keynote Address*, Energy Risk, Central & Eastern European Summit, November 9, 2009, Czech National Bank, Prague, The Czech Republic

Panel Discussion, How Should A Truly Liberalized Energy Market Work? Energy Risk Central & Eastern European Summit, November 9, 2009, Czech National Bank, Prague, The Czech Republic

The Increased Emphasis On The Importance Of Counterparty And Credit Risk In The CEE Region, Energy Risk Central & Eastern European Summit, November 9, 2009, Czech National Bank, Prague, The Czech Republic

Financial Reform Proposals - Impact on Energy Trading, Platts 4<sup>th</sup> Annual Rockies Gas & Oil, April 23, 2010, Westminster, Colorado

Weather Forecasting in Energy Trading, WeatherBug Professional Conference, April 15, 2010, Houston, Texas

Financial Reform Proposal - Impact on Energy Trading, Energy Risk USA 2010 Conference, May 25, 2010, Houston, Texas

Coping with the Impact of the Latest Regulations – How Should Energy Companies Respond? Regulatory Roundtable, Energy Risk USA 2010 Conference, May 26, 2010, Houston, Texas

Statistical Properties of Energy Prices Trading, Energy Risk USA 2010 Conference, May 26, 2010, Houston, Texas

Natural Gas Storage Valuation, Benposium (Bentek Energy Conference), June 4, 2010, Houston, Texas

Energy Risk Management, Seminar, Energy Risk Europe 2010 Conference, October 12, 2010, London, UK

Dealing with Illiquidity in the Energy Markets, Energy Risk Europe 2010 Conference, October 13, 2010, London, UK

What is the Future of Linked Gas Prices? Assessing the Market Impact of Oil and Gas Price Decoupling, Panel Discussion, Energy Risk Europe 2010 Conference, October 13, 2010, London, UK

RESUME OF V. J. KAMINSKI

Page 12 of 14

Understanding the New Dynamic: How do the Physical and Financial Markets for Energy Interact? Panel Discussion, Joint IEA-IEF-OPEC Event, November 22-23, 2010, London, UK

Derivatives Markets and The New Financial Regulations, Jones Partners Round Table Series, Jones Graduate School, Rice University, March 18, 2011, Houston, Texas

Managing and Mitigating Credit and Market Risk, Pre-Congress Seminar, Energy Risk USA 2011 Conference, May 16, 2011, Houston, Texas

Risk Management Tools for Trading in Volatile Markets, Energy Risk USA 2011 Conference, May 17, 2011, Houston, Texas

*Panel Discussion*, Oxford-Man Institute of Quantitative Finance Conference, Oxford University, June 13, 2011, Oxford, UK

The Clash of Values. The Theoretical and Practical Aspects of Natural Gas Storage Valuation, Oxford-Man Institute of Quantitative Finance Conference, Oxford University, June 15, 2011, Oxford, UK

Natural Gas Shale Revolution, Presentation to Banco de Crédito del Perú, October 17, 2011, Lima, Peru

Risk Management – Financial Derivatives, IV Conferencia Internacional sobre el Manejo de Riesgos con Instrumentos Derivados, Pontificia Universidad Catolica del Perú and Centro de Negocios, October 18, 2011, Lima, Peru

Workshop on the Interactions between Physical and Financial Energy Markets, Participant, Joint IEA-IEF-OPEC Event, November 29, 2011, Vienna, Austria

Putting Crude Oil Speculation into Perspective, Financial Speculation in the Oil Market and the Determinants of the Oil Price Workshop, Fondazione ENI Enrico Mattei, January 13, 2012, Milan, Italy

Credit Risk Management Post Dodd-Frank and MF Global, Jones Partners Round Table Series, Jones Graduate School, Rice University, January 18, 2012, Houston, Texas

Credit Risk Management Post Dodd-Frank and MF Global, CFA Society of Houston, April 11, 2012, Houston, Texas

Hands-On Calibration of Option Pricing and Risk Management Models, Pre-Congress Seminar, Energy Risk USA 2012 Conference, May 14, 2012, Houston, Texas

RESUME OF V. J. KAMINSKI

Page 13 of 14

Managing Energy Risks in the New Complex World, Platts Energy Risk Forum, September 18, 2012, London, UK

Gas and Coal Market Outlook, IEA-IEF-OPEC Symposium, International Energy Agency, Participant, October 4, 2012, Paris, France

From Enron to Great Recession: Lessons Learned, 5th Internal Auditors Forum, October 8, 2012, Dubai, United Arab Emirates

Workshop on the Interactions between Physical and Financial Energy Markets, Participant and Moderator, Joint IEA-IEF-OPEC Event, March 21, 2013, Vienna, Austria

The Outlook for Energy Trading in the Altered Marketplace, Energy Risk USA 2013 Conference, May 14, 2013, Houston, Texas

Panel Discussion: Discovering Efficient Energy Portfolio Management Strategies in the Uncertain Economic Environment, Energy Risk USA 2013 Conference, May 15, 2013, Houston, Texas

The Microstructure of the North American Crude Oil Market, Financial Speculation in the Oil Market and the Determinants of the Oil Price Workshop, Fondazione ENI Enrico Mattei, May 23, 2013, Milan, Italy

The Outlook for Energy Trading in the Altered Marketplace, Platts Energy Risk Forum, June 12, 2013, Houston, Texas

The Outlook for Energy Trading in the Altered Marketplace, Energy Risk Canada, June 18, 2013, Calgary, Canada

Oil Prices: Is \$100/bbl Oil Justified? Centre for Global Energy Studies, November 19, 2013, Bagshot, Surrey, UK

An informed approach to correlation modeling, Conference on Advanced Analysis and Valuation, Energy Trading, January 28, 2014, Houston, Texas

Workshop on the Interactions between Physical and Financial Energy Markets, Participant, Joint IEA-IEF-OPEC Event, March 31, 2014, Vienna, Austria

North Dakota Oil Production and Cost Trends, Oil and Commodity Price Dynamics Workshop, Fondazione ENI Enrico Mattei, June 6, 2014, Milan, Italy

Credit Risk Management of Financial and Energy - Related Portfolios, Similarities and Differences, 10th International Summer School on Risk Measurement and Control, La Sapienza University, June 19, 2014, Rome, Italy

RESUME OF V. J. KAMINSKI

Page 14 of 14

Keynote Presentation, CFA Texas Investor Symposium, February 20, 2015, Houston, Texas

Workshop on the Interactions between Physical and Financial Energy Markets, Participant, Joint IEA-IEF-OPEC Event, March 30, 2015, Vienna, Austria

*Breakeven Oil Price: The Bakken Case Study,* Energy Risk Summit USA 2015 Conference, May 12, 2015, Houston, Texas

A Symposium on Market Power and Market Manipulation in Energy Markets, Panel Discussion, Georgetown University McDonough School of Business, May 20, 2015, Washington, DC

Workshop on the Interactions between Physical and Financial Energy Markets, Participant, Joint IEA-IEF-OPEC Event, March 15, 2016, Vienna, Austria

Risk Staff Wanted: Challenges in Acquiring and Retaining Talents in Energy Risk Management, Panel Discussion, Energy Risk Summit USA 2016 Conference, May 18, 2016, Houston, Texas

Financial Institutions in Commodity Markets, JPMorgan Center for Commodities, University of Colorado Denver, September 30, 2016, Denver

Workshop on the Interactions between Physical and Financial Energy Markets, Participant, Joint IEA-IEF-OPEC Event, March 16, 2017, Vienna, Austria

Spotlight on the Energy Job Market: Developing career in energy risk management, Panel Discussion, Energy Risk Summit USA 2017 Conference, May 10, 2017, Houston, Texas

The Tale of Two Curves: LIBOR vs. OIS, Presentation, Energy Risk Summit USA 2017 Conference, May 10, 2017, Houston, Texas

Developments in Natural Gas Index Liquidity and Transparency; Price Discovery in Natural Gas and Electric Markets; Natural Gas Price Formation, FERC Technical Conference, Panelist, June 29, 2017, Washington, DC

Price Formation and Discovery in the US Natural Gas and Electricity Markets, "New Directions in Commodities Research" International Commodities Symposium, JPMorgan Center for Commodities, University of Colorado Denver, August 10, 2017, Denver

Diversification Benefits of Commodities: A Stochastic Dominance Efficiency Approach, Paper by Charoula Daskalaki et al., Discussant, "New Directions in

Commodities Research" International Commodities Symposium, JPMorgan Center for Commodities, University of Colorado Denver, August 10, 2017, Denver

Credit Risk Management of Financial and Energy - Related Portfolios: Similarities and Differences, CFA Society of Houston, November 8, 2017, Houston

#### **TESTIMONIES**

Credit Issues in Energy Markets, Clearing & Other Solutions, Federal Energy Regulatory Commission, Docket No. AD03-4-000, February 5, 2003, Washington, DC

*Price Discovery in Natural Gas and Electric Markets*, Federal Energy Regulatory Commission, Docket No. PL03-3-005, June 17, 2004, Washington, DC

Excessive Speculation in the Natural Gas Markets, US Senate, Permanent Subcommittee on Investigations, Committee of Governmental Affairs and Homeland Security, June 25, 2007, Washington, DC

#### **CONSULTING**

Multiple consulting engagements including the Federal Energy Regulatory Commission, US and foreign companies

#### **OTHER**

Visiting Scholar at the Federal Energy Regulatory Commission (July 2017 – June 2018)

Research Council Member, JPMorgan Center for Commodities, University of Colorado Denver