JOE WAYNE BYERS

Bear Eneryg, LLC. 700 Lousiana St. Houston, TX 77010 (713)236-5029 1034 Nicholson St. Houston, TX 77008 (713) 802-1297 Joe W Byers@yahoo.com

ACADEMIC BACKGROUND

5/2004. Ph. D. Oklahoma State University, Degree conferred: Curriculum emphasis: Finance; Dissertation: *Smile Consistent Volatility*.

5/1995. M.B.A. Fort Hays State University, Degree conferred: Curriculum emphasis: Finance.

5/1987. B. S. Fort Hays State University, Degree conferred: Major Field of Study: Mathematics.

CORPORATE EXPERIENCE

6/2007 - Present. <u>Bear Energy, LLC, Structure Product Senior Analyst,</u> Houston, TX, Core responsibilities include valuation and analysis of all natural gas structured products transactions, development of weather related products for LDC's and hedge funds, and assist with determining and managing the risk profile's of structured products.

9/1999 - 2/2003 <u>Williams Companies - Williams Energy Marketing & Trading</u>, Tulsa, OK 74172.

10/2002 - 2/2003. Research and Quantitative Analysis – Senior Quantitative Analyst, Natural Gas Fundamental Storage Analysis project. The primary responsibilities included providing weekly forecasts of natural gas storage values, analyzing natural gas markets, and providing quantitative assistance to traders and structure analysts. Petroleum Products Fundamental Model project. This included analysis and development of fundamental supply and demand models for refined petroleum products.

11/2001 - 10/2002. <u>Structured Products Desk</u> - Senior Consultant, Dedicated to the Global Gas Initiative within Williams Companies. This included deal valuation and financial structure design, coordinating engineering estimates, and coordinating communications across Williams' internal teams and counter-parties. Structure Products desk included storage, transportation, gas load serve, peaking option, and swing deal valuations. Additional responsibilities included developing models for valuation and forecasting of deal components.

3/2001 - 11/2001. <u>Implementation and Transition Desk</u> - Senior Quantitative Analyst, Responsibilities included facilitating the transition and implementation of structure deals to risk control and trading groups. This included defining risk profiles and risk management strategies. Responsible for natural gas, petroleum, and refined product deal transition. Additional responsibilities include improvement of valuation models methodologies, user interface, and systems integration.

9/1999 - 2/2001 <u>Risk Control Quantitative Research Group</u> - Senior Research Analyst, Responsibilities included model development, testing, and validation of all

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custom natural gas models. Testing and validation of models included research and development of parameter estimation techniques. Model development included theoretical and practical implementation of valuation models with continuous improvement in methodology, user interface, and systems integration.

6/1998 - 8/1998. <u>Risk Control Quantitative Research Group</u> - Summer Internship, Responsibilities included assisting in the development of derivative pricing models, analyzing pricing relationships, and research on trading systems and rules.

3/1989 – 12/1991. Leavell Resources Corp., LRC Development Corp., Mid Kansas Supply, Hays, KS 67601. Accountant and Comptroller, responsibilities included directing central accounting office for Exploration and Production, Oilfield Supply, and investor partnerships to provide efficient administration; assisting in the negotiation of business agreements and contracts with investors, customers, and vendors. I was responsible for the Oil and Gas Financial Accounting System, Oil and Gas Production Accounting System, and Oil Field Supply Financial Accounting and Inventory Management systems.

ACADEMIC EXPERIENCE

8/2004 - 5/2007. University of Tulsa, Tulsa OK.

Applied Professor of Finance,

Teaching responsibilities include Trading and Risk Management, Pricing and Managing Derivatives, Financial Administration, Investments, and Business Finance.

8/2003 – 12/2003 <u>Oklahoma State University – Tulsa and University of Tulsa</u>, Tulsa Ok. Adjunct Professor,

Teaching responsibilities included International Finance and Business Finance.

8/1995 – 12/1999. Oklahoma State University, Stillwater OK.

Graduate Teaching Assistant,

Teaching responsibilities include Introduction to Corporate Finance, Investments, Portfolio Management, and Financial Markets and Institutions.

Teaching Evaluations of overall instructor: Senior Level Classes 3.03/4.00, Introduction Class 2.70/4.00.

1/1993 - 5/1995. Fort Hays State University, Hays, KS.

Graduate Teaching Assistant,

Teaching responsibilities included Strategic Selling, a senior level undergraduate class, and Managerial Economics lab sessions for MBA candidates.

Research assistantship projects included research in the hedging efficiency of Crack Spreads and the informational content of key Federal Reserve members' departures.

8/1988 - 5/1989. Barton County Community College, Great Bend, KS

Adjunct instructor, Teaching responsibilities were introduction to microcomputers.

PUBLICATIONS

Byers, Joe Wayne, (2006), "Commodity Storage Valuation: A Linear Optimization based on traded instruments," Energy Economics, 28, 275-287. Energy Economics.

Byers, Joe Wayne, (2006), "Monthly FTRs Take Off in the PJM Interconnection," National Gas & Electricity, 22:9, 1-8. Natural Gas & Electricity Wiley Publishing

Byers, Joe Wayne, (2005), "Risk Management and Monetizing the Commodity Storage Option," National Gas & Electricity, 21:12, 1-8. Natural Gas & Electricity Wiley Publishing

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Masters, Robert, and Joe Wayne Byers, (1995), "TQEM: A Model for Teaching Entrepreneurship," The Art and Science of Entrepreneurship Education Volume III.

PRESENTATIONS

- "Commodity Storage Valuation: A Linear Optimization Based on Traded Instruments," Southwest Finance Symposium, Tulsa, Oklahoma, March 2005.
- "Deterministic Volatility Models Using Pooled Time Series Estimation Techniques" at the Southern Finance Association Annual Meeting in New Orleans, LA, March 2001.
- "Does ISO9000 Accreditation Improve Company Performance?" at the Southern Finance Association Annual Meeting, Baltimore, MD, November 1997.
- "Price Discovery in International Crude Spot Markets Using Cointegration and Causality" at the Seventh Annual Graduate Research Symposium at Oklahoma State University, Spring 1996.

ACCOMPLISHMENTS AND AWARDS

Developed locational marginal pricing database and financial transmission rights analysis software for the PJM market using MYSQL, JAVA, and PHP technologies. The software automatically downloads and updates the prices daily. The Java graphical user interface and analysis programs calculate monthly FTR values and payoffs. Reports are accessed using a browser interface utilizing the server side computer language of PHP.

Developed Linear Optimization for a BioDiesel refining facility.

Consulted on commodity trading and risk management activities for hedge funds and power generation companies both domestic and international.

Analyzed and developed forecasting model for employee stock purchase program.

Consulted on option pricing, valuation, and analysis of employee stock options, spread options, and structured product transactions with hedge funds and utilities.

Developed risk adjusted valuation model and proforma reports for Global Natural Gas Initiative including VAR and Credit risk adjustments.

Assisted in the initial prototype and development of Williams' multi-product refined products transportation model. The model is a multi-asset-spread option with cross commodity correlations designed using Excel and standard option pricing models; benchmarked and tested the assumptions of the model for reliable market valuations.

Implemented Risk Adjusted Cash Flow methodology in SAS that improved efficiency and productivity to risk control analysts. This included designing data storage and retrieval procedures that where implemented in the risk management system. Improved the methodology resulting in multi-million dollar decrease in risk adjustment and increased productivity by decreasing the time required to calculate the Risk Adjusted Cash Flow each week.

Automated the transportation books for risk control and traders that improved the accuracy and efficiency in the delivery of daily reports.

Organized and established central accounting office for Exploration and Production, Oilfield Supply, and investor partnerships that improved processes and controls.

Awarded 1997, 1998 and 1999 College of Business Outstanding Graduate Teaching Assistant in the Department of Finance.

Pinnacle Honor Society, 1995

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ADMINISTRATIVE AND ANALYTICAL SKILLS

Expert in using SAS, R, JAVA, and Visual Basic programming languages and compentent with Matlab and C++.

Proficient at integrating and utilizing statistical software and database software for analysis in Linux/Unix and Windows environments.

Specialize in derivative models and Monte Carlo simulations for valuing complex transactions.

Specialize in statistical analysis, econometric, and forecasting methods. Techniques include OLS, fixed/random effects models, ARIMA, and ARCH-GARCH models in univariate and multivariate settings.

Proficient in financial, management, and cost accounting procedures.