CUB-City Exhibit 3.1. Resume of Bernard F. Neenan

Bernard F. Neenan

Vice President
Pricing and Demand Response

UtiliPoint International, Inc.
126 North Salina Street, Suite 405
Syracuse, NY 13202-1050
T. 315.478.9974
F. 315.478.9982
E. **bneenan@utilipoint.com**
www.utilipoint.com

Bernie Neenan has been at the forefront of the design, implementation, and evaluation of market-based retail pricing products and services for the past 20 years. As a Rates Manager, he pioneered the use of the two-part RTP rate structure that subsequently was adopted by over 50 utilities in the United States. He has conducted extensive market research into how customers use and value electricity to support the design and evaluation of dynamic pricing products. His consulting experience includes designing rates and pricing systems for over 25 utilities in the United States, and several engagements overseas. He was commissioned by the New York ISO to help it develop its demand response programs, and he devised performance evaluation techniques in response to FERC directives to conduct comprehensive program evaluations that are now the industry standard. Bernie has published extensively and speaks frequency to industry audiences on issues related to improving the linkages between wholesale supply costs and retail energy prices.

AREAS OF EXPERTISE

- **Retail pricing product design,** utilizing over 20 years of experience in retail electricity rate and product design in regulated and competitive electricity markets.
- **Electricity restructuring**, specializing in developing market rules that integrate price-responsive loads into wholesale electricity market operations to improve market performance.
- **Performance evaluation** of customer response to rates and pricing structures, including estimating price elasticities to quantify and segment responses and comprehensive benefit/cost assessments of demand response programs.
- **Market research** to quantify consumer preferences for pricing product features and to identify ways to increase participation and performance through diverse product designs.
- **Strategic planning** to set saturation and net revenue goals for pricing products and prepare a business plan to guide their marketing and implementation.
- **Enabling technology design and** d**eployment** to characterize how information and control technologies contribute to price responsiveness and establish market potential.

EDUCATION

- Ph.D. Agricultural Economics, Cornell University, December 1980.

- M.S. Food and Resource Economics, University of Florida, August 1976.
- B.S. Agricultural Economics, Cornell University, June 1970.

CAREER PATH

UtiliPoint International, Inc. September 2005 – Present. Vice President of Pricing and Demand Response. Responsible for managing a consulting practice, comprised of five professionals and several affiliates, focused on the design, implementation and evaluation of retail electricity pricing plans for competitive and regulated markets.

Neenan Associates, LLC. December 1999 – August 2005. President. Founded the company to fill the void created by the divesture of regulated utilities and the formation of ISOs in customer participation in wholesale markets. Worked with ISOs to develop protocols that allow direct participation by customers, through demand response programs, in wholesale market operations to realize the benefits of price-responsive behaviors and induced-load reductions.

AXS Marketing, LLC. October 1996 – November 1999. Syracuse, NY. Principal and General Manager. Responsible for keeping AXS Marketing at the forefront in the design of new and practical pricing products that improve the performance of electricity markets.

Electrotek Concepts, Inc. December 1992 - September 1996. Syracuse, NY.
Director of Pricing Services, North American and International markets. Responsible for developing and managing Electrotek's electric utility pricing policy business. Assisted clients in designing and implementing new market services and pricing structures compatible with evolving competition in the industry. Managed Electrotek's utility pricing software business that provided customers with the software products and support services needed to implement new pricing products.

Niagara Mohawk Power Corporation. September 1985 – November 1992. Syracuse, NY.
Manager of Rates. May 1989 - November 1992. Managed a department of 22 professionals who performed cost of service, revenue requirements, rate design and rate administration functions and who conducted extensive load research and other customer usage and preference studies.
Director of Rate Design. July 1987 - April 1989. Created company's Innovative Rate Research Program. Was responsible for the design and testing of novel electric time-of-use rates. The program produced two innovative pricing products, the Hourly Integrated Pricing Program (HIPP) and the Voluntary Interruptible Pricing Program (VIPP) that received recognition by internal and external awards.
Senior Economist, Economic Research Department. September 1985 - June 1987. Responsible for the design, execution and evaluation of research projects to calibrate the costs and benefits of utility financed demand-side management (DSM) investments.

Solar Energy Research Institute. January 1980 – August 1985. Golden, CO.
Manager, Technical Evaluation and Planning Section. September 1984 - August 1985. Managed group of five multidisciplinary analysts who conducted technical and economic analyses of renewable and conventional energy technologies.

Senior Economist. January 1980 - August 1984. Responsible for developing and executing division engineering and economic technology assessments. Activities included conducting specific technology assessments and technology comparisons, modeling petroleum, petrochemical and agricultural industries, and analyzing risk and uncertainty methods and their applicability to electric utility planning.

Cornell University. May 1978 – January 1980. Ithaca, NY.
Graduate Research Associate. Research activities directed toward the analysis of government policies that regulate the production of wheat in the United States.

Los Alamos Scientific Laboratory. May 1978 – January 1980. Los Alamos, NM.
Visiting Scientist and Consultant. Developed a methodology for constructing material vectors for renewable technologies so that data were compatible with input-output analysis.

Cornell University. September 1976 – May 1980. Ithaca, NY. *Graduate Assistant*.

University of Florida. September 1974 – August 1976. Gainesville, FL. *Graduate Assistant.*

Peace Corps. 1970 – 1971. Colombia, South America. *Volunteer*.

EXPERIENCE AND EXPERTISE

- Pricing and Demand Response. Recognized as a leader in developing practical and effective ways to link retail electricity prices to the marginal cost of supply in centrally organized markets and traditional markets served by vertically integrated utilities.
- Wholesale market design. Designed and evaluated price-responsive load programs for the New York ISO that provides customers with opportunities to earn market prices for their load curtailment capabilities. Conducted assessment of national demand response capability for DOE as part of a benefit-cost analysis of the FERC SMD. Supported a Northeast ISO-funded study to evaluate alternative auction-based mechanisms for operating a central resource adequacy market.
- Public policy analysis. Developed methods for quantifying the public and private value of demand response, applied them to on-going ISO-implemented programs, and advised public agencies regarding the proper role and level of system benefit funding to support price responsiveness among retail customers.
- Competitive retail market design. Assisted competitive suppliers in evaluating opportunities to enter newly opened electricity markets. Advised enabling technology firms on how to leverage their technology and market presence to expand their market in competitive electricity markets.
- Restructuring electricity markets in the United States. Participated in the process in New York, Texas, and other states whereby market rules were proposed, evaluated, and adopted to introduce widespread competition to electricity markets. Devised new market bidding rules to accommodate demand response. Assisted in the preparation of the DOE Report to Congress on the value of demand response mandated by the Energy Act of 2005. Conducted studies to quantify the benefits of adopting electric default service that link retail energy usage rates to wholesale market prices.

- International restructuring consulting. Participated in IEA Workshop on demand response liberalized electricity markets. Conducted workshops and seminars on electricity pricing in restructured markets in several countries, including Canada, New Zealand, Australia, South Africa, Ecuador, England, Romania and Bulgaria.
- Identifying customer preferences. Conducted research in several markets to quantify customer preferences for alternative electricity purchasing plans. Prepared strategic pricing strategies using targeted products and services to invigorate existing franchise markets (Public Service of Oklahoma, Southwestern Electric Power, BC Hydro (Canada), Platte River Authority, ESCOM (South Africa)) and to provide a vehicle for entry into new competitive markets (competitive retailing clients).
- Pricing design and implementation. Assisted over a dozen utilities, including Public Service of Oklahoma, Florida Power and Light, Georgia Power, South Carolina Power and Light, and British Columbia Hydro, in implementing real-time pricing (RTP) products that link the prices customers pay to the utility's prevailing supply costs. Introduced at Public Service of Oklahoma a flexible time-of-use rate that is customized to fit each customer's load shifting capabilities.
- Regulatory approvals. Prepared and supported regulatory filings for innovative pilots and full-scale pricing programs in over a dozen jurisdictions, and as Rates Manager on six occasions prepared and sponsored testimony for full regulatory requirements of almost $5 billion for gas and electric services.

RECENT CONSULTING ENGAGEMENTS

- **Demand response portfolio for vertically integrated utilities (two such project ongoing) operating in a centralized electricity market (ongoing)**. Review existing products in light of customer needs and preference and evolving market structure to devise a portfolio of sustainable and profitable demand and price response services.
- **Estimate the benefits of residential RTP-based default service in Illinois (ongoing).** In response to a legislative directive, develop estimates of the level and distribution of benefits that can be expected from making RTP available to all residential customers in Illinois. Study results will be summarized in testimony as part of hearings to be held in late 2006.
- **Time-of-Use plans for residential customers in a competitive market (ongoing).** Develop TOU pricing plans that allow a default service provider to compete against new entrants. The new services were filed in the spring of 2006 and are now being rolled out in a pilot program.
- **Estimating the potential load reductions from demand and price response (ongoing).** Develop a methodology to assist researchers in developing the expected participation rates and load responses for alternative demand and price response programs. Data for several prominent studies of participation and response were convolved to develop estimates by sector and size. Report to be published later in 2006.
- **Demand Response Research Center, California Energy Commission (2005).** As part of a project team, developed a framework for valuing demand response programs in the context of California's hybrid electricity market structure. Designed a companion screening process to assess and rank alternative rates designs and demand response programs.

- **New England ISO (2004-2006).** Quantify the benefits of alternative pricing plans implemented as default service. Model developed compares the full range of dynamic pricing plans, from TOU to RTP in terms of financial benefits to participants and to other customers, and the impact on energy and capacity markets. Prepared and filed testimony to support the application of variable peak pricing as the default service rate in Connecticut for customers over 30 kW. As ruling has not been made as of fall 2006. Submitted testimony on behalf of ISO New England, Inc. in : State of Connecticut, Department of Public Utility and Control, Docket No. 05-10-03, Connecticut Power and Light Time-of-Use, Interruptible, Load Response and Seasonal Rates, proposing the adoption of by Connecticut Power and Light the Variable Peak Pricing plan as the default service for customers over 300 kW.
- **A Western IOU**. Designed a demand response portfolio specifically to cover anticipated near-term operating reserve shortfalls by developing a portfolio of demand response program options to appeal to all customers and customer circumstances
- **New England Independent System Operator.** Conducted an evaluation of alternative day-ahead bidding program for demand-side resources and made recommendations that were filed with FERC and subsequently approved. Conducted annual demand response program performance review and prepared report submitted to FERC. Undertook an analysis to quantify the benefits from the adoption of default service for larger customers that indexes hourly energy prices wholesale market day-ahead locational marginal prices.
- **Lawrence Berkeley National Laboratory.** Conducted an assessment of RTP programs implemented by vertically integrated utilities in the past 15 years. The report is the first comprehensive review of program design, goals and performance. Evaluated the design and success of RTP-type default services implemented in competitive retail markets in Middle Atlantic region.
- **Mexican Electricity Regulator.** For the Comisión Reguladora de Electridad (CRE), conducted a comprehensive evaluation of the country's electricity rates, including a marginal costs study and making recommendations for changes to the retail rate structure, and designing a RTP-type rate to replace the existing, conventional interruptible rate structures.
- **Consortium of Northeast Utilities.** Developed recommendations for the design and implementation of a centralized capacity auction to replace existing capacity acquisition mechanism.
- **Lawrence Berkley Laboratory.** Case study of how customers have adapted to default service energy prices indexed to ISO-day-ahead prices. Included administering and evaluating survey responses from over 50% of the target population of larger commercial and industrial customers and estimating of price repose elasticities and characterization the drivers to price response.
- **Department of Energy.** Developed estimates of the long-run benefits of incorporating demand response into the structure and operation of RTOs under the FERC SMD.
- **New York Independent System Operator.** Evaluated the performance of price-responsive load (PRL) programs implemented by the NYISO. An initial study conducted in 2001 was repeated in 2002. Devised new market rules to accommodate demand response in ICAP markets. Provide on-going support to the design of PRL programs for the NYISO and for the FERC SMD.

- **New York State Energy Research and Development Authority.** Conducted a macro study to quantify the impact in state employment and GNP of investments in energy conservation and load management to support the extension of New York's SBC funding. Evaluated the performance of programs implemented by NYSERDA to encourage participation in PLR programs and develop recommendations fro the scope and structure of future programs. Design and administer programs to assist customers in understanding how they can benefit from participation in PRL programs. Evaluated the viability of TOU rates that used class profiles for billing instead of individual participant time-differentiated meter reading. Developed promotional materials and conducted annual workshops to promote participation in NYISO demand response programs. Operated a virtual bidding program to provide retail customers with an opportunity to gain experience with bidding curtailments into the day-ahead market at no risk.
- **For a regulated utility**. Conducted a benefit/cost evaluation to quantify the net benefits of implementing demand response programs in conjunction with ISO-sponsored programs and developed guidelines for expenditures on program to promote and enable participation.
- **For a community action organization.** Design a real-time pricing pilot for residential customers that incorporates market price volatility in a manageable but meaningful fashion**.**
- **For several competitive electricity retailers.** Develop analytical perspectives and tools to support entry into competitive retail electricity markets.
- **For several enabling technology firms.** Conducted studies of market potential for metering, information gateway, and control technologies to support demand response.

PROFESSIONAL AFFILIATIONS AND AWARDS

- Peak Load Management Alliance, Member
- Association of Energy Service Professionals, Member
- Product Commercialization Award for LOADEXPERT™, Niagara Mohawk Power Corporation, October 1992.
- Innovator's Award, Electric Power Research Institute, Integrated Energy Systems Division, June 1992.

SELECTED PUBLICATIONS

Boisvert, R., Cappers, P., Goldman, C., Neenan, B., Hopper, N. Forthcoming 2007. Customer Response to Competitive Markets: A Study of Niagara Mohawk's Standard Offer Tariff. Energy Journal.

Hopper, N. Goldman, C., Bharvirkar, R., Neenan, B. June 2006. Customer Response to Day-Ahead Market Hourly Pricing: Choices and Performance. Utility Policy, Vol. 14, No. 2, pp. 126-134. Lawrence Berkeley National Laboratory Report No. LBNL-58114. Available at http://eetd.lbl.gov/EA/EMP/drlm-pubs.html

Hopper, N., Goldman, C. Neenan, B. April 2006. Demand Response from Day-Ahead Hourly Pricing for Large Customers. Electricity Journal. Vol. 19, Issue 3, pp. 52-63

Barbose, G., Goldman, C., Neenan, B. April 206. The Role of Demand Response in Default Service Pricing. Electricity Journal. Vol. 19, Issue 3, pp. 64-74.

Barbose, G., Goldman, C., Neenan, B. February 2006. The Role of Demand Response in Default Service Pricing. Electricity Journal, Vol. 19, No.3, pp. 64-74. Lawrence Berkeley National Laboratory Report No. LBNL-59737. Available at http://eetd.lbl.gov/EA/EMP/drlm-pubs.html
Goldman, C., Barbose, G., Neenan, B. January 2006. Real-Time Pricing as an Optional Service: It's Alive, but is it Well? Electricity Journal. Vol. 19, Issue 1, pp. 18-29

Neenan, B., Cappers, P., Pratt, D., Anderson, J. December 2005. Improving Linkages between Wholesale and Retail Markets through Dynamic Retail Pricing: Preliminary Results. Report prepared for New England ISO.

Goldman, C., Hopper, N., Bharvirkar, R., Neenan, B., Boisvert, R., Cappers, P., Pratt, D., Butkins, K. August 2005. Customer Strategies for Responding to Day-Ahead Hourly Electricity Prices. Demand Response Research Center. Lawrence Berkeley National Laboratory Report No. LBNL-57128. Available at http://eetd.lbl.gov/EA/EMP/drlm-pubs.html

Goldman, C., Hopper, N., Bharvirkar, R., Neenan, B., Boisvert, R., Cappers, P., Pratt, D., Butkins, K. July 2005. Customer Strategies for Responding to Day-Ahead Hourly Electricity Prices. Demand Response Research Center. Lawrence Berkeley National Laboratory Report No. LBNL-57128. Available at http://www.lbl.gov/.

Barbose, G., Goldman, C., Bharvirkar, R., Hopper, N., Ting, M., Neenan, B. August 2005. Real-Time Pricing as a Default or Optional Service for C&I Customers: A Comparative Analysis of Eight Case Studies. Ernest Orlando Lawrence Berkeley National Laboratory, Demand Response Research Center. Report No. LBNL-56661. Available at http://www.lbl.gov/.

Neenan Associates. February 2004. A Study of NYISO 2003 PRL Program Performance. Available at http://www.nyiso.com/public/products/demand_response/index.jsp

Barbose, G., Goldman, C., Neenan, B. December 2004. A Survey of Utility Experience with Real-Time Pricing. Lawrence Berkeley National Laboratory Report No. LBNL-54238. Available at http://www.lbl.gov/.

Neenan Associates, Lawrence Berkeley National Laboratory, Pacific Northwest National Laboratory. January 2003. How and Why Customers Respond to Electricity Price Variability: A

Study of NYISO and NYSERDA 2002 PRL Program Performance. Available at http://eetd.lbl.gov/EA/EMP/emp-pubsall.html

Neenan Associates. February 2003. Customer Response to Dynamic Pricing: A Review of Price Elasticity Estimates. Request from info@bneenan.com

Goldman, C., Hopper, N., Sezgen, O., Moezzi, M., Bharvirkar, R., Neenan, B., Boisvert, R., Cappers, P., and Pratt, D., Customer Response to Day-Ahead Wholesale Market Electricity prices: Case Study of RTP Program Experience in New York, Lawrence Berkeley National Laboratory Report LBNL54761, June 2004. Available at http://eetd.lbl.gov/ea/EMS/EMS_pubs.html.

Neenan Associates, Evaluation of NYISO's 2005 Demand Response Program Performance, December 2005, available at www.NYISO.com. Prior year evaluations (2001-2004). Available at the same location.

Neenan Associates and CERTS, How and Why Customers Respond to Electricity Prices: A Study of NYISO and NYSERDA 2002 PRL Program Performance, January 2003. Available at www.NYISO.com.

Boisvert, R., Neenan, B. August 2003. Social Welfare Implications of Demand Response Programs in Competitive Electricity Markets. Lawrence Berkeley National Laboratory Report No. LBNL-52530. Available at http://www.lbl.gov/.

Neenan Associates. February 2002. NYISO Price-Responsive Load Program Evaluation Final Report. Available at http://www.bneenan.com

Neenan, B., Boisvert, R., and Cappers, P. April 2002. What Makes a Customer Price Responsive? Electricity Journal, Vol. 15, pp. 52-59.

Boisvert, R., Cappers, P., Neenan, B. April 2002. The Benefits of Customer Participation in Wholesale Electricity Markets Electricity Journal, Vol. 15, No 3, pp. 41-51.

Long, J., Scott, B, Neenan, B. 2002. Is the Product the Price? In Eakin, K., Faruqui, A, Competitive Pricing in Electricity Markets, Kluwer Academic Press.

Herriges, J., Baladi, s, Caves, D., Neenan, B. August 1993. The Response of Industrial Customers to Electric Rates, Journal of Economics and Statistics.

Neenan, B. May-June 1992. Electricity A La Carte, Electric Perspectives, Volume 16, pp 48-66.

Neenan, B., Caves, D. December 1987. Real-Time Pricing of Electricity in a Regulated Market. Proceedings, 13th Annual Rates Conference, St. Louis, MO.

SELECTED CONFERENCE PAPERS, PRESENTATIONS AND SEMINARS

A Comparative Assessment of Default Service Pricing Plan. June 2006. National Town Meeting on Demand Response. Berkeley, CA. June 26-27. , June 13

Benefits of Dynamic Pricing of Default Electricity Service. May 12, 2006. Presented at: *Assessing the Potential for Demand Response Programs.* Institute for Regulatory Policy Studies. *Springfield. IL.*

Demand Response in Ancillary Service Markets. April 18, 2006. AESP Brown Bag audio Seminar.

Benefits of Demand Response in New England. April 28, 2006. Presented at ISO-New England Demand Response Summit. Sturbridge. MA.

Does Real-Time Pricing Deliver Demand Response? A Case Study of Niagara Mohawk's Large Customer RTP Tariff. Presented at Rutgers' Center for Research in Regulated Industries: 24th Annual Eastern Conference, Sky Top, PA. McDonough, C., Goldman C., Hopper, N., Neenan, B. April 2004

The Status of Demand Response in New York. 2003 IEEE PES Winter Power Meeting. Toronto, Canada. Lawrence, D., Neenan, B. April 2003

*The Role of Demand Response in Meeting Capacity Requirement***,** EUCI Conference on Electricity Markets and Resource Adequacy**,** April 14-15, 2005.

Valuing and Assessing Retail Price Responsiveness. International Energy Agency Workshop: The Role of Demand Response in Liberalizing Energy Markets, Paris, France, February 2003.

The Past and Future of Real-Time Pricing. Distributech 2003, February 2003, Las Vegas, Nevada. Also presented at Experimental Workshops in R2-06-001, a workshop conducted by California Energy Commission, September 9, 2002.

Principles and Practices of Demand Response Programs: ISO Operations and New Retail Markets. Workshop conducted at The Role of Demand Response Programs: Keeping the Grid Operating, Sponsored by the Peak Load Management Alliance, Washington, DC. April 29, 2001.

Come On In, the Water's Fine: The US Experience with RTP and Other Pool Pricing Schemes. EPRI sponsored workshop Pricing Energy in a Competitive Market Conference, Washington, DC, June 18, 1998.

Strategic Pricing: Yesterday, Today and Tomorrow. A training course presented to the marketing staff of Central and South West Utilities, Tulsa, OK, August 1996.

Workshop on Procurement and Pricing Strategies for the Competitive Electric Distribution Business. Presented to New Zealand electricity distributors, Christchurch and Wellington, New Zealand, April 1996.

Workshop on Introducing RTP and Other New Pricing Products. Presented at the Electric Power Research Institute's 4th Biennial Pricing Conference, San Diego, CA, April 1996.

Cost Allocation Methods and Techniques. In-house workshop presented to the pricing staff of the Romanian National Utility NREL, Bucharest, Romania, December 1994.

Workshop on Procurement and Pricing Strategies for Competitive Electric Distribution Business. Training program conducted for Victoria Electric Services, Melbourne, Australia, spring 1994 to develop staff for newly formed competitive retail entities.

Fundamentals of Traditional Rate Design, A comprehensive, multi-day training program on traditional rate design and competitive product pricing presented to the Victoria Utility Board (Melbourne, Australia, June 1994), the New England Electric Services Company (Northborough, MA, January 1994) and the Southern Company (Atlanta, GA, May 1993).

Ten Reasons to Look Forward to 1997: Accepting the Retailing and Merchandising Challenges and Opportunities Divestiture will Bestow and *Meeting Challenges and Creating Opportunities for the 1990's.* Electric Power Research Institute, Tampa, FL, February 1994.

New Pricing Technologies for Evolving Retail Electricity Markets. Southeastern Regional Electric and Natural Gas Conference on Regulatory Policy, Atlanta, GA, October 1993.

Building Sustainable Electric Service Markets, Seminar on Pricing and Service Innovations. An in-house workshop conducted for Midlands Electric Board, Mucklow Hill, Halesowen and West Midlands, Birmingham, England, June 1992.

If You Are Going to Market, You Need Something to Sell. Marketing Electricity in a Changing World. Sponsored by EEEI, Ltd., Paris, France, November 1991.

Transforming Electric Metering Services from a Cost Center to a Profit Center, Solutions and Strategies for the 1990's. The 12th Annual National Meter Reading Conference, Sponsored by the National Meter Reading Association, Buffalo, NY, June 1991.

Real-Time Pricing at Niagara Mohawk, Delivery Mechanisms and Customer Support for HIPP, and Description of Niagara Mohawk's Innovative Pricing Structures, Customer Choice Through Short-term Pricing. A workshop for electric distributors sponsored by Electricorp Marketing, Ltd., Christchurch, New Zealand, April 1991.

Pricing Electricity at the Margin: The Hourly Integrated Pricing Program, EEEL Workshop on Innovative Electricity Pricing. Sponsored by EEEL, Ltd., Oxford, England, spring, 1990.

Evaluation of the Contingent Market for Priority Electric Service, Rutgers University Seventh Annual Advanced Workshop in Public Utility Economics and Regulation. Mohonk, NY, May 1988.

The Design and Implementation of an Experiment to Test Response to Electric Rates Based on Marginal Costs. Rutgers University Seventh Annual Advanced Workshop in Public Utility Economics and Regulation, Mohonk, NY, May 1988.