

# Norm Richardson

## Professional Experience

Oct 2014 – Present Anchor Power Solutions Atlanta, GA

### **President**

Founded an independent consulting firm for power system planning and forecasting, and developed the EnCompass software model.

Sep 2009 – Sep 2014 Ventyx, an ABB Company Atlanta, GA

### **General Manager, Energy Portfolio Management (Jan 2010 – Sep 2014)**

Responsible for all Ventyx energy software and services, including:

- Analytics Software – Planning and forecasting models and simulation data, which included the Strategist and Generation Operations products
- Intelligence -- Velocity Suite data service for North American energy markets
- Advisors -- Consulting products and services, including the Power Reference Case products

### **Vice President, Power Markets (Sep 2009 – Jan 2010)**

- Directed the development of the North American Power Reference Case, a syndicated 25-year forecast of power, gas, coal, renewable energy, and emission allowance markets covering the NERC power systems.
- Managed a team of consultants that performed custom market price forecasts, asset valuations, and risk analysis.

Jan 2008 – Sep 2009 SNL Energy Charlottesville, VA

### **Associate Director, Energy Research**

Directed the Power Markets and Fuels database service, including power plant operations, area load and prices, natural gas pipelines, coal mines, and development projects for transmission, generation, and environmental controls. Established practices and procedures for collecting and validating Power Markets data from FERC, EIA, EPA, NERC, and other sources

Apr 1994 – Dec 2007 NewEnergy Associates Atlanta, GA

### **Vice President, Energy Forecasting and Planning (Oct 2005 – Dec 2007)**

- Served on Western Electric Coordinating Council (WECC) committees on model and data development, and designed the Portable Data Format used to share data among all members and simulation programs
- Led the design and implementation of a Security Constrained Unit Commitment (SCUC) model for use in Entergy's Weekly Procurement Process (WPP) for granting weekly transmission rights

### **Director, Energy Markets and Asset Analysis (Feb 2000 – Oct 2005)**

Product Manager for NewEnergy's PowerBase Suite of software and databases for the North American power markets, including the Strategist software.

### **Manager, Energy Market Systems (Sep 1996 – Feb 2000)**

- Established a Test Center and policies and procedures for Quality Assurance and product deliveries.
- Directed a team of software developers working on products (MarketPower, Nostradamus, PROSCREEN II) that forecast price and demand for electricity and gas.

### **PROSCREEN II Software Developer (Apr 1994 – Sep 1996)**

Led the efforts of both software developers and product consultants involved in the electric production cost and optimization modules of PROSCREEN.

## Consulting Projects

- Prepared an assessment of the Hu Honua biomass project on the island of Hawaii, including detailed simulations of potential capacity factors under various oil price forecasts.
- Prepared market assessments and price projections to support the acquisition of an ownership share of new nuclear development, and the sale of a portfolio of wind generation assets.
- Provided written testimony to the Wisconsin Public Service Commission in support of market price forecasts used for evaluating the sale of We Energies' Point Beach Nuclear Power Station.
- Provided oral testimony to the Michigan Tax Tribunal with regard to market price forecasts used to develop valuations for power plants in Michigan.
- Served as Energy Consultant to the Committee of Unsecured Creditors of Mirant Americas Generation, LLC (MAGI) during Mirant bankruptcy proceedings, leading a team that provided forecasts of energy and capacity prices, and operation and gross margin of MAGI assets throughout the United States.
- Forecasted energy and capacity revenues, operating expenses, and cash flow for several power plants that were being sold or refinanced, at the request of investment banks and independent power producers.
- Determined future capacity needs for Georgia Energy Cooperatives and analyzed bids received from power suppliers to determine the optimal selection of resources.
- Assisted Vectren Energy Delivery of Indiana in developing an Integrated Resource Plan that considered options such as new unit construction, plant upgrades, and DSM programs.
- Forecasted distributions of southeast electric market prices and natural gas consumption of Oglethorpe Power's existing and planned gas-fired generation, based on gas price and weather volatility.
- Forecasted distributions of generation, production costs, and operating income for Dominion Virginia Power based on weather uncertainty and volatility of gas, oil, and coal prices.
- Produced pro-forma financial statements for Old Dominion Electric Cooperative in order to obtain financing for the construction of two combustion turbine plants.

## Presentations and Publications

- "Assessing the Impacts of the Introduction of New Turbine Technologies on the Wholesale Market," Infocast ERCOT Market Summit 2016, February 2016
- "Risk Management Modeling for Resource Planning," G&T Resource Planning Conference, October 2011
- "Impacts of the GCC-IA Backbone on Generation and Transmission Planning," EU-GCC Clean Energy Network Discussion Group Meetings, May 2011
- "Economic Transmission Expansion Planning", FERC Technical Conference for Enhanced Wide-Area Planning Models, June 2010
- "Introduction to Power Markets", SNL CFE Analyst Training in the Power & Gas Sector, December 2008
- "Including Risk Analysis in Power Price Forecasting," Natural Gas & Electricity, September 2007
- "Maximizing Transmission Planning Efficiency", Electric Light & Power, Mar/Apr 2007
- "Market Price Forecasting with Risk Analysis," EUCI Resource & Supply Planning Conference, January 2007
- "Introduction to Resource Planning and Supply Optimization," EUCI Resource & Supply Planning Pre-Conference Workshop, January 2006 & January 2007
- "The Risks and Benefits of Capacity Markets to Generators," Electric Power Conference, May 2006
- "Discovering the True Value of Capital Improvements," Electric Power Conference, May 2006
- "Searching for the Investment Signal", Platts Insight, October 2005
- "Emissions Compliance: Optimizing your Asset Strategy is a Balancing Act," Harts Energy Markets, April 2005
- "Price Volatility: Modeling Techniques for Analyzing and Assessing Risk and Volatility," Infocast Wholesale Pricing Conference, November 2000

## Education

- Master of Science in Electric Engineering, 1994, Georgia Institute of Technology, Atlanta, GA
- Bachelor of Science in Mathematics, 1992, Furman University, Greenville, SC

