



Andrew Rogers

Manager of Databases and Analytics

ISO New England

M.S. – Power Systems Management

Worcester Polytechnic Institute 2015

B.A. – Mathematics, WSU 2008

When I started at Westfield State, I chose to major in math because I was good at it, not because I felt any great passion for it, at least not yet. The wide range of classes showed me just how many paths math can open, and that discovery led me to applied math. I also explored other disciplines like economics, computer science, and physics. I enjoyed learning the concepts, but I wasn't drawn to practicing them every day. In the process I realized that math underpins all three fields, giving me a strong, versatile foundation no matter which direction I took.

I graduated in 2008, right in the middle of the “Great Recession”, and took the first offer that came my way: Energy Analyst at Aegis Energy in Holyoke, MA, a 50-person firm that built 75 kW combined-heat-and-power generators. There I crunched utility bills, fuel costs, and equipment efficiencies to calculate payback periods and ROI for hospitals, apartment complexes, and factories. There I learned the intricacies of residential, commercial, and industrial rate structures. I would watch equations swing a project from “no-go” to “green light” which proved that applied math could influence major decisions.

Eighteen months later I joined ISO New England (ISO-NE) as a Settlement Analyst. ISO-NE is the regional transmission organization that operates the high-voltage power grid, runs the wholesale electricity markets, and plans the system that serves about 15 million people and 7.5 million customer accounts, oversees roughly 9,000 miles of transmission lines, almost 29 gigawatts of generation, and facilitates about \$7 billion in annual wholesale market transactions.

My hiring manager said I was chosen because I knew what a megawatt was and had a STEM background. My job was to master tariff rules for the Day-Ahead and Real-Time Energy Wholesale Markets and Ancillary Services, double-check the daily calculations that move \$10–50 million between generators, utilities, and traders. A highlight was building a script that applied minimum-run-time rules automatically, saving hours and catching edge case errors. That success led to a Market Analyst role, and ISO-NE later

sponsored my master's in Power Systems Management at Worcester Polytechnic Institute. This opportunity was reserved for electrical engineers but opened to me because of the calculus, differential equations, and complex analysis courses I took at Westfield State.

During that Market Analyst stint I fell in love with data. I moved into a Business Intelligence (BI) Analyst role, then grew into BI Tech Lead and finally BI Supervisor. Every step drew directly on my math background. Designing dashboards, architecting data models, and engineering pipelines let me combine math, coding, and business context in a way that clicked. Each project pulled me into new corners of the company, from forecasting renewable generation to tracking transmission-line outages to calculating the wholesale cost of energy for New England. It taught me that well designed reporting and data architecture is the backbone of effective problem solving and decision making.

Today, I'm the Manager of Databases and Analytics at ISO New England. Our team is responsible for the reliability of our database infrastructure and for building analytical systems that support both internal users and market participants. Every day I rely on the analytical mindset that started at Westfield State. That math degree taught me how to think, how to solve problems, and how to keep learning. I'm grateful to the professors, mentors, and classmates who helped shape that experience and it continues to guide me in everything I do.