Developed by Students and Faculty
Energy Market Simulations
Teaching Platform

EIDA
Energy Information Dashboard

Promoting Education and Research in Electricity Markets
Electricity Markets
An Education Platform for the Smart Grid

Electricity markets are central to the effective and reliable allocation of energy resources to consumers and industry. Electricity markets have been made possible by policy innovation and have since taken a central role in promoting cost efficiency, risk management, and economic growth.

As electricity markets grow in relevance and complexity, it is essential to educate future energy professionals on their essential characteristics. With the support of FirstEnergy, Case Western Reserve University is developing the Energy Information Dashboard (EIDA), a virtual environment where a student can take the role of a participant in the wholesale electricity market and carry out electricity transactions against peers or historical market prices. EIDA is a multi-disciplinary endeavor connecting faculty and students in both Computer Science and Finance.

**Wide-Ranging Benefits**

**Students**: The students with leading faculty are developing the virtual environment and learning about the power system (generation, transmission, distribution, customers) and the market electricity is sold into. Significant numbers of qualified Computer Science graduates are needed to upgrade the power system in the next 50 years and most universities discontinued the programs years ago.

**Workforce**: The tool provides job training to backfill the shortage of energy professionals for utilities, electricity markets transaction organizations, and industries that tie products and services to power systems. This training is a large source of future jobs.

**Research**: With trillions of dollars of investments expected for North American grid upgrades over the next 25 years, simulation and modeling are critical tools.

**Case Western Reserve University**

Case Western Reserve University (CWRU) is one of the nation’s leading independent research universities. The University’s primarily goal always has been to serve society as a leading center for undergraduate, graduate and professional education, and for research that adds to society’s store of knowledge and which addresses its priorities. Total sponsored research is $400 million annually. The combination of graduate and undergraduate programs with research in both engineering and management make the university uniquely positioned to develop EIDA and use it for delivering a stimulating educational experience.