

Students Learn Smart Grid Power Trading

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kbrannon@tulane.edu

A small group of master of finance and MBA candidates at Tulane University relived the nightmare of a darkened landscape from a massive power blackout ? not as students, but as the next operators of the Smart Grid.



Using real-time simulation, business students practice how to keep America's lights on in the most cost-effective way. (Photo by Greg Thurnher)

The [A. B. Freeman School of Business](#) has developed a course called "Introduction to Electricity Markets" to engage students in the challenges faced by power traders, electric utility analysts, independent power producers and utility dispatchers whose job it is to keep America's lights on in the most cost-effective manner.

Students taking the course assume the roles of these "power brokers," answering calls to shore up the nation's electrical system by integrating renewable energy sources, optimizing transmission systems with smart-grid technologies and participating in a fair and seamless wholesale electric marketplace.

Their final exam on Friday (March 5) was a simulated, 12-hour energy dispatch shift.

Students engage in real-time simulation activities in the business school's Trading Center. It is a \$2.4 million laboratory customized with unique power simulation software. Students work at monitors nearly identical to those seen by utility and independent power trading and dispatch desks, communicating with each other electronically to deliver power in the most economic, reliable and "green" mode possible.

Greg Thurnher, an adjunct lecturer of business, said these exercises are "real" enough to be recognized as suitable for operator continuing education hours by the North American Electric Reliability Corp., which is delegated by the Federal Energy Regulatory Commission to administer system operator training.

Those students who have successfully completed the course have, upon graduation, landed jobs in utility and commodity trading roles at numerous energy firms, including Entergy Corp., Florida Power and Light, Ameren Energy and JP Morgan, Thurnher says.