

## Megatrends in the Electrical Power Industry

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### With Guest Lecturer Mr. Thomas Golden

Program Manager, Technology Innovation,  
Electric Power Research Institute (EPRI)



Mr. Thomas Golden

#### Abstract:

Electric utilities across the country are going through a period of massive change. You see it in every corner of the industry. It is, as Lisa Wood, vice president at the Edison Foundation, said, “a profound but quiet transformation.” This interactive presentation will focus on three megatrends that are leading this change within the electric Power Industry. These megatrends are, Decentralization, Digitization, and Efficient Electrification.

**Decentralization:** The industry is faced with a challenge that is positively influencing our future. Customers have specific needs and these needs are pushing companies toward providing more and more individualized services. Customers want responsive technology, and they can get it almost anywhere.

**Digitization:** The electric power industry is investing over \$20 billion annually in the distribution grid. Utilities are moving to a more intelligent grid through a digital communications overlay that increases the ability to control the grid and move it closer to being “self-healing.”

**Efficient Electrification:** The energy industry is investing in a transition from coal to natural gas and constantly looking into other energy efficient solutions due to both demand and regulation.

Each of these megatrends will be covered in detail along with a discussion of technologies that are being used and some of the drivers for that technology. This will be an interactive session so please come with lots of questions and thoughts on the subject.

#### Biography:

Thomas Golden is the Program Manager of Technology Innovation at the Electric Power Research Institute (EPRI).

Tom’s previous role was as the Manager of Energy Market Design at the New York Independent System Operator (NYISO) where he and his team were responsible for the evolution of the NYISO wholesale energy electricity market design. The team was closely focused on improving pricing signals and incentives that closely align with reliability needs and/or policy objectives.

Before leading Energy Market Design, Golden was the Manager of Technology Management at Duke Energy where he helped shape the company’s strategy and policy regarding energy storage and emerging technologies. Thomas was a speaker at numerous National conferences and Universities where he delivered a message of thought leadership and change management related to emerging technologies. He was honored as one of the fifty Smart Grid Pioneers of 2015.

Previously, Golden led the Senior Reactor Operator Initial Licensing Program at Duke Energy’s Catawba Nuclear Station. In this role, Thomas developed future licensed reactor and senior reactor operators who are tasked with operating a two-unit commercial nuclear reactor facility.

Thomas earned a Bachelor of Science Degree in Nuclear Engineering and Engineering Physics from Rensselaer Polytechnic Institute as well as a Master of Business Administration from Wake Forest University. Thomas is a military veteran, serving 12 years on active duty in the US Navy where responsibilities included operating submarine nuclear reactors and land-based prototype nuclear reactors. Thomas continues to serve today as a Navy Reserve, Supply Corps Officer.

