Live Seminars | ELECTRIC INDUSTRY BASICS — CONDENSED VERSION

enerdynamics
The Energy Education Experts

Course length: One day
Prerequisites: None
CPE credits: 8

A one-day entry-level introduction to the business of electricity

The technical, regulatory, and market aspects of the electric industry are highly complex and rapidly changing. This one-day seminar presents a clear and easy-to-understand fundamental overview of this unique business. Whether new to the industry or a veteran who is looking for a deeper understanding of the electricity business, Electric Industry Basics – Condensed version helps participants make sense of this dynamic industry.

WHO WILL BENEFIT FROM THIS SEMINAR?

- New hires, summer hires, and interns working in the electric industry
- Regulatory employees requiring a fundamental electric business overview
- Sales professionals and technical employees such as system operators, engineers, and information technology professionals requiring a fundamental electric business overview
- Professionals in the legal, finance, accounting, PR, and communications fields who are becoming active in the energy industry
- Virtually any industry employee with limited experience in the business side of the industry

WHAT PARTICIPANTS WILL LEARN

- What electricity is and how it works
- The different classes of electricity users and their needs
- How the physical system is designed and operated
- How regulation works and affects the industry
- How electric markets are structured and how they function
- How the industry is rapid evolving

COURSE AGENDA

Overview of Electricity

- What is electricity?
- How electricity works
- Why electricity is critical to our society
- Unique characteristics of electricity
- Electric units

Customers

- Types of electric customers
- Customer usage patterns
- Customer needs and wants
- Services available to electric customers

The Physical System

- The planning horizon for generation
- Types of generation, their characteristics, and how each is used
- U.S. generation capacity and output
- How generation is dispatched to meet the load curve
- Transmissions systems (components and characteristics)
- North American power grids
- Distribution systems (components and characteristics)
- Characteristics of power systems
- How the system is scheduled and operated
- Types of ancillary services and what they are used for
- How reliability is maintained

Regulation

- Why the electric industry is regulated
- Who regulates each function
- Types of regulatory proceedings
- The regulatory process and how rates are set
- Incentive regulation
- How regulated electric companies make money

Markets

- What an electric market is
- Five market structures currently in use in North America
- What electric supply choice is and where it is available
- How parties transact in electric markets
- Services bought and sold in electric markets
- Basic pricing concepts
- ISO scheduling
- Locational marginal pricing

- How an energy portfolio is managed
- Risk exposures and how they can be managed

The Future

- Trends to watch in the next five years
- The future
  - An evolved grid
  - Distributed resources
  - Greenhouse gas regulation
  - Engaged customers
  - New business models