

# Engineering Courses

## Smart Grid: Substation/Distribution Automation

### Training objectives:

The participants will acquire knowledge of modern/intelligent grid technology; more specifically SCADA/EMS/DMS, Substation and Distribution Automation applications, designs, technical issues and benefits. Modern/intelligent grid, its real value and a summary of its architectures are introduced.

### The course is intended for:

Managers, engineers and technicians working for power delivery companies, equipment providers, consulting organizations, and government entities who have a vested interest in knowing how power distribution systems are planned, engineered and operated to deliver reliable, economic power, and understanding the key drivers, requirements and constraints that affect cost and performance tradeoffs.

### Main features:

- Introduction to Enterprise Data Management and Substation Automation (SA)
- Enabling the Smart Grid
- Industry Standards Activities
- Why Substation Automation? Why Now?
- Acquiring Operational and Non-Operational Data from Substation IEDs
- Smart Grid Business Drivers
- SCADA Systems Evolution and Overview
- Smart Grid Recent Deployments and Lessons Learned
- Substation Functions
- Impact of Renewables on the Grid
- Distribution Automation Value
- Distribution Automation Continuum
- Modular Protection, Control and Automation Systems
- SCADA Integration with Other Systems
- SCADA System Implementation and Maintenance
- Smart Grid Security
- Privacy of Information and Smart Grid
- Smart Grid Policy and Regulation
- Communication Issues
- Building the Business Case

### Recommended prior knowledge:

Basic knowledge of electrical engineering.

**Note: The course is held in English. Class subject to change. Class times are 8-4.**

For more information visit: [www.geenergyconsulting.com](http://www.geenergyconsulting.com)



Power Systems & Energy Course | PSEC