

# Consoliated Edison Company Control Center Training for Smart Grid Operation

## **Project Description**

Consolidated Edison of New York (ConEd) is developing a training program to prepare their workforce to implement advanced system capabilities, such as rapid restoration and grid reconfiguration, for their electric system and its customers. The curriculum includes three modules: a selection module that enable's ConEd to select appropriate personnel; a training module that develops the training curriculum based on industry needs; and a qualification module consisting of formal written and practical examinations that verify skill levels and qualification. The curriculum includes remote operation of reclosers, switches (SF6), regulators, sophisticated capacitor band controllers, supervisory controls, communication systems (SCADA, Smart Grid), and sectionalizers. It also includes the management of these systems and the successful completion of North American Electric Reliability Corporation Critical Infrastructure Protection training. A novel training feature of ConEd's training is the use of simulators in a distribution control center environment that includes an integrated use of SCADA, risk management, contingency analysis, and contingency response.

### **Goals/Objectives**

- Expand distribution automation to advance self-healing grid operations
- Efficient delivery through system losses reduction, enhanced data visualization, and integrated Smart Grid technologies
- Establish cyber-secure and scalable communication platforms
- Enable interoperability of various system elements through integration into a common Enterprise-level control system
- Augment decision support systems with sensor feedback to provide improvements
- to the predictive models that identify, isolate, and rectify system vulnerabilities
- Provide for future renewable energy capabilities in the service area

#### **Benefits**

- Job placement within six months of graduation
- Employee retention and employee growth
- High-tech training in cutting-edge
  Smart Grid technologies
- Efficient service to customers from the use of state-of-the-art technologies



### CONTACTS

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#### PARTNERS

Orange and Rockland Utilities Inc

PROJECT DURATION

7/20/2010-7/20/2013

#### COST

**Total Project Value** \$473,350

**DOE/Non-DOE Share** \$236,675/\$236,675

PROJECT LOCATION New York

CID: OE0000455

Managed by the National Energy Technology Laboratory for the Office of Electricity Delivery and Energy Reliability

