Oncor Electric Delivery Company
Grid Reliability through Engineering Advancement and Training

Project Description
Oncor Electric Delivery Company is partnering with Siemens Power Technologies International to provide training in transmission planning and system protection due to increased urban energy loads and to meet the need for specialized wind power studies. Students will focus on developing practical problem-solving abilities and building a greater working knowledge of transmission power systems. The training will enable engineers to plan, design, and protect a Smart Grid. Courses include Power Electronics in Transmission Systems (HVDC, FACTS) and Wind Power, Analytical Methods for Voltage Control and Reactive Power Planning, Power System Stability and Stabilizer Tuning, and courses based on Siemens’ PSS® software, such as Graphical Model Builder and Advanced Power Flow. Training will be provided at Oncor for their employees and at Siemens for the public.

Goals/Objectives
• Train engineers in the specialized areas of transmission planning and system protection
• Enhance electrical engineering training with more specialized knowledge in electric power system technology

Benefits
• Jobs replacing retiring engineers
• Transmission planning problems resolution
• Increased Smart Grid functionality
• Power line and substation upgrades that aid in advanced renewable energy development as mandated by the Texas legislature

CONTACTS
Deborah Buterbaugh
Project Manager
National Energy Technology Laboratory
3610 Collins Ferry Road
Morgantown, WV 26507-0880
304-285-4164
Deborah.Buterbaugh@netl.doe.gov

Ken Donoho
Principal Investigator
Oncor Electric Delivery Company LLC
1601 Bryan Street Ste 22
Dallas, TX 75201-3430
Kdonoho1@oncor.com

PARTNERS
Siemens Power Technologies International

PROJECT DURATION
6/10/2010–6/10/2013

COST
Total Project Value
$431,937
DOE/Non-DOE Share
$188,748/$243,189

PROJECT LOCATION
Texas

CID: OE0000456

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