North Carolina State University
Master of Electric Power Systems Engineering

Project Description
North Carolina State University (NC State) is developing an intensive professional Master’s degree program for power system engineers and managers to develop and deploy next generation Smart Grid systems. The Master of Electric Power Systems Engineering (MEPSE) covers both core power engineering topics, Smart Grid applications, and cross-disciplinary courses, including risk management, communication skills, project management, engineering economics, and technical writing. MEPSE targets new graduates in the utility industry, displaced workers seeking a new career, and current utility industry employees seeking to enhance their skills. It is an intensive systems-focused, hands-on program designed for training a population with diverse backgrounds in approximately 10 months. NC State plans to grow the program through an innovative, real-time distance learning component to accommodate a broader audience.

Goals/Objectives
• Develop and deliver a comprehensive MEPSE program for Smart Grid workforce training
• Collaborate with industry to ensure that the curriculum fulfills industrial needs to aid in job placement and to advance Smart Grid technologies

Benefits
• A workforce trained in technical and professional skills that can provide leadership in transforming existing power systems to a Smart Grid
• Displaced workers retrained for careers in the high-tech electric power industry
• Industrial-academic collaboration in power energy education
• Increased job placement opportunities in the power industry
• Skilled workers that can meet the utility industry needs for the future

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PARTNERS
Alstrom Grid
Quanta
Progress Energy
ABB
KEMA

PROJECT DURATION
6/30/2010–6/30/2013

COST
Total Project Value
$3,403,458
DOE/Non-DOE Share
$2,492,266/$911,192

PROJECT LOCATION
North Carolina

CID: OE0000437

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

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