



Incremental Systems Corporation Massive Real-time Simulations for Training Smart Grid Operators

Project Description

Incremental Systems Corporation (IncSys) is providing training with real-time simulations so that operators, engineers, and students will learn to prevent major power system events. With the PowerSimulator, IncSys has the ability to run massive drills with hundreds of operators using web-enabled simulations of complete interconnections. These simulations will include Smart Grid technologies such as wind farms, solar farms, demand side management, smart micro-grids, and plug-in hybrid electric vehicles. The program will also simulate cascading outages. PowerSimulator training is conducted by a team of software developers, model development technicians, power system engineers, trainers and operator trainees. The training demonstrates how new Smart Grid systems, people, and processes can all work together to benefit system reliability and reduce restoration times.

Goals/Objectives

- Increase the number of candidates that are capable of becoming NERC certified, working as real-time system operators
- 120 military veterans trained and certified
- Decrease cost, improve the ease of application, and increase the resource pool of PowerSimulator training implementers

Benefits

- Major blackouts reduced
- 120 military veterans placed in energy industry jobs
- Workforce-ready trainees
- Updated training for current power industry workers
- Job retention



CONTACTS

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PARTNERS

PowerData Corporation; Pacific Gas and Electric; CenterPoint Energy; Grant County PUD; Southern Illinois Power Cooperative; SOS International; U.S. Embassy, Iraq; Centralia College, Clark College, Front Range Community College, Gonzaga University, Mississippi State University; Rensselaer Polytechnic Institute; Texas A&M University; Washington State University, Whatcom Community College

PROJECT DURATION

07/15/2010–07/15/2013

COST

Total Project Value
\$8,287,500

DOE/Non-DOE Share
\$3,600,000/\$4,687,500

PROJECT LOCATION

Washington

CID: OE0000488

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

