



U.S. DEPARTMENT OF
ENERGY

Office of Electricity Delivery and Energy Reliability



American Recovery and Reinvestment Act

Workforce Training Program Overview

Reforming Electric Energy Systems

Curriculum Workshop

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The Workforce Training Program Facilitates:

- Development of a trained and skilled workforce
- Implementation of a national clean-energy smart grid
- Providing the next generation of skilled technicians, engineers, and managers for the electric power industry



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Three Topic areas:

Topic A: Developing and Enhancing Workforce Training Programs for the Electric Power Sector

STEPS: Strategic Training and Education in Power Systems

Topic B: Smart Grid Workforce Training

Topic A: Developing and Enhancing Workforce Training Programs:

- Provides new strategies and programs for industry.
- Addresses the entire electricity delivery system:
 - Transmission
 - Distribution
 - Electrical equipment manufacturing

STEPS: Strategic Training and Education in Power Systems

- Supports Colleges and Universities in developing new curricula.
- Addresses building, operating, and maintaining a modern electricity system.
- Courses target
 - Power electronics
 - Information and communications technologies
 - Policy
 - Economics

Topic B: Smart Grid Workforce Training

- Targets power sector personnel directly related to smart grid.
- Increases workforce capacity and capability of electric power companies and smart grid technology manufacturers.
- Addresses skills shortages in a variety of power sector disciplines.

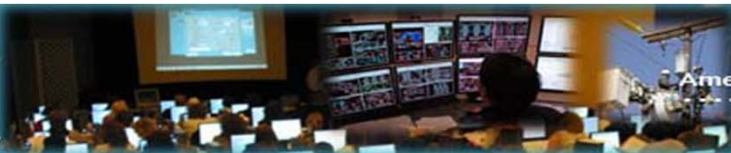


Goals/Objectives:

- **Raise awareness and interest in careers in electric utilities**
- **Address predicted employment needs due to worker retirement**
- **Provide training**
 - Demand energy response
 - Distributed Generation
 - Energy Utilization/Optimization
 - Cost Simulations
- **Train professionals at all levels of utility hierarchy.**
- **Promote excellence in electric power education and research.**
- **Develop outreach activities to ignite public interest in smart grid technology.**

Benefits:

- **Up to 175,000 technicians, staff, and management positions filled with qualified personnel.**
- **Skilled workforce educated in energy conservation and renewable energy.**
- **Increased investment in advanced laboratory equipment, faculty development, and academic research.**
- **Increased skills and pay rates for technicians and displaced workers.**
- **Increased awareness of cyber security issues.**
- **Support for the development of a technical class capable of maintaining the next generation of smart grid technologies.**



Workforce Training Program Timeline:

- **The solicitation was issued on 9/21/2009**
- **Agreements were awarded between April 2010 and September 30, 2010.**
- **All projects are not to exceed 3 years; making a targeted project end date of September 2013.**



Workforce Training Program Statistics:

Total Awards: 52 awards

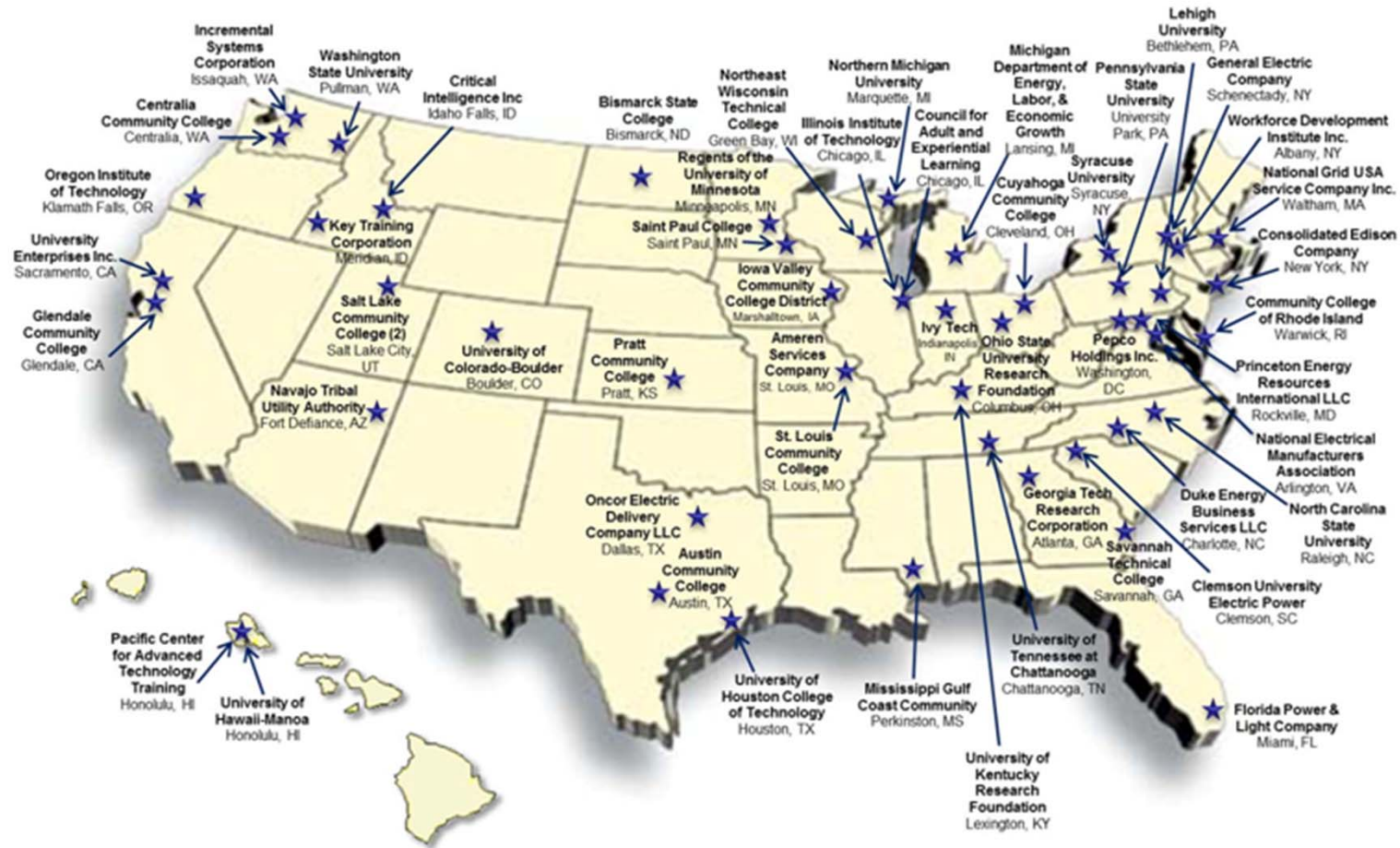
Total Dollar Amount of Awards: \$98,927,504

Topic A: 22 awards Totaling \$13,849,875

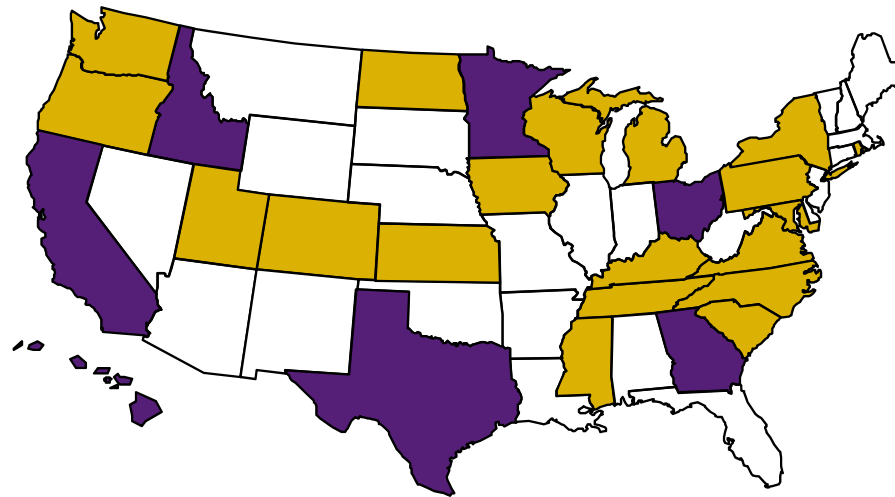
Topic B: 19 awards totaling \$54,820,263

STEPS: 11 awards totaling \$27,646,317

Workforce Development Training Projects



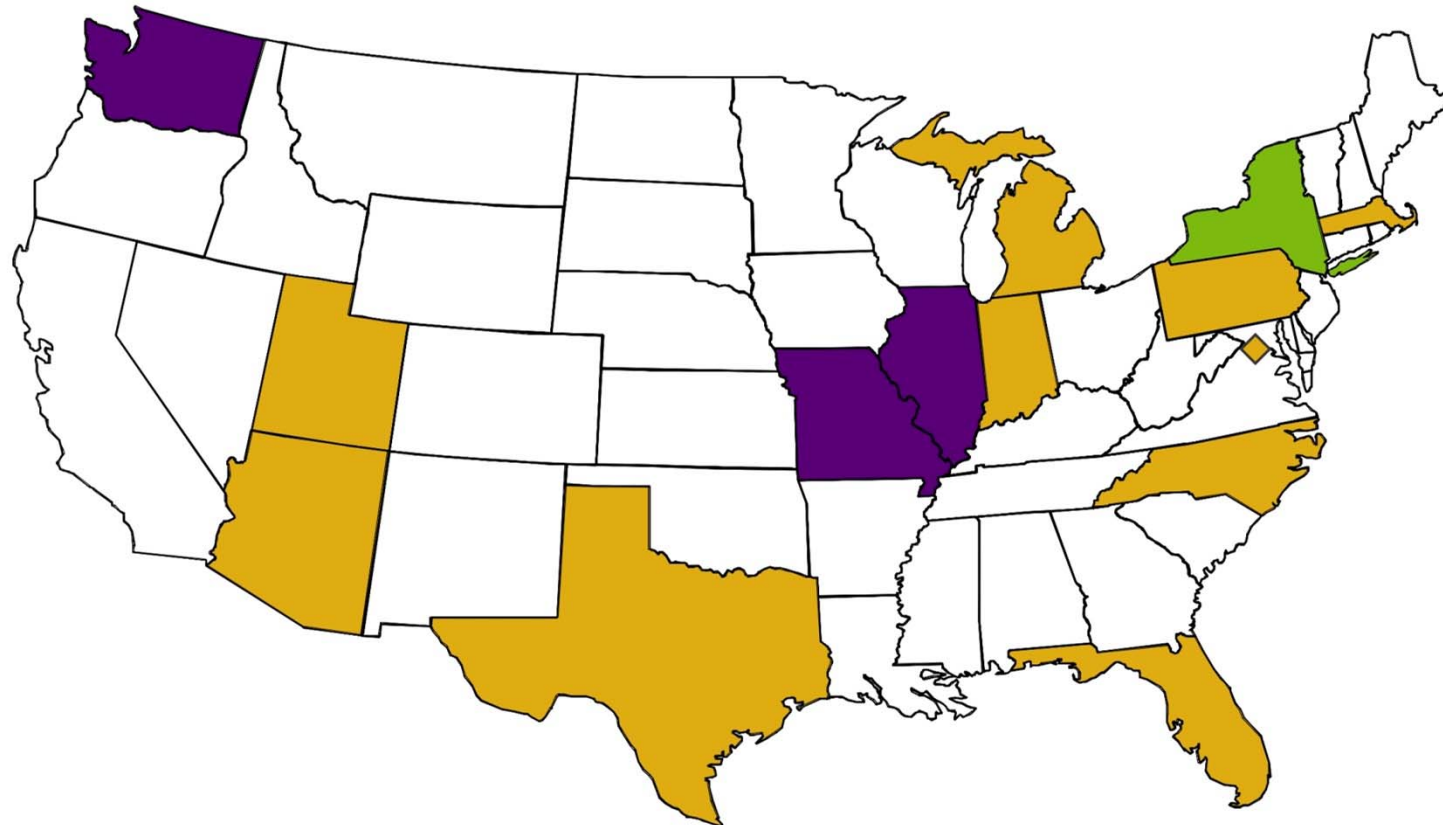
Topic A and STEPS



Number of Projects in State



Topic B



Number of Projects in State





Overall Status:

Phase 1:

- Completion of Benefits and Metrics Plan
- Completion of Project Management Plan.

Phase 2:

- Project Task Implementation

- As of the 1/31/11, 45 of the 52 projects had proceeded to Phase 2.
- The project scopes and objectives vary and have unique milestones and implementation schedules.



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