

**DOCKET**  
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# PIER COST SHARE ACTIVITIES

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California Energy Commission

## PUBLIC INTEREST ENERGY RESEARCH (PIER) PROGRAM

- Established as a Utility Funded R&D Program in 1997 by AB1890
- \$86M Annual Budget
- Over \$400M in Active Projects
- Strong Emphasis on Partnerships
  - Federal and State Agencies
  - National Laboratories
  - Universities
  - Utilities
  - Private Researchers



2



## RESEARCH POWERS THE FUTURE

### Research to meet our Energy Policy Goals

- Greenhouse Gas Emission Reduction
- Renewables Portfolio Standard
- Zero Net Energy – Smart Communities
- Alternative Fuels – Electric Fuel Vehicles
- Enable Ratepayer Participation to Reduce Costs
- Create Jobs in Clean Energy Economy



ARRA Projects form Foundation for California's Clean Energy Economy

3



## LEADING THE WAY

### PIER Utility Grid Research over the last 10 years

- Synchrophasors
- Energy Storage
- Renewable Integration
- Demand Response
- Grid Security
- Electric Vehicles Integration
- Other areas of Smart Grid



Our Research has made California the leader in Smart Grid

4



## AMERICAN RECOVERY & REINVESTMENT ACT

FOA 36 – Smart Grid Demonstrations  
FOA 58 – Smart Grid Investment Program

### \$4.5 Billion in Smart Grid Research:

- Demand Response
- Grid Security
- Energy Storage
- Renewable Integration
- Distribution Automation
- Phasor Deployment
- PHEV Integration



5



## GOLDEN STATE LEVERAGE

### Support California based proposals to the DOE that...

- Compliment California Energy Policy
- Provide Ratepayers Benefits
- Develop a Clean Energy Workforce
- Expand California Cleantech Businesses Globally

### Energy Commission provided

- Letters of Support
- Co-funding
- Technical Insights and feedback



6



## WHY SUPPORT ARRA PROJECTS?

- Accelerate Smart Grid Implementation
- Modernize the California Grid
- Share Lessons Learned with other California Based Projects
- Identify Gaps in Research
- Identify needs for and help coordinate Standards Development
- ARRA Projects form the Foundation for California's Clean Energy Economy
- PIER Supported projects will help California meet the State's Energy and Environmental Policy Objectives

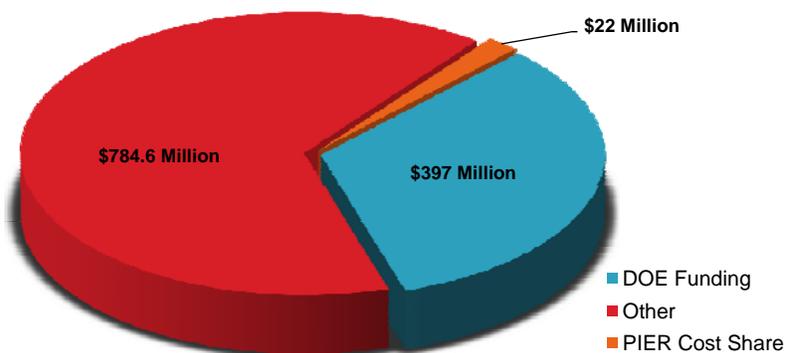


7



## PIER Supported Projects

- PIER Allocation - \$22 Million
- PIER Supported projects Will Help California Meet The State's Energy And Environmental Policy Objectives



8



## FOLLOW-UP QUESTIONS

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