



U.S. Department of Energy
Energy Efficiency and Renewable Energy

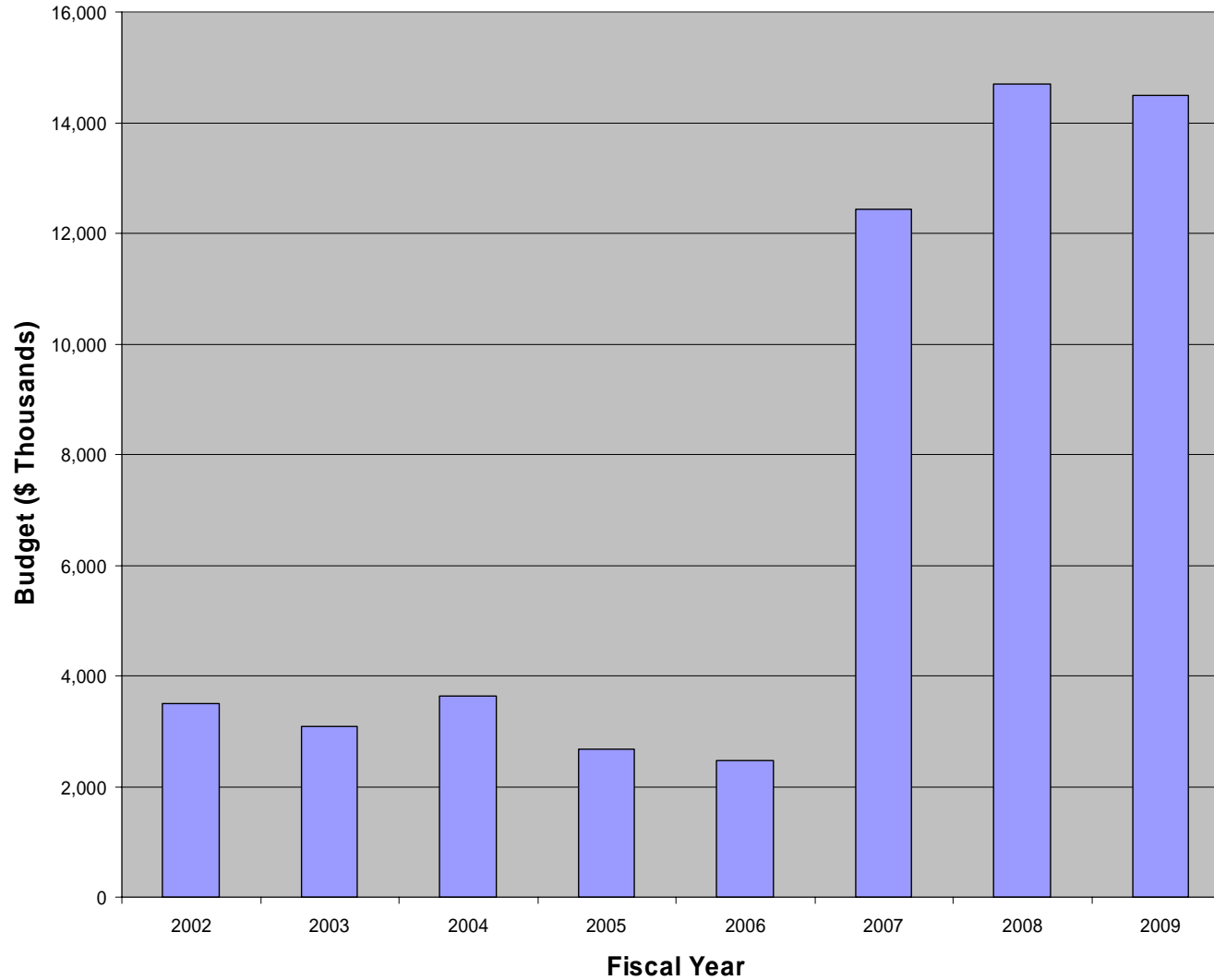
Program Areas





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Systems Integration Budget History





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Research Areas

- Interconnection Issues
 - Existing & New Transmission
 - ATC & Wind
 - Conditional Firm
- Operations & Reliability
 - Variability & Uncertainty
 - Voltage Management
 - Dynamic Stability



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Research Areas

- **Markets**
 - Market structure & operational costs
 - Capacity Costs & Value
 - Displacement Costs & Value
- **Education & Outreach**
 - University Research Activities
 - Training Engineers & Operators on Wind
 - Educating Decision Makers



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Outreach & Education

Outreach activities include the creation and dissemination of information for use by the electric power industry as well as the general public. Educational activities are centered on creating programs to train future engineers, operators and others that will operate and maintain electric energy systems with ever increasing levels of wind energy.



- **Engineering Program Development**
Fund the creation of courses/programs for wind energy at the university level.
- **Trade School Program Development**
Fund the creation of courses/programs for wind energy at the university level.
- **Policy Outreach**
Create targeted informational materials for National, State, and Local policy and trade organizations to publish for their membership.



PSERC



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Current Activities

- PSERC
 - Funding Wind Integration Research
 - In concert with Office of Electricity
 - \$200k – \$600k
- Education Grants
 - Research & Curriculum Development
 - Engineering & Trades
 - \$1M – \$3M
 - www.grants.gov