



FY07 DOE Energy Storage Program  
PEER Review

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# Mission

Develop advanced electricity storage and PE technologies, in partnership with industry, for modernizing and expanding the electric supply. This will improve the quality, reliability, flexibility and cost effectiveness of the existing system.

Help create an energy storage industry

Make energy storage ubiquitous





# ESS Program Makeup

## ESS Base Program

- CEC/DOE Data Acquisition and Project Support
- NYSERDA/DOE Data Acquisition and Project Support
- BPA ETO based STATCOM Project
- ETO Development Project
- Boeing Superconducting Flywheel
- ACONF Coast Guard Project
- Iowa Stored Energy Project
- Electrolyte Research





## ESS Program Makeup cont.

### Congressionally Directed Programs

- University of Missouri-Rolla – Grid Modernization

### Carryover Earmark Projects

- EEI - BiPolar Ni-MH Battery Development
- Sprint - Storage for Telecommunications Apps.
- Emerson – Network Power
- Beacon Power – Frequency Regulation Plant Design
- Mead Westvaco - Research on Lead-Carbon Asymmetric Supercapacitors (FY05)





## ESS Program Makeup cont.

### SBIR

- Aegis Technology - PII
- Arkansas Power Electronic International – PII
- SemiSouth Laboratories - PI
- Solitronics - PI
- GeneSic Semiconductor Inc. – PI
- ADA Technologies Inc. – PI
- Giner Inc. - PI





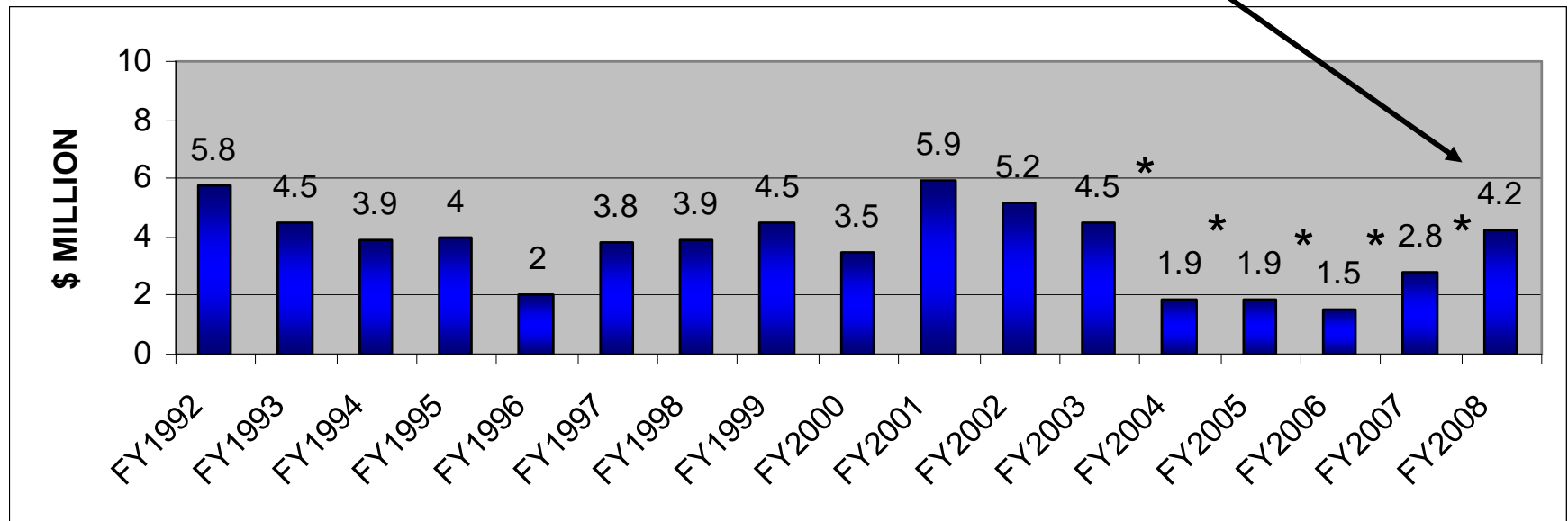
## Significant Events in FY07

- DOE Office of Science Energy Storage Workshop, April, 2007
- Completion of Beacon CEC and NYSERDA projects
- Successful Coast Guard test of ACONF System in Alaska
- BPA Condon ETO-STATCOM Project Initiated
- Completed two summers of Data Acquisition on AEP NAS Substation Project



# Energy Storage Systems Program Funding

FY08 Plan

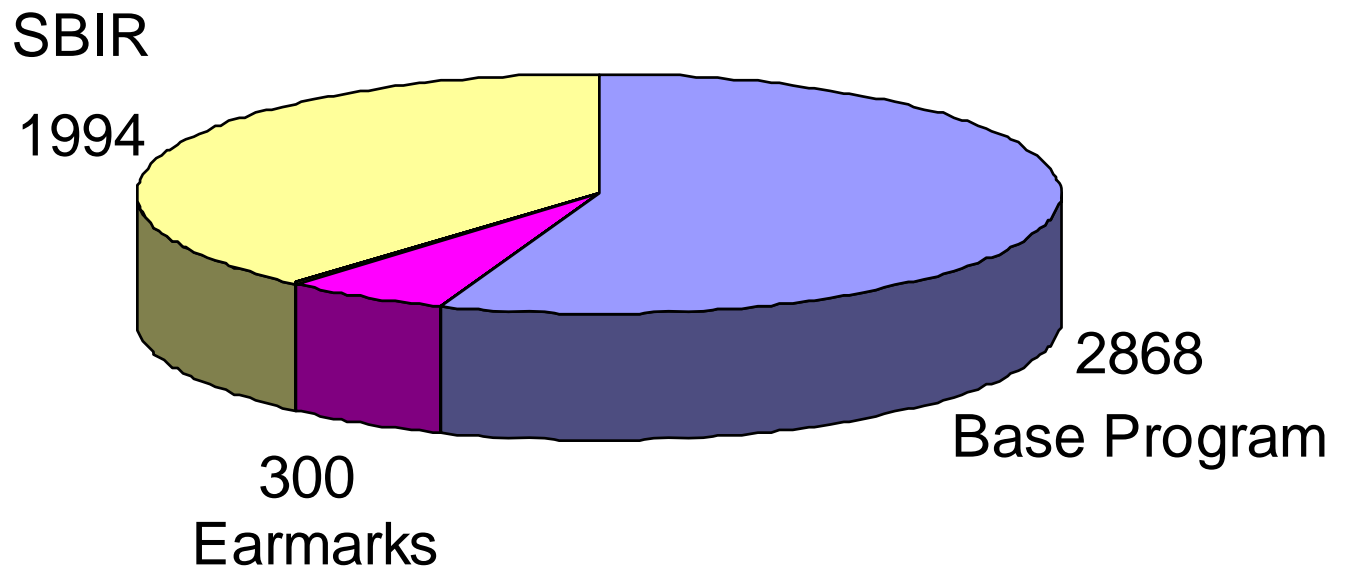


\* Earmarks removed





# FY07 ESS Funding \$ K







# Summary

- Continuing our strong working relationship with our partners
- Energy Storage Program evolving by adding more fundamental research
- FY08 proposed budget includes increase in basic research funding for energy storage and separate budget line for grid power electronics
- FY08 budget picture has great uncertainty
  - \$6M in House
  - \$20M in Senate
  - Continuing Resolution Probable

