

ARPA-E in The Energy Research Act of 2007

Pursuant to the recommendations of the Committee on Prospering in the Global Economy of the 21st Century, the Energy Research Act of 2007 creates a new research agency called ARPA-E: the Advanced Research Projects Agency – Energy. ARPA-E’s mission will be transformative, out-of-the-box research to break America’s addiction to oil and other scarce or nonrenewable fuels. They will be charged with creating brand-new energy technologies and strategies, all to ensure that America’s global economic competitiveness is not compromised by our energy needs in the coming decades. Key features of the Baucus ARPA-E are as follows:

Modeled after DARPA: ARPA-E takes its inspiration from the Defense Advanced Research Projects Agency, or DARPA. This Pentagon research office developed the Internet and stealth technology.

Independent: The bill creates ARPA-E outside of the Department of Energy, instead of inside the Department, to maintain the agency’s independence as it pursues new energy strategies.

Direct access, direct responsibility: The Director of ARPA-E will be appointed by and report directly to the President.

Small and elite: ARPA-E will be a small agency with a total of 250 people. A minimum of 180 would be technical staff. The director and four deputies would lead ARPA-E.

Engaged, expert staff: ARPA-E staff will be required to have a technical background. The agency would use the Experimental Personnel Authority designed for DARPA, enabling higher salaries and faster hiring than for typical Federal employees. To maintain an intense, innovative focus, technical staff would be limited to 3 to 4 years at the agency. Managers would be limited to 4 to 6 years. The director can give both groups extended terms of employment at his or her discretion.

Full funding: The Energy Research Act of 2007 recognizes the magnitude, importance and urgency of ARPA-E’s task, and provides appropriate funding as follows:

- FY2008: \$300 million
- FY2009: \$600 million
- FY2010: \$1.1 billion
- FY2011: \$1.5 billion
- FY2012: \$2 billion

Flexible contracting: For contracts, the agency would use the DARPA procedure, which allows more flexible contracting arrangements than are normally possible under the Federal Acquisition Regulations. To ensure that ARPA-E would conduct innovative research, 75 percent of research projects initiated by ARPA-E would not be peer reviewed.

Real incentives: ARPA-E would be authorized to award cash prizes to encourage and accelerate energy research accomplishments.

Room for growth: The Energy Research Act of 2007 requires a report by the end of fiscal year 2008 on whether ARPA-E needs its own, in-house energy research lab.