

ARPA-E's Legislative Father Bemoans Agency's Uncertain Future

By Gabriel Nelson

The Advanced Research Projects Agency-Energy, or ARPA-E, has already had a number of "life-or-death experiences."

And the division of the Department of Energy will continue to face hurdles on Capitol Hill until it can live up to a 50-year-old predecessor at the Pentagon that has spun off its research into stealth airplanes, the Internet and global positioning satellites, the former lawmaker who championed the agency on Capitol Hill said today.

Bart Gordon, who chaired the House Science Committee until he retired in 2010, said he still believes ARPA-E will follow in the footsteps of its namesake, the Defense Advanced Research Projects Agency, or DARPA. It was Gordon, a Tennessee Democrat, who shepherded the new agency's authorization through Congress in 2007 on the recommendations of the National Academy of Sciences.

Without a signature achievement on the marketplace, "it'll be a challenge" to overcome those political challenges and keep funding flowing toward the new agency, Gordon said in an interview after an event today in Washington, D.C.

"There will be an energy equivalent of the Internet, if you give it enough time," he said.

Since its formation at the start of the Obama administration, the incubator for high-tech projects has become a favorite of clean technology advocates for its work with technologies that could shake up the energy industry, such as advanced biofuels and improved batteries for electric cars.

But the agency has had multiple close calls since control of the House changed hands. High-ranking Republicans such as Rep. Ralph Hall of Texas, the new Science chairman, dislike that President Obama has put more federal cash toward clean energy programs.

The committee's 2012 agenda kicked off last month with a hearing in which Hall and his deputies suggested that ARPA-E's \$275 million budget has crowded out other programs in the \$4.5 billion budget for the Office of Science.

That office, which puts most of its money toward basic energy sciences and research into fossil fuels and nuclear reactors, grew by 0.6 percent for the current fiscal year and fell by 6 percent last year, Republicans note, even as funding for ARPA-E grew by 260 percent and then by another 53 percent this fiscal year (E&E Daily, Jan. 25).

"It is by no means assured that ARPA-E will continue," Gordon said during today's event, which was held by the Information Technology and Innovation Foundation, or ITIF. "Funding can be taken out. Another president could not like [the agency]."

During the event, panelists compared ARPA-E to DARPA, saying that the energy industry and defense spending will require different approaches. While the federal government is the sole purchaser for many military products, the success of energy technologies will depend on their adoption by the private sector.

ARPA-E has awarded grants in about a dozen topic areas, many of which have snappy acronyms to suit their goals. Among them is PETRO, which stands for "Plants Engineered to Replace Oil," and BEEST, short for "Batteries for Electrical Energy Storage in Transportation." Others deal with the smart grid, carbon capture, solar panels and the energy efficiency of buildings.

Gordon, who is now working on K Street as a partner at K&L Gates LLP, said the next policy challenge for ARPA-E will be figuring out a way to hand off its projects to venture capitalists or find funding elsewhere within the federal government.

The agency will often need \$10 million or \$20 million to move toward the marketplace. Because universities and small businesses get a combined 60 percent of ARPA-E grants, the Small Business Administration's Small Business Innovation Research (SBIR) program could be one place to look, he said.

Others who spoke at today's event saw a place for ARPA-E, especially as an ideological debate plays out on Capitol Hill over the size of government and its role in responding to environmental and energy challenges.

"If we want to solve climate change and if we want to address foreign energy, there really is no other way to do it than innovation," ITIF President Robert Atkinson said. "We can't regulate our way there. We can't price our way there. We can't mandate our way there. You can't solve climate change that way, because there are lots and lots of countries in the world that will never, ever adopt clean technology until the price is cheaper than fossil fuels."

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