Good morning. I’d like to thank this panel of expert witnesses for being here today. I’d also like to welcome the other members of this subcommittee to our first hearing. In my district, and many around the country, energy means cutting-edge science and family-supporting jobs, and there is much work to be done to ensure the U.S. remains a leader in this industry. I look forward to working with members from both sides of the aisle to do just that.

Today, we are here to discuss the progress and future of the Advanced Research Program Agency-Energy, or ARPA-E. To understand the success of this program, I think it’s helpful for us to better understand how it started. Almost 15 years ago, a bipartisan group of Members from the House and Senate, worried that the U.S.’s competitiveness in science and technology development might be falling behind, commissioned a report from the National Academies to provide suggestions to the federal government on how to maintain its leadership in these critical fields. The report, entitled Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future, indicated that the U.S. was quickly losing its scientific and technological advantages.

One of its major recommendations was the creation of a new program within the Department of Energy modeled after the Defense Advanced Research Program Agency (DARPA) within the Department of Defense, whose work was essential to the development of revolutionary innovations like GPS and the Internet. And so, ARPA-E was born – to ensure that the U.S. maintains its global competitiveness by pursuing high-risk, high-reward energy technology research and development projects. Our country’s heritage of innovation does not exist in a vacuum. We need to encourage innovation and paradigm-shifting discoveries in all sectors of the economy – and especially in energy. Or as the National Academies put it: “Throughout history, the United States has consistently demonstrated that its greatest resource is its people and their talent for innovation and leadership. There has never been a greater need or opportunity for American leadership than that posed by the challenge of achieving dramatic innovations in energy technology.” ARPA-E is a critical component of spurring that type of innovation.

Since Congress first authorized this program in 2007, largely due, I understand, to the hard work of this Committee under its Chairman at the time, Bart Gordon, ARPA-E projects have led to 71
new companies, 109 projects partnered with other government agencies to further development, and 136 projects that have garnered more than $2.6 billion in private sector funding.

Among these exciting projects is one right in my district at Westinghouse, located in Cranberry Township. This project aims to address known issues that face the nuclear power industry today to ensure that this valuable resource continues to provide carbon-free, reliable electricity to the grid. A micro-reactor design made of advanced materials will be modelled and component samples will be fabricated and tested with the ultimate goal of significantly reducing the costs and schedule for building a new plant.

I am pleased with the progress of this project and many others supported by ARPA-E, and I look forward to the testimony from our witnesses here today to discuss issues and ideas Congress should consider as we aim to further the success of this program.