Highlights of the “Enabling Innovation for Science, Technology, and Energy in America Act”

The Department of Energy (DOE) is the lead federal agency supporting fundamental scientific research for energy and the DOE’s Office of Science (SC) is the nation’s largest support of basic research in the physical sciences. This bill prioritizes fundamental science and basic research at the Department of Energy by providing $4.7 billion in FY14, a 1.7 percent increase in spending above current levels and one percent above the House-passed FY14 Energy & Water Appropriations bill. The legislation prioritizes transformative energy science activities that drive innovation and long-term economic growth, as well as promotes American leadership in discovery science research.

Department of Energy Office of Science Mission: The legislation codifies DOE’s Office of Science mission of the delivery of scientific discoveries, capabilities, and major scientific tools to transform the understanding of nature and to advance the energy, economic, and national security of the United States. This mission was included in the 2010 House-passed America COMPETES Act, but not enacted into law.

Light Source Leadership Initiative: The Department of Energy is the steward of world-class accelerator-based x-ray light sources. Light sources are the tools for revolutionary experiments in chemistry, physics, biology, and materials science. They expand the scientific frontiers and advance energy science for broad societal gain. The legislation establishes an initiative to sustain and advance global leadership of light source user facilities.

American Super Computing Leadership: The advancement of computing technology has enabled revolutionary breakthroughs in all scientific disciplines. Previous federal investments in basic research have pushed forward technology that is now commonplace throughout daily life, such as desktop computers and consumer devices. The next generation of supercomputing is the pursuit of “exascale” systems, or systems that are a thousand times faster than today’s leading computers. The legislation:

- Encourages ongoing support of applied mathematics and computational science activities to complement advanced computing systems.

Discovery Science: The Office of Science is the Federal government’s primary supporter of facilities that explore the most fundamental questions about the nature of the universe. The legislation directs DOE to revitalize U.S. global leadership in discovery science by developing a plan to steward national and international leadership in underground science, with a focus on development of scientific user facilities that enable study of the frontiers of particle physics.

Reducing Red Tape and Increasing Transparency: DOE’s National Laboratories are a vital American resource with a storied history dating back to the Manhattan Project. While times have drastically changed from the Labs’ previous Cold War-driven mission, they remain central to the American scientific enterprise. In order to reduce government red tape and regulations, while increasing transparency, the legislation:

- Directs the Secretary of Energy to work with other applicable agencies to reduce costly and duplicative workplace regulations of the National Labs.
- Reduces DOE micromanagement of Lab technology transfer agreements.
- Requires DOE to make basic spending and financial data publicly available.