

Department of Energy Announces up to \$40 Million in Available Funding for Next Generation Nuclear Plants

WASHINGTON, DC – U.S. Energy Secretary Steven Chu announced today that up to \$40 million in funding will be available from the Department of Energy to support design and planning work for the Next Generation Nuclear Plant (NGNP). Next Generation Nuclear Plants will use new, high temperature, gas-cooled reactor technologies to integrate multiple industrial applications in one plant or facility, such as generating electricity while refining petroleum. NGNP will extend the application of nuclear energy into the broader industrial and transportation sectors, reducing fuel use and pollution and improving on the inherent safety of existing commercial light water reactor technology.

Support for new developments in nuclear technologies will be critical to meeting our energy, climate and security goals for years to come, said Secretary Chu. Next Generation Nuclear Plants hold the promise of safe, cost-effective, zero-emissions energy for major U.S. industries that are some of the largest energy consumers in the country. By integrating multiple industrial processes, this next generation technology will offset imported fossil fuels, reduce pollution and create tens of thousands of quality jobs in industries across America.

About 40 percent of the nation's greenhouse gas emissions come from industrial processes in high energy consuming sectors. With NGNP systems, the process heat or steam generated by the high temperature nuclear reactors will be used to power applications like advanced highly efficient turbines, manufacture plastic components from raw materials, or produce ammonia for fertilizer. By integrating energy generation and production operations, NGNP technologies will allow high energy consuming industries and sectors like petroleum, plastic and biofuels producers to reduce carbon dioxide emissions, limit their need for fossil fuels, and become more competitive.

The NGNP project is being conducted in two phases with Phase 1 comprised of research and development, conceptual design, and development of licensing requirements, and Phase 2 comprised of detailed design, license review, and construction that would lead to a demonstration plant by 2021 that is capable of producing hydrogen, electricity, and/or process heat. The Funding Opportunity Announcement (FOA) being released today will support the following Phase 1 activities: the development of cost-shared conceptual design(s), cost and schedule estimates for demonstration project completion and a business plan for integrating Phase 2 activities. DOE will use the information and data gathered in Phase 1 as a basis for determining whether the project should continue to Phase 2.

Applications for the FOA are due November 16, 2009. Applications must be submitted through <https://www.fedconnect.net/FedConnect/default.htm> to be considered for award. DOE expects to make up to two awards in February 2010 with each supporting a unique reactor concept.