

Press Release News Media Contact: (202) 586-4940 For Immediate Release: March 27, 2019

U.S. Department of Energy Further Advances Nuclear Energy Technology through Industry Awards of \$19 Million

WASHINGTON, D.C. - The U.S. Department of Energy (DOE) today announced funding selectees for multiple domestic advanced nuclear technology projects. Four projects in two states will receive varying amounts for a total of approximately \$19 million in funding. The projects are cost-shared and will allow industry-led teams, including participants from federal agencies, public and private laboratories, institutions of higher education, and other domestic entities, to advance the state of U.S. commercial nuclear capability.

The awards are through the Office of Nuclear Energy's (NE) funding opportunity announcement (FOA) <u>U.S. Industry Opportunities for Advanced Nuclear Technology Development</u>. This is the fourth round of funding through this FOA. The <u>first group</u> was announced on April 27, the <u>second group</u> was announced on July 10, and the <u>third group</u> was announced on November 13, 2018. The total of the four rounds of awards is approximately \$117 million. Subsequent quarterly application review and selection processes will be conducted over the next four years.

The Trump Administration is committed to reviving and revitalizing the U.S. nuclear industry, and these private-public partnerships are needed to help successfully develop innovative domestic nuclear technologies," said U.S. Secretary of Energy Rick Perry. "There are a lot of U.S. companies working on technologies to make the next generation of nuclear reactors safer and highly competitive, and partnerships will be key to accomplishing this goal."

The solicitation is broken into three funding pathways:

1.First-of-a-Kind (FOAK) Nuclear Demonstration Readiness Project pathway, intended to address major advanced reactor design development projects or complex technology advancements for existing plants which have significant technical and licensing risk and have the potential to be deployed by the mid-to-late 2020s.

2. Advanced Reactor Development Projects pathway, which allows a broad scope of proposed concepts and ideas that are best suited to improving the capabilities and commercialization potential of advanced reactor designs and technologies.

3. Regulatory Assistance Grants pathway, which provide direct support for resolving design regulatory issues, regulatory review of licensing topical reports or papers, and other efforts focused on obtaining certification and licensing approvals for advanced reactor designs and capabilities.

The following project was selected under the **FOAK Nuclear Demonstration Readiness Project** pathway:

 eVinci (TM) Micro Reactor Nuclear Demonstration Unit Readiness Project – Westinghouse Electric Corp LLC (Cranberry Township, PA) is for Westinghouse and its team to prepare for the Nuclear Demonstration Unit (NDU) of the eVinci micro reactor through design, analysis, testing and licensing to manufacture, site and test the NDU by 2022

DOE Funding: \$12,879,797; Non-DOE: \$15,675,350; Total Value: \$28,555,147

The following two projects were selected under the **Advanced Reactor Development Projects** pathway:

• Passive Radio Frequency Tags and Sensors for Process Monitoring in Advanced Reactors – This work proposed by Dirac Solutions Inc. (Pleasanton, CA) to develop and commercialize next generation specialized wireless sensing and monitoring passive and semi-passive tags integrated with sensors for the remote process monitoring of advanced reactors.

DOE Funding: \$1,000,000; Non-DOE: \$250,000; Total: \$1,250,000

• *Modeling and Simulation Development Pathways to Accelerate KP-FHR Licensing* – Under this proposal, Kairos Power, LLC (Alameda, CA) will bring forward in the schedule critical advanced modeling and simulation capability through the DOE NEAMS program.

DOE Funding: \$5,000,000; Non-DOE: \$5,112,519; Total Value: \$10,112,519

• Technology Pre-Application Licensing Report on the Development of a Mechanistic Source Term Methodology for the Kairos Power Fluoride Cooled High Temperature Reactor (KP-FHR) – Kairos Power, LLC (Alameda, CA) will develop a mechanistic source term for the KP-FHR design including consideration of radionuclides generated and transported in the fuel particle and the barriers to release for licensing basis event analyses.

DOE Funding:\$500,000; Non-DOE: \$203,957; Total Value: \$703,957

NE funds research, development, and demonstration projects to reduce the risk and cost of advanced nuclear technologies, and to improve nuclear energy's contribution to meeting the nation's economic, energy security, and environmental challenges.

More information on the Office of Nuclear Energy and its programs can be found here.