

April 23—April 27, 2018

Energy @ Work

Secretary of Energy Rick Perry and Chairman Francois Jacq of France's CEA Sign Statements of Intent on Advanced Fast Neutron Sodium-Cooled Reactors and Artificial Intelligence



Secretary Rick Perry and François Jacq, Chairman of France's Alternative Energies and Atomic Energy Commission (CEA), seized the occasion of President Trump's Head-of-State welcome for French President Emmanuel Macron to sign two Statements of Intent (SOIs). The signings usher in a new era of DOE-CEA research and development (R&D) cooperation with enhanced collaboration in the area of advanced fast neutron sodium-cooled nuclear reactor technologies and new collaboration in the area of artificial intelligence.

Together, both countries will work on artificial intelligence technologies to better transform data and information into knowledge and expertise to promote our

respective goals.

To do this, the two partners are building on a longstanding, technical U.S.-France cooperation in civil nuclear energy and high performance computing by enhancing strategic and technical exchanges to drive innovation.

"Research cooperation between DOE and CEA in the areas of



artificial intelligence, civil-nuclear power and nuclear security serves as an important pillar of innovation in the world today," said Secretary Perry.

Under Secretary Paul Dabbar visits JLAB, CalTech, and other sites in Southern California swing



Under Secretary Dabbar got to visit NASA's Jet Propulsion Laboratory this week and took a <u>picture with their famous peanuts</u>. Others who have been pictured with the peanuts include actors from The Big Bang Theory and Star Trek.

The Undersecretary's team also got to see National Lab innovations that were integrated into the Mars 2020 Rover. Other stops on the trip included CalTech's Center for the Autonomous Systems and Technologies, where they saw the ambulance drone project, the Grid Tech

Technologies, where they saw the ambulance drone project, the Grid Tech Learning Center Lab, and the Linde + Robinson Lab where they viewed the solar telescope.

Energy in the News

DOE announces \$14.5 million to advance geothermal energy development

Daily Energy Insider (Randolph) reported that DOE "announced Monday up to \$14.5 million in new funding to advance geothermal energy development, focusing on geothermal drilling." According to the article, the "Efficient Drilling for Geothermal Energy (EDGE) funding opportunity announcement (FOA) will cover three topics areas: early-stage R&D projects to reduce delays in drilling operations typically referred to as non-drilling time; early-stage R&D projects in drilling technologies that improve penetration rates for drilling geothermal wells; and approaches and models to accelerate the transfer of geothermal drilling and related technologies from the laboratory into the real world by focusing on building partnerships that will increase adoption of nascent technology and improving knowledge transfer in the geothermal industry." Algos Online (Kutepatil) reported that "Daniel Simmons, Principal Deputy Assistant Secretary for Energy Efficiency and Renewable Energy affirmed that advancing R&D activities in the geothermal energy market will in turn help in harnessing the heat underneath to expand the

domestic energy resources." According to the article, "he further added that geothermal energy is a quite reliable renewable energy source with firm & flexible operations that offer a gamut of essential services which would significantly contribute to the nation's grid stability & resiliency." Renewables Now also reported on the story.

Developing countries back Sec. Perry energy plans

Real Clear Energy (Summers) reported that Sec. Perry "has been adamant that the U.S. and other developed nations have a responsibility to pursue renewable energy in a way that will not compromise efforts to expand access to electricity in emerging economies." The article indicated that "at an energy summit in March, Perry called any policy which hampers universal electrification in favor of avoiding fossil fuels 'immoral.'" As part of his "efforts to find an approach that reduces emissions while still ensuring widespread access to affordable electricity," the article noted, Sec. Perry "has proposed a global alliance of countries interested in developing low-emission fossil fuel projects." According to the article, Sec. Perry's idea "has engendered its share of pushback from environmental lobbyists," but his position "has also gathered significant support, both within the United States and abroad." The White House, the article explained, "wants to steer the UN Green Climate Fund in the direction of high-efficiency plants employing carboncapture technology." The article pointed out that "numerous African countries, including Botswana, Tanzania, South Africa, and Nigeria, are reportedly interested in joining the fossil fuel alliance Secretary Perry proposed."