

## CONGRESS

# Lawmakers move on advanced nuclear technology bills

*The 115th Congress began with a push for more nuclear R&D.*

January seems to have been Advanced Nuclear Technology Month. In addition to NuScale Power's submittal of a design certification application for its small modular reactor to the Nuclear Regulatory Commission, the NRC's docketing of an early site permit application from the Tennessee Valley Authority for SMRs at the Clinch River site, and Terrestrial Energy's announcement of its intention to license its Integral Molten Salt Reactor (NN, Feb. 2017, pp. 15 and 17), there was also a good deal of legislative activity surrounding the subject on Capitol Hill.

On January 23, the House of Representatives unanimously approved the Advanced Nuclear Technology Development Act (H.R. 590), a bipartisan effort to spur civilian research and development of advanced nuclear reactors in the United States. Sponsored by Rep. Bob Latta (R., Ohio) and cosponsored by Reps. Jerry McNerny (D., Calif.), Mike Doyle (D., Pa.), Chuck Fleischmann (R., Tenn.), Richard Hudson (R., N.C.), and Paul



Latta

Tonko (D., N.Y.), the bill was received in the Senate the following day and was referred to the Committee on Commerce, Science, and Transportation. A nearly identical version of the bill had been introduced in the House in April 2016. That version passed in September (NN, Oct. 2016, p. 32) but was not taken up in the Senate before Congress adjourned for the year.

"Advanced nuclear technology will play an important role in helping the U.S. maintain its role as a global energy leader," Latta said in a press release. "However, regulatory ambiguity and uncertainty threaten the continued development of this source of clean, reliable power. Providing guidance and a licensing framework for the nuclear industry will aid the efforts of the private sector to implement cutting-edge technology that is safe and effective."

McNerny added: "Our nation must continue as the leader in clean energy innovation and technologies. As the U.S. moves

toward a low-carbon, sustainable energy economy, nuclear energy has the potential



McNerny

to play a role in meeting state and national goals. The Advanced Nuclear Technology Development Act provides direction and a framework for industry experts that are essential in promoting new and innovative reactor technologies that are safe and reliable."

H.R. 590 would require the Department of Energy and the Nuclear Regulatory Commission to sign a memorandum of understanding to share technical expertise, computer modeling resources, and DOE facilities in order to support the evolution of next-generation reactor technologies. In addition, it would require the NRC to submit to Congress, within one year of enactment, a plan for developing "an efficient, risk-informed, technology-neutral framework for advanced reactor licensing."

According to the bill, the NRC's plan must include an evaluation of, among other things, "options to expedite and streamline the licensing of advanced reactors, including opportunities to minimize the time from application submittal to final NRC licensing decision and minimize the delays that may result from any necessary amendments or supplements to applications," as well as "options to provide cost-sharing financial structures for license applicants in a phased licensing process." The plan, which is to include cost estimates, budgets, and specific milestones, would be due by September 30, 2019.

### Related legislation

On January 24, the House unanimously approved the Department of Energy Research and Innovation Act (H.R. 589). Sponsored by Rep. Lamar Smith (R., Texas) and cosponsored by 20 colleagues, including Reps. Eddie Bernice Johnson (D., Texas), Randy Weber (R., Texas), Randy Hultgren (R., Ill.), and Zoe Lofgren (D., Calif.), this measure would provide policy direction to the DOE on basic science re-

search, nuclear energy R&D, research coordination and priorities, and reforms designed to streamline the management of the DOE's national laboratories.



Smith

H.R. 589 incorporates language from seven pieces of legislation passed by the House in the previous Congress, including the Nuclear Energy Innovation Capabilities Act (NEICA). Based on NEICA, Title IV of H.R. 589 would authorize nuclear R&D activities at the DOE and would combine the strengths of the national labs, universities, and the private sector in a joint innovation initiative, according to a press release from the House Committee on Science, Space, and Technology. The bill would also provide a timeline for the DOE to complete a research reactor facility that would enable proprietary and academic research to develop supercomputing models and design next-generation nuclear energy technologies, the press release stated.

"America must maintain [its] nuclear capabilities and continue to develop cutting-edge technology here at home," said Weber, sponsor of NEICA, in the



Weber

press release. "Without the direction provided in Title IV, we'll continue to fall further and further behind, losing the ability to develop innovative nuclear technology and be left importing next-generation reactor designs from overseas. Title IV will maintain America's capability to influence security and proliferation standards around the world as more developing nations look to nuclear energy to grow their economies."

H.R. 589 was received in the Senate on January 30 and was referred to the Committee on Energy and Natural Resources. Also in the Senate, on January 11, Sen. Mike Crapo (R., Idaho) brought back the upper chamber's version of NEICA, which he had originally introduced in January 2016 and which had been added as an amendment to the ultimately unsuccessful Energy Policy Modernization Act (NN, Mar. 2016, p. 33). Cosponsors of the reintroduced bill include Sens. Cory Booker (D., N.J.), Dick Durbin (D., Ill.), Orrin Hatch (R., Utah), Lisa Murkowski (R., Alaska), Jim Risch (R., Idaho), and Sheldon Whitehouse (D., R.I.).