

SENATE

Bipartisan bill aims to boost U.S. nuclear industry

The Nuclear Energy Leadership Act calls for more action from the DOE in support of advanced nuclear energy goals.

On September 6, Sens. Lisa Murkowski (R., Alaska) and Cory Booker (D., N.J.) introduced S. 3422, the Nuclear Energy Leadership Act (NELA), bipartisan legislation intended to reestablish U.S. leadership in nuclear energy by launching public-private partnerships between the federal government, research institutions, and industry innovators. It will also promote education initiatives, workforce development, and nuclear science training. Cosponsors of the bill include Sens. Shelley Moore Capito (R., W.Va.), Chris Coons (D., Del.), Mike Crapo (R., Idaho), Dick Durbin (D., Ill.), Joe Manchin (D., W.Va.), James Risch (R., Idaho), and Sheldon Whitehouse (D., R.I.). The bill has been referred to the Senate Committee on Energy and Natural Resources, which Murkowski chairs.



Murkowski

Booker

“Nuclear power provides clean, safe, efficient, flexible, and reliable power to American families and businesses, but we have only scratched the surface of its immense potential,” Murkowski said in a press release. “Our bipartisan bill will help rejuvenate the U.S. nuclear industry by providing the tools, resources, and partnerships necessary to drive innovation in advanced reactors. I thank my colleagues for joining me in sponsoring this timely measure to create American jobs and restore our global leadership on nuclear technologies.”

Among other directives, NELA would create a pilot program for at least one long-term power purchase agreement between the Department of Energy and a utility to buy electricity generated by a commercial nuclear reactor. According to the bill’s text, the secretary of energy “shall give special consideration to power purchase

agreements for first-of-a-kind or early deployment nuclear technologies that can provide reliable and resilient power to high-value assets for national security purposes . . . especially in remote off-grid scenarios or grid-connected scenarios.” The deadline for the DOE to enter into such an agreement is December 31, 2023.

The new legislation would also extend the maximum length of federal power purchase agreements from 10 to 40 years, a change that the Nuclear Energy Institute considers crucial. “This is important because the larger upfront investments in nuclear reactors generally mean they need more than 10 years before they can begin to realize a profit,” NEI stated in a press release on the bill’s introduction. “The shorter timespan effectively locks nuclear power out of power purchase agreements with the federal government.”

In addition, NELA would direct the DOE to establish specific advanced reactor research and development goals, a 10-year strategic plan that supports those goals, a fast neutron-capable research facility, a program to provide a minimum amount of high-assay low-enriched uranium to U.S. advanced reactor developers from DOE stockpiles until a long-term domestic supply is developed, and a university nuclear leadership program to meet the workforce needs of the industry, as well as those of the Nuclear Regulatory Commission and the National Nuclear Security Administration.

ANS President John Kelly said in a statement, “The American Nuclear Society applauds Senator Murkowski and Senator Booker on their introduction of the Nuclear Energy Leadership Act. NELA is an important step forward in supporting development of the U.S. advanced reactor technology portfolio and the nuclear engineering workforce.”