

S. 4897 “American Nuclear Infrastructure Act of 2020”
Section-by-Section

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

Sec. 1. Short title; table of contents.

This section cites this Act as the “American Nuclear Infrastructure Act of 2020” and provides the table of contents.

Sec. 2. Definitions.

This section defines the terms used in this Act.

TITLE I—REESTABLISHING AMERICAN INTERNATIONAL COMPETITIVENESS AND GLOBAL LEADERSHIP

Sec. 101. International nuclear reactor export and innovation activities.

This section requires the Nuclear Regulatory Commission (Commission) to coordinate all work of the Commission relating to: (1) nuclear reactor import and export licensing; and (2) international regulatory cooperation and assistance relating to nuclear reactors.

The Commission must also coordinate international activities with respect to the establishment of: (1) certain technical standards; (2) nuclear regulatory organizations and legal frameworks; and (3) exchange programs and training to other countries.

The Commission is authorized to establish the International Nuclear Reactor Export and Innovation Branch within the Commission’s Office of International Programs.

Sec. 102. Denials of certain domestic licenses for national security purposes.

This section defines “covered fuel” as enriched uranium that is fabricated into fuel assemblies by an entity that is: (1) owned or controlled by Russia or China; or (2) organized under the laws of Russia or China. The section prohibits the possession or ownership of covered fuel, unless the Commission specifically authorizes such possession or ownership.

The Commission shall notify the Secretary of Energy and Secretary of State within 30 days of receipt of an application to possess or own covered fuel. A license shall not be issued if the Secretary of Energy and Secretary of State jointly determine, within 180 days, that possession or ownership of covered fuel poses a threat to the national security of the United States.

Sec. 103. Export license requirements.

This section ensures advanced nuclear technologies approved for export are in compliance with nonproliferation standards.

TITLE II—EXPANDING NUCLEAR ENERGY THROUGH ADVANCED NUCLEAR TECHNOLOGIES

Sec. 201. Advanced nuclear reactor prizes.

This section authorizes the Secretary of Energy to award a prize in an amount equal to the regulatory fees assessed by the Commission for activities related to the first operating permit for an advanced nuclear reactor issued to a non-Federal entity.

The Secretary is authorized to make additional awards for the first advanced reactors that: (1) use isotopes derived from spent nuclear fuel as fuel for the reactor; or (2) operate flexibly to generate electricity or high temperature process heat for nonelectric applications.

Sec. 202. Report on unique licensing considerations relating to the use of nuclear energy for nonelectric applications.

This section directs the Commission to submit a report to Congress, not later than one year after the date of enactment, identifying unique licensing issues or requirements related to the: (1) flexible operation of nuclear reactors; (2) use of nuclear reactors for nonelectric applications; and (3) colocation of nuclear reactors with industrial plants or other facilities.

Nonelectric applications include hydrogen or other liquid and gaseous fuel or chemical production; water desalination and wastewater treatment; heat for industrial processes; district heating; energy storage; industrial or medical isotope production; and other applications as identified by the Commission.

Sec. 203. Enabling preparations for the demonstration of advanced nuclear reactors on Department sites.

This section excludes funding to support pre-application proceedings (or the review of an early site permit) associated with advanced nuclear reactor demonstrations that will be located on Department of Energy (Department) sites from the Commission's fee recovery requirements.

TITLE III—PRESERVING EXISTING NUCLEAR ENERGY GENERATION

Sec. 301. Nuclear reactor incentives.

This section directs the Administrator of the Environmental Protection Agency (Administrator) to: (1) establish a carbon emissions avoidance program to evaluate nuclear reactors projected to cease operations due to economic factors; and (2) award financial credits to certified nuclear reactors.

To certify a nuclear reactor, the Administrator must confirm that: (1) the reactor has a good safety record as determined by the Commission's Reactor Oversight Process; (2) determine that the reactor is projected to cease operations due to economic factors; and (3) determine that carbon emissions would increase if the reactor ceased operations and was replaced with other generation.

Certified nuclear reactors shall submit to the Administrator sealed bids that describe the price required to sustain operations and a commitment to provide a specific amount of electricity

generation. The Administrator shall establish a process for evaluating bids and selecting reactors to receive credits on a dollar per megawatt-hour basis over a four-year period. The amount of the credit is based on a certified facility's operating loss. A certified reactor may apply for a renewal for a subsequent four-year period in accordance with the application requirements.

The Administrator may not allocate credits after September 30, 2026.

This section also directs the Comptroller General of the United States to submit a report to Congress evaluating the effectiveness of the program with respect to avoiding carbon emissions while maintaining the reliability of the electric grid, the amount of ratepayer savings, and recommendations to renew or expand the credits.

The section authorizes the appropriation of such sums as necessary to carry out this section from fiscal year 2021 through 2026.

Sec. 302. Report on lessons learned during the COVID–19 public health emergency.

This section directs the Commission to submit a report to Congress, not later than 180 days after the date of enactment, which identifies processes, procedures, and other regulatory policies that were revised or suspended during the public health emergency. The report must also review if these actions compromised the ability of the Commission to fulfill its mission.

Sec. 303. Investment by allies.

This section allows certain foreign entities to receive a license described in section 103(d) or 104(d) of the Atomic Energy Act of 1954 (Public Law 83-703) (AEA) for a nuclear utilization facility if the Commission determines that issuing such license is not inimical to the common defense and security or the health and safety of the public. This section applies to an entity that is owned, controlled, or dominated by the government of a country that is a member of the Group of Seven as of November 25, 2020 (i.e., Canada, France, Germany, Italy, Japan, United Kingdom, and the United States) or the Republic of Korea; a corporation that is incorporated in those countries; or an alien who is a national of those countries.

**TITLE IV—REVITALIZING AMERICA'S NUCLEAR SUPPLY CHAIN
INFRASTRUCTURE**

Sec. 401. Advanced nuclear fuel licensing.

This section directs the Commission to enter into a memorandum of understanding (MOU) with the Department relating to the development of advanced nuclear fuels referred to as high-assay, low-enriched uranium (HALEU). The MOU shall require the Department and Commission to ensure that the Department has sufficient technical expertise to support the development of innovative advanced nuclear fuels and ensure the Commission has sufficient technical expertise to support the evaluation of advanced nuclear fuels. The MOU must also identify methods to improve the use of computers and software codes to model the behavior of advanced nuclear fuels. The MOU shall ensure the Department maintains facilities to enable deployment of innovative advanced nuclear fuels and ensure the Commission has access to such facilities.

This section also directs the Commission to submit a report to Congress, not later than 180 days after the date of enactment, identifying data needed to support the licensing of fuel facilities that can produce HALEU and associated HALEU transportation packages. The report must also identify necessary regulatory updates to support the licensing and certification of such facilities and to address nuclear nonproliferation considerations.

Sec. 402. National strategic uranium reserve.

This section directs the Secretary of Energy to establish, subject to the availability of appropriations, a program to operate a uranium reserve. The uranium reserve is established and operated using the authority granted to the Secretary by sections 53, 63, and 161g. of the Atomic Energy Act of 1954.

The purpose of the uranium reserve is to provide assurance of the availability of uranium recovered in the United States in the event of a market disruption and support strategic fuel cycle capabilities in the United States.

Uranium acquired through this program must be recovered: (1) at a facility that is licensed by the Commission or an Agreement State; (2) is not located on Tribal land; and (3) is not subject to an escalated enforcement action taken in response to a regulatory violation within the one-year period prior to the Secretary acquiring such uranium. The Secretary shall also exclude uranium that is recovered in the United States by an entity that is owned, controlled or organized under the laws of Russia or China, from the uranium reserve.

The Secretary must issue a Request for Information not later than 90 days after enactment of this Act to evaluate options for: (1) the operation and management of the reserve; (2) contractual mechanisms to acquire the uranium; and (3) the quantities, form, transportation, and storage of the reserve. The Secretary shall include a request for amounts for the Uranium Reserve in the Department's budget justification or an explanation why amounts are not requested.

Sec. 403. Report on advanced methods of manufacturing and construction for nuclear energy applications.

This section directs the Commission to submit a report to Congress, not later than 180 days after the date of enactment, on licensing and safety issues for innovative nuclear energy applications related to manufacturing and construction.

TITLE V—MISCELLANEOUS

Sec. 501. Nuclear energy workforce development.

This section reauthorizes the Integrated University Program through 2030. It also establishes a new traineeship subprogram to provide focused training to meet critical mission needs of the Commission and nuclear workforce needs relating to nuclear safety and tradeecraft.

Sec. 502. Annual report on the spent nuclear fuel and high-level radioactive waste inventory in the United States.

This section directs the Secretary of Energy to annually submit a report to Congress that describes the annual and cumulative payments made by the United States to the holder of a

standard contract due to a partial breach of the contract under the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101 et seq.) resulting in financial damages to the holder and the amount spent to reduce projected legal payments.

Section 503. Authorization of appropriations for superfund actions at abandoned mining sites on Tribal land.

This section authorizes appropriations for the Administrator to conduct removal actions under Superfund at abandoned mine land on Tribal land. It also authorizes appropriations for the Administrator to conduct remedial actions under Superfund at similarly located eligible non-National Priorities List sites and sites listed on the National Priorities list. This section also directs the Agency for Toxic Substances and Disease Registry to perform one or more health assessments at each eligible non-National Priority List site that is located on Tribal land.

The Administrator shall coordinate with the applicable Indian Tribe when selecting and prioritizing sites and carrying out removal and remedial actions.

Section 504. Nuclear closure communities.

This section authorizes the Secretary of Commerce to establish a grant program to provide grants to assist with economic development and fund community advisory boards in communities that have been, or will be, impacted by a nuclear power plant that has ceased, or will cease operations as of the date of enactment.

Section 505. Report on corporate support.

This section directs the Commission to submit a report to Congress, not later than 180 days after the date of enactment, describing: (1) the Commission's implementation of the budgetary authority caps for corporate support established under section 102(a)(3) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2215(a)(3)); and (2) whether the Commission is meeting and is expected to meet the total caps under that section.

Sec. 506. Technical correction.

This section makes a technical correction to the AEA to permit the Commission to issue a license for a research and test reactor if not more than 75 percent of the annual costs to the licensee of owning and operating the facility are devoted to the sale of non-energy services, energy services, or a combination of non-energy services and energy services.