

“(B) assess how the capabilities and defenses that may be employed by other countries could impact deterrence in 2030 and beyond and how such threats could be addressed or mitigated in the warhead and related delivery systems;

“(C) exercise the full set of design skills necessary for an effective nuclear deterrent and responsive enterprise through production of conceptual designs and, as the Administrator determines appropriate, production of non-nuclear prototypes of components or subsystems; and

“(D) examine and recommend actions for significantly shortening timelines and significantly reducing costs associated with design, development, certification, and production of the warhead, without reducing worker or public health and safety.

“(2) TIMING.—The Administrator shall—

“(A) during fiscal year 2018, develop a plan to carry out paragraph (1); and

“(B) during fiscal year 2019, implement such plan.

“(c) BRIEFING.—Not later than March 1, 2018, the Administrator, in coordination with the Chairman, shall provide a briefing to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] on the plan of the Administrator to carry out the warhead design competition under subsection (b). Such briefing shall include an assessment of the costs, benefits, risks, and opportunities of such plan, particularly impacts to ongoing life extension programs and infrastructure projects.”

PLAN FOR DEVELOPING EXASCALE COMPUTING AND INCORPORATING SUCH COMPUTING INTO THE STOCKPILE STEWARDSHIP PROGRAM

Pub. L. 113–66, div. C, title XXXI, §3129, Dec. 26, 2013, 127 Stat. 1066, provided that:

“(a) PLAN REQUIRED.—The Administrator for Nuclear Security shall develop and carry out a plan to develop exascale computing and incorporate such computing into the stockpile stewardship program under section 4201 of the Atomic Energy Defense Act (50 U.S.C. 2521) during the 10-year period beginning on the date of the enactment of this Act [Dec. 26, 2013].

“(b) MILESTONES.—The plan required by subsection (a) shall include major programmatic milestones in—

“(1) the development of a prototype exascale computer for the stockpile stewardship program; and

“(2) mitigating disruptions resulting from the transition to exascale computing.

“(c) COORDINATION WITH OTHER AGENCIES.—In developing the plan required by subsection (a), the Administrator shall coordinate, as appropriate, with the Under Secretary of Energy for Science, the Secretary of Defense, and elements of the intelligence community (as defined in section 3(4) of the National Security Act of 1947 (50 U.S.C. 3003(4))).

“(d) INCLUSION OF COSTS IN FUTURE-YEARS NUCLEAR SECURITY PROGRAM.—The Administrator shall—

“(1) address, in the estimated expenditures and proposed appropriations reflected in each future-years nuclear security program submitted under section 3253 of the National Nuclear Security Administration Act (50 U.S.C. 2453) during the 10-year period beginning on the date of the enactment of this Act, the costs of—

“(A) developing exascale computing and incorporating such computing into the stockpile stewardship program; and

“(B) mitigating potential disruptions resulting from the transition to exascale computing; and

“(2) include in each such future-years nuclear security program a description of the costs of efforts to develop exascale computing borne by the National Nuclear Security Administration, the Office of Science of the Department of Energy, other Federal agencies, and private industry.

“(e) SUBMISSION TO CONGRESS.—The Administrator shall submit the plan required by subsection (a) to the congressional defense committees [Committees on

Armed Services and Appropriations of the Senate and the House of Representatives] with each summary of the plan required by subsection (a) of section 4203 of the Atomic Energy Defense Act (50 U.S.C. 2523) submitted under subsection (b)(1) of that section during the 10-year period beginning on the date of the enactment of this Act.

“(f) EXASCALE COMPUTING DEFINED.—In this section, the term ‘exascale computing’ means computing through the use of a computing machine that performs near or above 10 to the 18th power floating point operations per second.”

§ 2522. Stockpile stewardship criteria

(a) Requirement for criteria

The Secretary of Energy shall develop clear and specific criteria for judging whether the science-based tools being used by the Department of Energy for determining the safety and reliability of the nuclear weapons stockpile are performing in a manner that will provide an adequate degree of certainty that the stockpile is safe and reliable.

(b) Coordination with Secretary of Defense

The Secretary of Energy, in developing the criteria required by subsection (a), shall coordinate with the Secretary of Defense.

(Pub. L. 107–314, div. D, title XLII, §4202, formerly Pub. L. 105–261, div. C, title XXXI, §3158, Oct. 17, 1998, 112 Stat. 2257; Pub. L. 106–65, div. A, title X, §1067(3), Oct. 5, 1999, 113 Stat. 774; renumbered Pub. L. 107–314, div. D, title XLII, §4202, by Pub. L. 108–136, div. C, title XXXI, §3141(e)(3), Nov. 24, 2003, 117 Stat. 1758; Pub. L. 111–84, div. C, title XXXI, §3112, Oct. 28, 2009, 123 Stat. 2703; Pub. L. 112–239, div. C, title XXXI, §3133(b)(1), (2), Jan. 2, 2013, 126 Stat. 2192.)

CODIFICATION

Section was formerly set out as a note under section 2121 of Title 42, The Public Health and Welfare, prior to renumbering by Pub. L. 108–136.

AMENDMENTS

2013—Pub. L. 112–239, §3133(b)(2), substituted “Stockpile stewardship criteria” for “Report on stockpile stewardship criteria” in section catchline.

Subsecs. (c), (d). Pub. L. 112–239, §3133(b)(1), struck out subsecs. (c) and (d), which related, respectively, to report and definitions.

2009—Subsec. (c). Pub. L. 111–84, §3112(a), amended subsec. (c) generally. Prior to amendment, subsec. (c) required submission of report not later than Mar. 1, 2000, to Congressional committees on Department of Energy efforts to develop subsec. (a) criteria.

Subsec. (d). Pub. L. 111–84, §3112(b), added subsec. (d). 1999—Subsec. (c). Pub. L. 106–65 substituted “Committee on Armed Services” for “Committee on National Security” before “of the House of Representatives”.

§ 2523. Nuclear weapons stockpile stewardship, management, and responsiveness plan

(a) Plan requirement

The Administrator, in consultation with the Secretary of Defense and other appropriate officials of the departments and agencies of the Federal Government, shall develop and annually update a plan for sustaining the nuclear weapons stockpile. The plan shall cover, at a minimum, stockpile stewardship, stockpile management, stockpile responsiveness, stockpile surveillance, program direction, infrastructure