

107TH CONGRESS
1ST SESSION

S. 1746

To amend the Atomic Energy Act of 1954 and the Energy Reorganization Act of 1974 to strengthen security at sensitive nuclear facilities.

IN THE SENATE OF THE UNITED STATES

NOVEMBER 29, 2001

Mr. REID (for himself, Mrs. CLINTON, Mr. LIEBERMAN, and Mr. JEFFORDS) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

A BILL

To amend the Atomic Energy Act of 1954 and the Energy Reorganization Act of 1974 to strengthen security at sensitive nuclear facilities.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Nuclear Security Act
5 of 2001”.

6 **SEC. 2. DEFINITIONS.**

7 Section 11 of the Atomic Energy Act of 1954 (42
8 U.S.C. 2014) is amended—

1 (1) by redesignating subsection jj. as subsection
2 ii.; and

3 (2) by adding at the end the following:

4 “jj. DESIGN BASIS THREAT.—The term ‘design basis
5 threat’ means the design basis threat established by the
6 Commission under section 73.1 of title 10, Code of Fed-
7 eral Regulations (or any successor regulation developed
8 under section 170C).

9 “kk. SENSITIVE NUCLEAR FACILITY.—The term
10 ‘sensitive nuclear facility’ means—

11 “(1) a commercial nuclear power plant and as-
12 sociated spent fuel storage facility;

13 “(2) a decommissioned nuclear power plant and
14 associated spent fuel storage facility;

15 “(3) a category I fuel cycle facility;

16 “(4) a gaseous diffusion plant; and

17 “(5) any other facility licensed by the Commis-
18 sion, or used in the conduct of an activity licensed
19 by the Commission, that the Commission determines
20 should be treated as a sensitive nuclear facility
21 under section 170C.”.

22 **SEC. 3. NUCLEAR SECURITY.**

23 (a) IN GENERAL.—Chapter 14 of the Atomic Energy
24 Act of 1954 (42 U.S.C. 2201 et seq.) is amended by add-
25 ing at the end the following:

1 **“SEC. 170C. PROTECTION OF SENSITIVE NUCLEAR FACILI-**
 2 **TIES AGAINST THE DESIGN BASIS THREAT.**

3 “(a) DEFINITIONS.—In this section:

4 “(1) NUCLEAR SECURITY FORCE.—The term
 5 ‘nuclear security force’ means the nuclear security
 6 force established under subsection (b)(1).

7 “(2) FUND.—The term ‘Fund’ means the Nu-
 8 clear Security Fund established under subsection (f).

9 “(3) QUALIFICATION STANDARD.—The term
 10 ‘qualification standard’ means a qualification stand-
 11 ard established under subsection (e)(2)(A).

12 “(4) SECURITY PLAN.—The term ‘security plan’
 13 means a security plan developed under subsection
 14 (b)(2).

15 “(b) NUCLEAR SECURITY.—The Commission shall—

16 “(1) establish a nuclear security force, the
 17 members of which shall be employees of the Com-
 18 mission, to provide for the security of all sensitive
 19 nuclear facilities against the design basis threat; and

20 “(2) develop and implement a security plan for
 21 each sensitive nuclear facility to ensure the security
 22 of all sensitive nuclear facilities against the design
 23 basis threat.

24 “(c) DESIGN BASIS THREAT.—

25 “(1) IN GENERAL.—Not later than 90 days
 26 after the date of enactment of this section, and at

1 least once every 3 years thereafter, the Commission,
2 in consultation with the Assistant to the President
3 for Homeland Security, the Attorney General, the
4 Secretary of Defense, and other Federal, State, and
5 local agencies, as appropriate, shall revise the design
6 basis threat to include—

7 “(A) threats equivalent to—

8 “(i) the events of September 11,
9 2001;

10 “(ii) a physical, cyber, biochemical, or
11 other terrorist threat;

12 “(iii) an attack on a facility by mul-
13 tiple coordinated teams of a large number
14 of individuals;

15 “(iv) assistance in an attack from sev-
16 eral persons employed at the facility;

17 “(v) a suicide attack;

18 “(vi) a water-based or air-based
19 threat;

20 “(vii) the use of explosive devices of
21 considerable size and other modern weap-
22 onry;

23 “(viii) an attack by persons with a so-
24 phisticated knowledge of the operations of
25 a sensitive nuclear facility; and

1 “(ix) fire, especially a fire of long du-
2 ration; and

3 “(B) any other threat that the Commission
4 determines should be included as an element of
5 the design basis threat.

6 “(2) REPORTS.—The Commission shall submit
7 to Congress a report on each revision made under
8 paragraph (1).

9 “(d) SECURITY PLANS.—

10 “(1) IN GENERAL.—Not later than 180 days
11 after the date of enactment of this section, the Com-
12 mission shall develop a security plan for each sen-
13 sitive nuclear facility to ensure the protection of
14 each sensitive nuclear facility against the design
15 basis threat.

16 “(2) ELEMENTS OF THE PLAN.—A security
17 plan shall prescribe—

18 “(A) the deployment of the nuclear secu-
19 rity force, including—

20 “(i) numbers of the members of the
21 nuclear security force at each sensitive nu-
22 clear facility;

23 “(ii) tactics of the members of the nu-
24 clear security force at each sensitive nu-
25 clear facility; and

1 “(iii) capabilities of the members of
2 the nuclear security force at each sensitive
3 nuclear facility;

4 “(B) other protective measures,
5 including—

6 “(i) designs of critical control systems
7 at each sensitive nuclear facility;

8 “(ii) restricted personnel access to
9 each sensitive nuclear facility;

10 “(iii) perimeter site security, internal
11 site security, and fire protection barriers;

12 “(iv) increases in protection for spent
13 fuel storage areas;

14 “(v) placement of spent fuel in dry
15 cask storage; and

16 “(vi) background security checks for
17 employees and prospective employees; and

18 “(C) a schedule for completing the require-
19 ments of the security plan not later than 18
20 months after the date of enactment of this sec-
21 tion.

22 “(3) ADDITIONAL REQUIREMENTS.—A holder
23 of a license for a sensitive nuclear facility under sec-
24 tion 103 or 104 or the State or local government in
25 which a sensitive nuclear facility is located may peti-

1 tion the Commission for additional requirements in
2 the security plan for the sensitive nuclear facility.

3 “(4) IMPLEMENTATION OF SECURITY PLAN.—

4 Not later than 270 days after the date of enactment
5 of this section, the Commission, in consultation with
6 a holder of a license for a sensitive nuclear facility
7 under section 103 or 104, shall, by direct action of
8 the Commission or by order requiring action by the
9 licensee, implement the security plan for the sen-
10 sitive nuclear facility in accordance with the schedule
11 under paragraph (2)(C).

12 “(5) SUFFICIENCY OF SECURITY PLAN.—If at
13 any time the Commission determines that the imple-
14 mentation of the requirements of the security plan
15 for a sensitive nuclear facility is insufficient to en-
16 sure the security of the sensitive nuclear facility
17 against the design basis threat, the Commission
18 shall immediately submit to Congress and the Presi-
19 dent a classified report that—

20 “(A) identifies the vulnerability of the sen-
21 sitive nuclear facility; and

22 “(B) recommends actions by Federal,
23 State, or local agencies to eliminate the vulner-
24 ability.

25 “(e) NUCLEAR SECURITY FORCE.—

1 “(1) IN GENERAL.—Not later than 90 days
2 after the date of enactment of this section, the Com-
3 mission, in consultation with other Federal agencies,
4 as appropriate, shall establish a program for the hir-
5 ing and training of the nuclear security force.

6 “(2) HIRING.—

7 “(A) QUALIFICATION STANDARDS.—Not
8 later than 30 days after the date of enactment
9 of this section, the Commission shall establish
10 qualification standards that individuals shall be
11 required to meet to be hired by the Commission
12 as members of the nuclear security force.

13 “(B) EXAMINATION.—The Commission
14 shall develop and administer a nuclear security
15 force personnel examination for use in deter-
16 mining the qualification of individuals seeking
17 employment as members of the nuclear security
18 force.

19 “(C) CRIMINAL AND SECURITY BACK-
20 GROUND CHECKS.—The Commission shall re-
21 quire that an individual to be hired as a mem-
22 ber of the nuclear security force undergo a
23 criminal and security background check.

24 “(D) DISQUALIFICATION OF INDIVIDUALS
25 WHO PRESENT NATIONAL SECURITY RISKS.—

1 The Commission, in consultation with the heads
2 of other Federal agencies, as appropriate, shall
3 establish procedures, in addition to any back-
4 ground check conducted under subparagraph
5 (B), to ensure that no individual who presents
6 a threat to national security is employed as a
7 member of the nuclear security force.

8 “(3) ANNUAL PROFICIENCY REVIEW.—

9 “(A) IN GENERAL.—The Commission shall
10 provide that an annual evaluation of each mem-
11 ber of the nuclear security force is conducted
12 and documented.

13 “(B) REQUIREMENTS FOR CONTINU-
14 ATION.—An individual employed as a member
15 of the nuclear security force may not continue
16 to be employed in that capacity unless the eval-
17 uation under subparagraph (A) demonstrates
18 that the individual—

19 “(i) continues to meet all qualification
20 standards;

21 “(ii) has a satisfactory record of per-
22 formance and attention to duty; and

23 “(iii) has the knowledge and skills
24 necessary to vigilantly and effectively pro-

1 vide for the security of a sensitive nuclear
2 facility against the design basis threat.

3 “(4) TRAINING.—

4 “(A) IN GENERAL.—The Commission shall
5 provide for the training of each member of the
6 nuclear security force to ensure each member
7 has the knowledge and skills necessary to pro-
8 vide for the security of a sensitive nuclear facil-
9 ity against the design basis threat.

10 “(B) TRAINING PLAN.—Not later than 60
11 days after the date of enactment of this section,
12 the Commission shall develop a plan for the
13 training of members of the nuclear security
14 force.

15 “(C) USE OF OTHER AGENCIES.—The
16 Commission may enter into a memorandum of
17 understanding or other arrangement with any
18 other Federal agency with appropriate law en-
19 forcement responsibilities, to provide personnel,
20 resources, or other forms of assistance in the
21 training of members of the nuclear security
22 force.

23 “(f) NUCLEAR SECURITY FUND.—

24 “(1) ESTABLISHMENT.—There is established in
25 the Treasury of the United States a fund to be

1 known as the ‘Nuclear Security Fund’, which shall
2 be used by the Commission to administer programs
3 under this section to provide for the security of sen-
4 sitive nuclear facilities.

5 “(2) DEPOSITS IN THE FUND.—The Commis-
6 sion shall deposit in the Fund—

7 “(A) the amount of fees collected under
8 paragraph (5); and

9 “(B) amounts appropriated under sub-
10 section (g).

11 “(3) INVESTMENT OF AMOUNTS.—

12 “(A) IN GENERAL.—The Secretary of the
13 Treasury shall invest such portion of the Fund
14 as is not, in the judgment of the Secretary of
15 the Treasury, required to meet current with-
16 drawals. Investments may be made only in in-
17 terest-bearing obligations of the United States.

18 “(B) ACQUISITION OF OBLIGATIONS.—For
19 the purpose of investments under subparagraph
20 (A), obligations may be acquired—

21 “(i) on original issue at the issue
22 price; or

23 “(ii) by purchase of outstanding obli-
24 gations at the market price.

1 “(C) SALE OF OBLIGATIONS.—Any obliga-
2 tion acquired by the Fund may be sold by the
3 Secretary of the Treasury at the market price.

4 “(D) CREDITS TO FUND.—The interest on,
5 and the proceeds from the sale or redemption
6 of, any obligations held in the Fund shall be
7 credited to and form a part of the Fund.

8 “(4) USE OF AMOUNTS IN THE FUND.—The
9 Commission shall use amounts in the Fund to pay
10 the costs of—

11 “(A) salaries, training, and other expenses
12 of the nuclear security force; and

13 “(B) developing and implementing security
14 plans.

15 “(5) FEE.—To ensure that adequate amounts
16 are available to provide assistance under paragraph
17 (4), the Commission shall assess licensees a fee in
18 an amount determined by the Commission, not to
19 exceed 1 mill per kilowatt-hour of electricity gen-
20 erated by a sensitive nuclear facility.

21 “(g) AUTHORIZATION OF APPROPRIATIONS.—There
22 are authorized to be appropriated such sums as are nec-
23 essary to carry out this section.”.

24 (b) IMPLEMENTATION.—The Commission shall com-
25 plete the full implementation of the amendment made by

1 subsection (a) as soon as practicable after the date of en-
 2 actment of this Act, but in no event later than 270 days
 3 after the date of enactment of this Act.

4 (c) TECHNICAL AND CONFORMING AMENDMENT.—
 5 The table of contents for chapter 14 of the Atomic Energy
 6 Act of 1954 (42 U.S.C. prec. 2011) is amended by adding
 7 at the end the following:

“Sec. 170B. Uranium supply.

“Sec. 170C. Protection of sensitive nuclear facilities against the design basis
 threat.”.

8 **SEC. 4. OPERATION SAFEGUARDS AND RESPONSE UNIT.**

9 Section 204 of the Energy Reorganization Act of
 10 1974 (42 U.S.C. 5844) is amended by adding at the end
 11 the following:

12 “(d) OPERATION SAFEGUARDS AND RESPONSE
 13 UNIT.—

14 “(1) DEFINITIONS.—In this subsection:

15 “(A) ASSISTANT DIRECTOR.—The term
 16 ‘Assistant Director’ means the Assistant Direc-
 17 tor for Operation Safeguards and Response.

18 “(B) DESIGN BASIS THREAT.—The term
 19 ‘design basis threat’ has the meaning given the
 20 term in section 11 of the Atomic Energy Act of
 21 1954 (42 U.S.C. 2014).

22 “(C) SENSITIVE NUCLEAR FACILITY.—The
 23 term ‘sensitive nuclear facility’ has the meaning

1 given the term in section 11 of the Atomic En-
2 ergy Act of 1954 (42 U.S.C. 2014).

3 “(D) UNIT.—The term ‘Unit’ means the
4 Operation Safeguards and Response Unit estab-
5 lished under paragraph (2)(A).

6 “(2) ESTABLISHMENT OF UNIT.—

7 “(A) IN GENERAL.—There is established
8 within the Office of Nuclear Material Safety
9 and Safeguards the Operation Safeguards and
10 Response Unit.

11 “(B) HEAD OF UNIT.—The Unit shall be
12 headed by the Assistant Director for Operation
13 Safeguards and Response.

14 “(C) DUTIES.—The Assistant Director
15 shall—

16 “(i) establish a program for the con-
17 duct of operation safeguards and response
18 evaluations under paragraph (3); and

19 “(ii) establish a program for the con-
20 duct of emergency response exercises under
21 paragraph (4).

22 “(D) MOCK TERRORIST TEAM.—The per-
23 sonnel of the Unit shall include a Mock Ter-
24 rorist Team comprised of—

1 “(i) not fewer than 20 individuals
2 with advanced knowledge of special weap-
3 ons and tactics comparable to special oper-
4 ations forces of the Armed Forces;

5 “(ii) at least 1 nuclear engineer;

6 “(iii) for each evaluation at a sensitive
7 nuclear facility under paragraph (3), at
8 least 1 individual with knowledge of the
9 operations of the sensitive nuclear facility
10 who is capable of actively disrupting the
11 normal operations of the sensitive nuclear
12 facility; and

13 “(iv) any other individual that the As-
14 sistant Director determines should be a
15 member of the Mock Terrorist Team.

16 “(3) OPERATION SAFEGUARDS AND RESPONSE
17 EVALUATIONS.—

18 “(A) IN GENERAL.—Not later than 1 year
19 after the date of enactment of this subsection,
20 the Assistant Director shall establish an oper-
21 ation safeguards and response evaluation pro-
22 gram to assess the ability of each sensitive nu-
23 clear facility to defend against the design basis
24 threat.

1 “(B) FREQUENCY OF EVALUATIONS.—Not
2 less often than once every 2 years, the Assistant
3 Director shall conduct and document operation
4 safeguards and response evaluations at each
5 sensitive nuclear facility to assess the ability of
6 the members of the nuclear security force at the
7 sensitive nuclear facility to defend against the
8 design basis threat.

9 “(C) ACTIVITIES.—The evaluation shall in-
10 clude 2 or more force-on-force exercises by the
11 Mock Terrorist Team against the sensitive nu-
12 clear facility that simulate air, water, and land
13 assaults (as appropriate).

14 “(D) CRITERIA.—The Assistant Director
15 shall establish criteria for judging the success
16 of the evaluations.

17 “(E) CORRECTIVE ACTION.—If a sensitive
18 nuclear facility fails to complete successfully an
19 operation safeguards and response evaluation,
20 the Commission shall require additional oper-
21 ation safeguards and response evaluations not
22 less often than once every 6 months until the
23 sensitive nuclear facility successfully completes
24 an operation safeguards and response evalua-
25 tion.

1 “(F) REPORTS.—Not less often than once
2 every year, the Commission shall submit to
3 Congress and the President a report that de-
4 scribes the results of each operation safeguards
5 and response evaluation under this paragraph
6 for the previous year.

7 “(4) EMERGENCY RESPONSE EXERCISES.—

8 “(A) IN GENERAL.—Not later than 1 year
9 after the date of enactment of this subsection,
10 the Assistant Director, in consultation with the
11 Assistant to the President for Homeland Secu-
12 rity, the Director of the Federal Emergency
13 Management Agency, the Attorney General, and
14 other Federal, State, and local agencies, as ap-
15 propriate, shall establish an emergency response
16 program to evaluate the ability of Federal,
17 State, and local emergency response personnel
18 within a 50-mile radius of a sensitive nuclear
19 facility to respond to a radiological emergency
20 at the sensitive nuclear facility.

21 “(B) FREQUENCY.—Not less often than
22 once every 3 years, the Assistant Director shall
23 conduct emergency response exercises to evalu-
24 ate the ability of Federal, State, and local
25 emergency response personnel within a 50-mile

1 radius of a sensitive nuclear facility to respond
2 to a radiological emergency at the sensitive nu-
3 clear facility.

4 “(C) ACTIVITIES.—The response exercises
5 shall evaluate—

6 “(i) the response capabilities, response
7 times, and coordination and communica-
8 tion capabilities of the response personnel;

9 “(ii) the effectiveness and adequacy of
10 emergency response plans, including evacu-
11 ation plans; and

12 “(iii) the ability of response personnel
13 to distribute potassium iodide or other pro-
14 phylactic medicines in an expeditious man-
15 ner.

16 “(D) REVISION OF EMERGENCY RESPONSE
17 PLANS.—The Commission shall revise the emer-
18 gency response plan for a sensitive nuclear fa-
19 cility to correct for any deficiencies identified by
20 an evaluation under this paragraph.

21 “(E) REPORTS.—Not less often than once
22 every year, the Commission shall submit to
23 Congress and the President a report that
24 describes—

1 “(i) the results of each emergency re-
2 sponse exercise under this paragraph con-
3 ducted in the previous year; and

4 “(ii) each revision of an emergency re-
5 sponse plan made under subparagraph (D)
6 for the previous year.”.

7 **SEC. 5. POTASSIUM IODIDE STOCKPILES.**

8 Section 170 of the Atomic Energy Act of 1954 (42
9 U.S.C. 2210) is amended by adding at the end the fol-
10 lowing:

11 “u. Not later than 180 days after the date of enact-
12 ment of this subsection, the Commission, in consultation
13 with the Director of the Federal Emergency Management
14 Agency, the Secretary of Health and Human Services, and
15 other Federal, State, and local agencies, as appropriate,
16 shall—

17 “(1) ensure that sufficient stockpiles of potas-
18 sium iodide tablets have been established at public
19 facilities (such as schools and hospitals) within at
20 least a 50-mile radius of all sensitive nuclear facili-
21 ties;

22 “(2) develop plans for the prompt distribution
23 of the stockpiles described in paragraph (1) to all in-
24 dividuals located within at least a 50-mile radius of

1 a sensitive nuclear facility in the event of a release
2 of radionuclides; and

3 “(3) submit to Congress a report—

4 “(A) certifying that stockpiles have been
5 established as described in paragraph (1); and

6 “(B) including the plans described in para-
7 graph (2).”.

8 **SEC. 6. DEFENSE OF FACILITIES.**

9 (a) IN GENERAL.—In a case in which a state of war
10 or national emergency exists, the Commission shall—

11 (1) request the Governor of each State in which
12 a sensitive nuclear facility is located to deploy the
13 National Guard to each sensitive nuclear facility in
14 that State; and

15 (2) request the President to—

16 (A) deploy the Coast Guard to sensitive
17 nuclear facilities on the coastline of the United
18 States; and

19 (B) restrict air space in the vicinity of sen-
20 sitive nuclear facilities in the United States.

21 (b) AUTHORIZATION OF APPROPRIATIONS.—There
22 are authorized to be appropriated such sums as are nec-
23 essary to carry out this section.

○