

**TITLE VI—NUCLEAR MATTERS**

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1 **TITLE VI—NUCLEAR MATTERS**  
2 **Subtitle A—Price-Anderson Act**  
3 **Amendments**

4 **SEC. 601. SHORT TITLE.**

5 This subtitle may be cited as the “Price-Anderson  
6 Amendments Act of 2005”.

7 **SEC. 602. EXTENSION OF INDEMNIFICATION AUTHORITY.**

8 (a) INDEMNIFICATION OF NUCLEAR REGULATORY  
9 COMMISSION LICENSEES.—Section 170 c. of the Atomic  
10 Energy Act of 1954 (42 U.S.C. 2210(c)) is amended—

11 (1) in the subsection heading, by striking “LI-  
12 CENSES” and inserting “LICENSEES”; and

13 (2) by striking “December 31, 2003” each  
14 place it appears and inserting “December 31,  
15 2025”.

16 (b) INDEMNIFICATION OF DEPARTMENT CONTRAC-  
17 TORS.—Section 170 d.(1)(A) of the Atomic Energy Act  
18 of 1954 (42 U.S.C. 2210(d)(1)(A)) is amended by striking  
19 “December 31, 2006” and inserting “December 31,  
20 2025”.

21 (c) INDEMNIFICATION OF NONPROFIT EDUCATIONAL  
22 INSTITUTIONS.—Section 170 k. of the Atomic Energy Act  
23 of 1954 (42 U.S.C. 2210(k)) is amended by striking “Au-

1 gust 1, 2002” each place it appears and inserting “Decem-  
2 ber 31, 2025”.

3 **SEC. 603. MAXIMUM ASSESSMENT.**

4 Section 170 of the Atomic Energy Act of 1954 (42  
5 U.S.C. 2210) is amended—

6 (1) in the second proviso of the third sentence  
7 of subsection b.(1)—

8 (A) by striking “\$63,000,000” and insert-  
9 ing “\$95,800,000”; and

10 (B) by striking “\$10,000,000 in any 1  
11 year” and inserting “\$15,000,000 in any 1 year  
12 (subject to adjustment for inflation under sub-  
13 section t.)”; and

14 (2) in subsection t.(1)—

15 (A) by inserting “total and annual” after  
16 “amount of the maximum”;

17 (B) by striking “the date of the enactment  
18 of the Price-Anderson Amendments Act of  
19 1988” and inserting “August 20, 2003”; and

20 (C) in subparagraph (A), by striking “such  
21 date of enactment” and inserting “August 20,  
22 2003”.

23 **SEC. 604. DEPARTMENT LIABILITY LIMIT.**

24 (a) INDEMNIFICATION OF DEPARTMENT CONTRAC-  
25 TORS.—Section 170 d. of the Atomic Energy Act of 1954

1 (42 U.S.C. 2210(d)) is amended by striking paragraph (2)  
2 and inserting the following:

3 “(2) In an agreement of indemnification entered into  
4 under paragraph (1), the Secretary—

5 “(A) may require the contractor to provide and  
6 maintain financial protection of such a type and in  
7 such amounts as the Secretary shall determine to be  
8 appropriate to cover public liability arising out of or  
9 in connection with the contractual activity; and

10 “(B) shall indemnify the persons indemnified  
11 against such liability above the amount of the finan-  
12 cial protection required, in the amount of  
13 \$10,000,000,000 (subject to adjustment for inflation  
14 under subsection t.), in the aggregate, for all per-  
15 sons indemnified in connection with the contract and  
16 for each nuclear incident, including such legal costs  
17 of the contractor as are approved by the Secretary.”.

18 (b) **CONTRACT AMENDMENTS.**—Section 170 d. of the  
19 Atomic Energy Act of 1954 (42 U.S.C. 2210(d)) is further  
20 amended by striking paragraph (3) and inserting the fol-  
21 lowing—

22 “(3) All agreements of indemnification under which  
23 the Department of Energy (or its predecessor agencies)  
24 may be required to indemnify any person under this sec-  
25 tion shall be deemed to be amended, on the date of enact-

1 ment of the Price-Anderson Amendments Act of 2005, to  
2 reflect the amount of indemnity for public liability and any  
3 applicable financial protection required of the contractor  
4 under this subsection.”.

5 (c) **LIABILITY LIMIT.**—Section 170 e.(1)(B) of the  
6 Atomic Energy Act of 1954 (42 U.S.C. 2210(e)(1)(B)) is  
7 amended—

8 (1) by striking “the maximum amount of finan-  
9 cial protection required under subsection b. or”; and

10 (2) by striking “paragraph (3) of subsection d.,  
11 whichever amount is more” and inserting “para-  
12 graph (2) of subsection d.”.

13 **SEC. 605. INCIDENTS OUTSIDE THE UNITED STATES.**

14 (a) **AMOUNT OF INDEMNIFICATION.**—Section 170  
15 d.(5) of the Atomic Energy Act of 1954 (42 U.S.C.  
16 2210(d)(5)) is amended by striking “\$100,000,000” and  
17 inserting “\$500,000,000”.

18 (b) **LIABILITY LIMIT.**—Section 170 e.(4) of the  
19 Atomic Energy Act of 1954 (42 U.S.C. 2210(e)(4)) is  
20 amended by striking “\$100,000,000” and inserting  
21 “\$500,000,000”.

22 **SEC. 606. REPORTS.**

23 Section 170 p. of the Atomic Energy Act of 1954 (42  
24 U.S.C. 2210(p)) is amended by striking “August 1, 1998”  
25 and inserting “December 31, 2021”.

**1 SEC. 607. INFLATION ADJUSTMENT.**

2 Section 170 t. of the Atomic Energy Act of 1954 (42  
3 U.S.C. 2210(t)) is amended—

4 (1) by redesignating paragraph (2) as para-  
5 graph (3); and

6 (2) by inserting after paragraph (1) the fol-  
7 lowing:

8 “(2) The Secretary shall adjust the amount of indem-  
9 nification provided under an agreement of indemnification  
10 under subsection d. not less than once during each 5-year  
11 period following July 1, 2003, in accordance with the ag-  
12 gregate percentage change in the Consumer Price Index  
13 since—

14 “(A) that date, in the case of the first adjust-  
15 ment under this paragraph; or

16 “(B) the previous adjustment under this para-  
17 graph.”.

**18 SEC. 608. TREATMENT OF MODULAR REACTORS.**

19 Section 170 b. of the Atomic Energy Act of 1954 (42  
20 U.S.C. 2210(b)) is amended by adding at the end the fol-  
21 lowing:

22 “(5)(A) For purposes of this section only, the Com-  
23 mission shall consider a combination of facilities described  
24 in subparagraph (B) to be a single facility having a rated  
25 capacity of 100,000 electrical kilowatts or more.

1 “(B) A combination of facilities referred to in sub-  
2 paragraph (A) is 2 or more facilities located at a single  
3 site, each of which has a rated capacity of 100,000 elec-  
4 trical kilowatts or more but not more than 300,000 elec-  
5 trical kilowatts, with a combined rated capacity of not  
6 more than 1,300,000 electrical kilowatts.”.

7 **SEC. 609. APPLICABILITY.**

8 The amendments made by sections 603, 604, and 605  
9 do not apply to a nuclear incident that occurs before the  
10 date of the enactment of this Act.

11 **SEC. 610. CIVIL PENALTIES.**

12 (a) **REPEAL OF AUTOMATIC REMISSION.**—Section  
13 234A b.(2) of the Atomic Energy Act of 1954 (42 U.S.C.  
14 2282a(b)(2)) is amended by striking the last sentence.

15 (b) **LIMITATION FOR NOT-FOR-PROFIT INSTITU-**  
16 **TIONS.**—Subsection d. of section 234A of the Atomic En-  
17 ergy Act of 1954 (42 U.S.C. 2282a(d)) is amended to read  
18 as follows:

19 “d.(1) Notwithstanding subsection a., in the case of  
20 any not-for-profit contractor, subcontractor, or supplier,  
21 the total amount of civil penalties paid under subsection  
22 a. may not exceed the total amount of fees paid within  
23 any 1-year period (as determined by the Secretary) under  
24 the contract under which the violation occurs.

1           “(2) For purposes of this section, the term ‘not-for-  
2 profit’ means that no part of the net earnings of the con-  
3 tractor, subcontractor, or supplier inures to the benefit of  
4 any natural person or for-profit artificial person.”.

5           (c) **EFFECTIVE DATE.**—The amendments made by  
6 this section shall not apply to any violation of the Atomic  
7 Energy Act of 1954 (42 U.S.C. 2011 et seq.) occurring  
8 under a contract entered into before the date of enactment  
9 of this section.

10 **[SEC. 611. SUBROGATION.**

11 **SEC. 621. LICENSES.**

12           Section 103 c. of the Atomic Energy Act of 1954 (42  
13 U.S.C. 2133(c)) is amended by inserting “from the au-  
14 thorization to commence operations” after “forty years”.

15 **SEC. 622. NUCLEAR REGULATORY COMMISSION SCHOLAR-**  
16 **SHIP AND FELLOWSHIP PROGRAM.**

17           Chapter 19 of the Atomic Energy Act of 1954 is  
18 amended by inserting after section 242 (42 U.S.C. 2015a)  
19 the following:

20 **“SEC. 243. SCHOLARSHIP AND FELLOWSHIP PROGRAM.**

21           “a. **SCHOLARSHIP PROGRAM.**—To enable students to  
22 study, for at least 1 academic semester or equivalent term,  
23 science, engineering, or another field of study that the Nu-  
24 clear Regulatory Commission determines is in a critical  
25 skill area related to the regulatory mission of the Nuclear



1 Regulatory Commission, the Nuclear Regulatory Commis-  
2 sion may carry out a program to—

3 “(1) award scholarships to undergraduate stu-  
4 dents who—

5 “(A) are United States citizens; and

6 “(B) enter into an agreement under sub-  
7 section c. to be employed by the Nuclear Regu-  
8 latory Commission in the area of study for  
9 which the scholarship is awarded.

10 “b. FELLOWSHIP PROGRAM.—To enable students to  
11 pursue education in science, engineering, or another field  
12 of study that the Nuclear Regulatory Commission deter-  
13 mines is in a critical skill area related to its regulatory  
14 mission, in a graduate or professional degree program of-  
15 fered by an institution of higher education in the United  
16 States, the Nuclear Regulatory Commission may carry out  
17 a program to—

18 “(1) award fellowships to graduate students  
19 who—

20 “(A) are United States citizens; and

21 “(B) enter into an agreement under sub-  
22 section c. to be employed by the Nuclear Regu-  
23 latory Commission in the area of study for  
24 which the fellowship is awarded.

25 “c. REQUIREMENTS.—

1           “(1) IN GENERAL.—As a condition of receiving  
2 a scholarship or fellowship under subsection a. or b.,  
3 a recipient of the scholarship or fellowship shall  
4 enter into an agreement with the Nuclear Regu-  
5 latory Commission under which, in return for the as-  
6 sistance, the recipient shall—

7           “(A) maintain satisfactory academic  
8 progress in the studies of the recipient, as de-  
9 termined by criteria established by the Nuclear  
10 Regulatory Commission;

11           “(B) agree that failure to maintain satis-  
12 factory academic progress shall constitute  
13 grounds on which the Nuclear Regulatory Com-  
14 mission may terminate the assistance;

15           “(C) on completion of the academic course  
16 of study in connection with which the assistance  
17 was provided, and in accordance with criteria  
18 established by the Nuclear Regulatory Commis-  
19 sion, engage in employment by the Nuclear  
20 Regulatory Commission for a period specified  
21 by the Nuclear Regulatory Commission, that  
22 shall be not less than 1 time and not more than  
23 3 times the period for which the assistance was  
24 provided; and

1           “(D) if the recipient fails to meet the re-  
2           quirements of subparagraph (A), (B), or (C),  
3           reimburse the United States Government for—

4                   “(i) the entire amount of the assist-  
5           ance provided the recipient under the  
6           scholarship or fellowship; and

7                   “(ii) interest at a rate determined by  
8           the Nuclear Regulatory Commission.

9           “(2) WAIVER OR SUSPENSION.—The Nuclear  
10          Regulatory Commission may establish criteria for  
11          the partial or total waiver or suspension of any obli-  
12          gation of service or payment incurred by a recipient  
13          of a scholarship or fellowship under this section.

14          “d. COMPETITIVE PROCESS.—Recipients of scholar-  
15          ships or fellowships under this section shall be selected  
16          through a competitive process primarily on the basis of  
17          academic merit and such other criteria as the Nuclear  
18          Regulatory Commission may establish, with consideration  
19          given to financial need and the goal of promoting the par-  
20          ticipation of individuals identified in section 33 or 34 of  
21          the Science and Engineering Equal Opportunities Act (42  
22          U.S.C. 1885a, 1885b).

23          “e. DIRECT APPOINTMENT.—The Nuclear Regu-  
24          latory Commission may appoint directly, with no further

1 competition, public notice, or consideration of any other  
2 potential candidate, an individual who has—

3 “(1) received a scholarship or fellowship award-  
4 ed by the Nuclear Regulatory Commission under  
5 this section; and

6 “(2) completed the academic program for which  
7 the scholarship or fellowship was awarded.”.

8 **SEC. 623. COST RECOVERY FROM GOVERNMENT AGENCIES.**

9 Section 161 w. of the Atomic Energy Act of 1954  
10 (42 U.S.C. 2201(w)) is amended—

11 (1) by striking “for or is issued” and all that  
12 follows through “1702” and inserting “to the Com-  
13 mission for, or is issued by the Commission, a li-  
14 cense or certificate”;

15 (2) by striking “483a” and inserting “9701”;  
16 and

17 (3) by striking “, of applicants for, or holders  
18 of, such licenses or certificates”.

19 **SEC. 624. ELIMINATION OF PENSION OFFSET FOR CERTAIN**  
20 **REHIRED FEDERAL RETIREES.**

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

1 **“SEC. 170C. ELIMINATION OF PENSION OFFSET FOR CER-**  
2 **TAIN REHIRED FEDERAL RETIREES.**

3 “a. IN GENERAL.—The Nuclear Regulatory Commis-  
4 sion may waive the application of section 8344 or 8468  
5 of title 5, United States Code, on a case-by-case basis for  
6 employment of an annuitant—

7 “(1) in a position of the Nuclear Regulatory  
8 Commission for which there is exceptional difficulty  
9 in recruiting or retaining a qualified employee; or

10 “(2) when a temporary emergency hiring need  
11 exists.

12 “b. PROCEDURES.—The Nuclear Regulatory Com-  
13 mission shall prescribe procedures for the exercise of au-  
14 thority under this section, including—

15 “(1) criteria for any exercise of authority; and

16 “(2) procedures for a delegation of authority.

17 “c. EFFECT OF WAIVER.—An employee as to whom  
18 a waiver under this section is in effect shall not be consid-  
19 ered an employee for purposes of subchapter II of chapter  
20 83, or chapter 84, of title 5, United States Code.”.

21 (b) TABLE OF SECTIONS AMENDMENT.—The table of  
22 sections for chapter 14 of the Atomic Energy Act of 1954  
23 is amended by adding at the end the following new item:

“Sec. 170C. Elimination of pension offset for certain rehired Federal retirees.”.

**1 SEC. 625. ANTITRUST REVIEW.**

2 Section 105 c. of the Atomic Energy Act of 1954 (42  
3 U.S.C. 2135(c)) is amended by adding at the end the fol-  
4 lowing:

5 “(9) APPLICABILITY.—This subsection does not  
6 apply to an application for a license to construct or oper-  
7 ate a utilization facility or production facility under sec-  
8 tion 103 or 104 b. that is filed on or after the date of  
9 enactment of this paragraph.”.

**10 SEC. 626. DECOMMISSIONING.**

11 Section 161 i. of the Atomic Energy Act of 1954 (42  
12 U.S.C. 2201(i)) is amended—

13 (1) by striking “and (3)” and inserting “(3)”;  
14 and

15 (2) by inserting before the semicolon at the end  
16 the following: “, and (4) to ensure that sufficient  
17 funds will be available for the decommissioning of  
18 any production or utilization facility licensed under  
19 section 103 or 104 b., including standards and re-  
20 strictions governing the control, maintenance, use,  
21 and disbursement by any former licensee under this  
22 Act that has control over any fund for the decom-  
23 missioning of the facility”.

1 **SEC. 627. LIMITATION ON LEGAL FEE REIMBURSEMENT.**

2 Title II of the Energy Reorganization Act of 1974  
3 (42 U.S.C. 5841 et seq.) is amended by adding at the end  
4 the following new section:

5 “LIMITATION ON LEGAL FEE REIMBURSEMENT

6 “SEC. 212. The Department of Energy shall not, ex-  
7 cept as required under a contract entered into before the  
8 date of enactment of this section, reimburse any con-  
9 tractor or subcontractor of the Department for any legal  
10 fees or expenses incurred with respect to a complaint sub-  
11 sequent to—

12 “(1) an adverse determination on the merits  
13 with respect to such complaint against the con-  
14 tractor or subcontractor by the Director of the De-  
15 partment of Energy’s Office of Hearings and Ap-  
16 peals pursuant to part 708 of title 10, Code of Fed-  
17 eral Regulations, or by a Department of Labor Ad-  
18 ministrative Law Judge pursuant to section 211 of  
19 this Act; or

20 “(2) an adverse final judgment by any State or  
21 Federal court with respect to such complaint against  
22 the contractor or subcontractor for wrongful termi-  
23 nation or retaliation due to the making of disclo-  
24 sures protected under chapter 12 of title 5, United  
25 States Code, section 211 of this Act, or any com-  
26 parable State law,

1 unless the adverse determination or final judgment is re-  
2 versed upon further administrative or judicial review.”.

3 **SEC. 628. DECOMMISSIONING PILOT PROGRAM.**

4 (a) PILOT PROGRAM.—The Secretary shall establish  
5 a decommissioning pilot program under which the Sec-  
6 retary shall decommission and decontaminate the sodium-  
7 cooled fast breeder experimental test-site reactor located  
8 in northwest Arkansas, in accordance with the decommis-  
9 sioning activities contained in the report of the Depart-  
10 ment relating to the reactor, dated August 31, 1998.

11 (b) AUTHORIZATION OF APPROPRIATIONS.—There is  
12 authorized to be appropriated to the Secretary to carry  
13 out this section \$16,000,000.

14 **SEC. 629. WHISTLEBLOWER PROTECTION.**

15 (a) DEFINITION OF EMPLOYER.—Section 211(a)(2)  
16 of the Energy Reorganization Act of 1974 (42 U.S.C.  
17 5851(a)(2)) is amended—

18 (1) in subparagraph (C), by striking “and” at  
19 the end;

20 (2) in subparagraph (D), by striking the period  
21 at the end and inserting a semicolon; and

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

23 “(E) a contractor or subcontractor of the  
24 Commission;

25 “(F) the Commission; and



1 “(G) the Department of Energy.”.

2 (b) DE NOVO REVIEW.—Subsection (b) of such sec-  
3 tion 211 is amended by adding at the end the following  
4 new paragraph:

5 “(4) If the Secretary has not issued a final de-  
6 cision within 1 year after the filing of a complaint  
7 under paragraph (1), and there is no showing that  
8 such delay is due to the bad faith of the person  
9 seeking relief under this paragraph, such person  
10 may bring an action at law or equity for de novo re-  
11 view in the appropriate district court of the United  
12 States, which shall have jurisdiction over such an ac-  
13 tion without regard to the amount in controversy.”.

14 **SEC. 630. MEDICAL ISOTOPE PRODUCTION.**

15 Section 134 of the Atomic Energy Act of 1954 (42  
16 U.S.C. 2160d) is amended—

17 (1) in subsection a., by striking “a. The Com-  
18 mission” and inserting “a. IN GENERAL.—Except as  
19 provided in subsection b., the Commission”;

20 (2) by redesignating subsection b. as subsection  
21 c.; and

22 (3) by inserting after subsection a. the fol-  
23 lowing:

24 “b. MEDICAL ISOTOPE PRODUCTION.—

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

1           “(A) HIGHLY ENRICHED URANIUM.—The  
2 term ‘highly enriched uranium’ means uranium  
3 enriched to include concentration of U-235  
4 above 20 percent.

5           “(B) MEDICAL ISOTOPE.—The term ‘med-  
6 ical isotope’ includes Molybdenum 99, Iodine  
7 131, Xenon 133, and other radioactive mate-  
8 rials used to produce a radiopharmaceutical for  
9 diagnostic, therapeutic procedures or for re-  
10 search and development.

11           “(C) RADIOPHARMACEUTICAL.—The term  
12 ‘radiopharmaceutical’ means a radioactive iso-  
13 tope that—

14                   “(i) contains byproduct material com-  
15 bined with chemical or biological material;  
16 and

17                   “(ii) is designed to accumulate tempo-  
18 rarily in a part of the body for therapeutic  
19 purposes or for enabling the production of  
20 a useful image for use in a diagnosis of a  
21 medical condition.

22           “(D) RECIPIENT COUNTRY.—The term ‘re-  
23 cipient country’ means Canada, Belgium,  
24 France, Germany, and the Netherlands.

1           “(2) LICENSES.—The Commission may issue a  
2           license authorizing the export (including shipment to  
3           and use at intermediate and ultimate consignees  
4           specified in the license) to a recipient country of  
5           highly enriched uranium for medical isotope produc-  
6           tion if, in addition to any other requirements of this  
7           Act (except subsection a.), the Commission deter-  
8           mines that—

9                   “(A) a recipient country that supplies an  
10                  assurance letter to the United States Govern-  
11                  ment in connection with the consideration by  
12                  the Commission of the export license applica-  
13                  tion has informed the United States Govern-  
14                  ment that any intermediate consignees and the  
15                  ultimate consignee specified in the application  
16                  are required to use the highly enriched uranium  
17                  solely to produce medical isotopes; and

18                   “(B) the highly enriched uranium for med-  
19                  ical isotope production will be irradiated only in  
20                  a reactor in a recipient country that—

21                           “(i) uses an alternative nuclear reac-  
22                           tor fuel; or

23                           “(ii) is the subject of an agreement  
24                           with the United States Government to con-  
25                           vert to an alternative nuclear reactor fuel

1                   when alternative nuclear reactor fuel can  
2                   be used in the reactor.

3                   “(3) REVIEW OF PHYSICAL PROTECTION RE-  
4                   QUIREMENTS.—

5                   “(A) IN GENERAL.—The Commission shall  
6                   review the adequacy of physical protection re-  
7                   quirements that, as of the date of an applica-  
8                   tion under paragraph (2), are applicable to the  
9                   transportation and storage of highly enriched  
10                  uranium for medical isotope production or con-  
11                  trol of residual material after irradiation and  
12                  extraction of medical isotopes.

13                  “(B) IMPOSITION OF ADDITIONAL RE-  
14                  QUIREMENTS.—If the Commission determines  
15                  that additional physical protection requirements  
16                  are necessary (including a limit on the quantity  
17                  of highly enriched uranium that may be con-  
18                  tained in a single shipment), the Commission  
19                  shall impose such requirements as license condi-  
20                  tions or through other appropriate means.

21                  “(4) FIRST REPORT TO CONGRESS.—

22                  “(A) NAS STUDY.—The Secretary shall  
23                  enter into an arrangement with the National  
24                  Academy of Sciences to conduct a study to de-  
25                  termine—

1           “(i) the feasibility of procuring sup-  
2 plies of medical isotopes from commercial  
3 sources that do not use highly enriched  
4 uranium;

5           “(ii) the current and projected de-  
6 mand and availability of medical isotopes  
7 in regular current domestic use;

8           “(iii) the progress that is being made  
9 by the Department of Energy and others  
10 to eliminate all use of highly enriched ura-  
11 nium in reactor fuel, reactor targets, and  
12 medical isotope production facilities; and

13           “(iv) the potential cost differential in  
14 medical isotope production in the reactors  
15 and target processing facilities if the prod-  
16 ucts were derived from production systems  
17 that do not involve fuels and targets with  
18 highly enriched uranium.

19           “(B) FEASIBILITY.—For the purpose of  
20 this subsection, the use of low enriched uranium  
21 to produce medical isotopes shall be determined  
22 to be feasible if—

23           “(i) low enriched uranium targets  
24 have been developed and demonstrated for  
25 use in the reactors and target processing

1 facilities that produce significant quantities  
2 of medical isotopes to serve United States  
3 needs for such isotopes;

4 “(ii) sufficient quantities of medical  
5 isotopes are available from low enriched  
6 uranium targets and fuel to meet United  
7 States domestic needs; and

8 “(iii) the average anticipated total  
9 cost increase from production of medical  
10 isotopes in such facilities without use of  
11 highly enriched uranium is less than 10  
12 percent.

13 “(C) REPORT BY THE SECRETARY.—Not  
14 later than 5 years after the date of enactment  
15 of the Energy Policy Act of 2005, the Secretary  
16 shall submit to Congress a report that—

17 “(i) contains the findings of the Na-  
18 tional Academy of Sciences made in the  
19 study under subparagraph (A); and

20 “(ii) discloses the existence of any  
21 commitments from commercial producers  
22 to provide domestic requirements for med-  
23 ical isotopes without use of highly enriched  
24 uranium consistent with the feasibility cri-  
25 teria described in subparagraph (B) not

1 later than the date that is 4 years after  
2 the date of submission of the report.

3 “(5) SECOND REPORT TO CONGRESS.—If the  
4 study of the National Academy of Sciences deter-  
5 mines under paragraph (4)(A)(i) that the procure-  
6 ment of supplies of medical isotopes from commer-  
7 cial sources that do not use highly enriched uranium  
8 is feasible, but the Secretary is unable to report the  
9 existence of commitments under paragraph  
10 (4)(C)(ii), not later than the date that is 6 years  
11 after the date of enactment of the Energy Policy Act  
12 of 2005, the Secretary shall submit to Congress a  
13 report that describes options for developing domestic  
14 supplies of medical isotopes in quantities that are  
15 adequate to meet domestic demand without the use  
16 of highly enriched uranium consistent with the cost  
17 increase described in paragraph (4)(B)(iii).

18 “(6) CERTIFICATION.—At such time as com-  
19 mercial facilities that do not use highly enriched  
20 uranium are capable of meeting domestic require-  
21 ments for medical isotopes, within the cost increase  
22 described in paragraph (4)(B)(iii) and without im-  
23 pairing the reliable supply of medical isotopes for  
24 domestic utilization, the Secretary shall submit to  
25 Congress a certification to that effect.

1           “(7) SUNSET PROVISION.—After the Secretary  
2           submits a certification under paragraph (6), the  
3           Commission shall, by rule, terminate its review of  
4           export license applications under this subsection.”.

5 **SEC. 631. SAFE DISPOSAL OF GREATER-THAN-CLASS C RA-**  
6 **DIOACTIVE WASTE.**

7           (a) RESPONSIBILITY FOR ACTIVITIES TO PROVIDE  
8 STORAGE FACILITY.—The Secretary shall provide to Con-  
9 gress official notification of the final designation of an en-  
10 tity within the Department to have the responsibility of  
11 completing activities needed to provide a facility for safely  
12 disposing of all greater-than-Class C low-level radioactive  
13 waste.

14           (b) REPORTS AND PLANS.—

15                 (1) REPORT ON PERMANENT DISPOSAL FACIL-  
16 ITY.—

17                         (A) PLAN REGARDING COST AND SCHED-  
18 ULE FOR COMPLETION OF EIS AND ROD.—Not  
19 later than 1 year after the date of enactment of  
20 this Act, the Secretary, in consultation with  
21 Congress, shall submit to Congress a report  
22 containing an estimate of the cost and a pro-  
23 posed schedule to complete an environmental  
24 impact statement and record of decision for a



1 permanent disposal facility for greater-than-  
2 Class C radioactive waste.

3 (B) ANALYSIS OF ALTERNATIVES.—Before  
4 the Secretary makes a final decision on the dis-  
5 posal alternative or alternatives to be imple-  
6 mented, the Secretary shall—

7 (i) submit to Congress a report that  
8 describes all alternatives under consider-  
9 ation, including all information required in  
10 the comprehensive report making rec-  
11 ommendations for ensuring the safe dis-  
12 posal of all greater-than-Class C low-level  
13 radioactive waste that was submitted by  
14 the Secretary to Congress in February  
15 1987; and

16 (ii) await action by Congress.

17 (2) SHORT-TERM PLAN FOR RECOVERY AND  
18 STORAGE.—

19 (A) IN GENERAL.—Not later than 180  
20 days after the date of enactment of this Act,  
21 the Secretary shall submit to Congress a plan  
22 to ensure the continued recovery and storage of  
23 greater-than-Class C low-level radioactive sealed  
24 sources that pose a security threat until a per-  
25 manent disposal facility is available.

1 (B) CONTENTS.—The plan shall address  
2 estimated cost, resource, and facility needs.

3 **SEC. 632. PROHIBITION ON NUCLEAR EXPORTS TO COUN-**  
4 **TRIES THAT SPONSOR TERRORISM.**

5 (a) IN GENERAL.—Section 129 of the Atomic Energy  
6 Act of 1954 (42 U.S.C. 2158) is amended—

7 (1) by inserting “a.” before “No nuclear mate-  
8 rials and equipment”; and

9 (2) by adding at the end the following new sub-  
10 section:

11 “b.(1) Notwithstanding any other provision of law,  
12 including specifically section 121 of this Act, and except  
13 as provided in paragraphs (2) and (3), no nuclear mate-  
14 rials and equipment or sensitive nuclear technology, in-  
15 cluding items and assistance authorized by section 57 b.  
16 of this Act and regulated under part 810 of title 10, Code  
17 of Federal Regulations, and nuclear-related items on the  
18 Commerce Control List maintained under part 774 of title  
19 15 of the Code of Federal Regulations, shall be exported  
20 or reexported, or transferred or retransferred whether di-  
21 rectly or indirectly, and no Federal agency shall issue any  
22 license, approval, or authorization for the export or reex-  
23 port, or transfer, or retransfer, whether directly or indi-  
24 rectly, of these items or assistance (as defined in this para-  
25 graph) to any country whose government has been identi-

1 fied by the Secretary of State as engaged in state sponsor-  
2 ship of terrorist activities (specifically including any coun-  
3 try the government of which has been determined by the  
4 Secretary of State under section 620A(a) of the Foreign  
5 Assistance Act of 1961 (22 U.S.C. 2371(a)), section  
6 6(j)(1) of the Export Administration Act of 1979 (50  
7 U.S.C. App. 2405(j)(1)), or section 40(d) of the Arms Ex-  
8 port Control Act (22 U.S.C. 2780(d)) to have repeatedly  
9 provided support for acts of international terrorism).

10 “(2) This subsection shall not apply to exports, reex-  
11 ports, transfers, or retransfers of radiation monitoring  
12 technologies, surveillance equipment, seals, cameras, tam-  
13 per-indication devices, nuclear detectors, monitoring sys-  
14 tems, or equipment necessary to safely store, transport,  
15 or remove hazardous materials, whether such items, serv-  
16 ices, or information are regulated by the Department of  
17 Energy, the Department of Commerce, or the Nuclear  
18 Regulatory Commission, except to the extent that such  
19 technologies, equipment, seals, cameras, devices, detectors,  
20 or systems are available for use in the design or construc-  
21 tion of nuclear reactors or nuclear weapons.

22 “(3) The President may waive the application of  
23 paragraph (1) to a country if the President determines  
24 and certifies to Congress that the waiver will not result  
25 in any increased risk that the country receiving the waiver

1 will acquire nuclear weapons, nuclear reactors, or any ma-  
2 terials or components of nuclear weapons and—

3 “(A) the government of such country has not  
4 within the preceding 12-month period willfully aided  
5 or abetted the international proliferation of nuclear  
6 explosive devices to individuals or groups or willfully  
7 aided and abetted an individual or groups in acquir-  
8 ing unsafeguarded nuclear materials;

9 “(B) in the judgment of the President, the gov-  
10 ernment of such country has provided adequate,  
11 verifiable assurances that it will cease its support for  
12 acts of international terrorism;

13 “(C) the waiver of that paragraph is in the vital  
14 national security interest of the United States; or

15 “(D) such a waiver is essential to prevent or re-  
16 spond to a serious radiological hazard in the country  
17 receiving the waiver that may or does threaten pub-  
18 lic health and safety.”.

19 (b) **APPLICABILITY TO EXPORTS APPROVED FOR**  
20 **TRANSFER BUT NOT TRANSFERRED.**—Subsection b. of  
21 section 129 of Atomic Energy Act of 1954, as added by  
22 subsection (a) of this section, shall apply with respect to  
23 exports that have been approved for transfer as of the date  
24 of the enactment of this Act but have not yet been trans-  
25 ferred as of that date.

**1 SEC. 633. EMPLOYEE BENEFITS.**

2 Section 3110(a) of the USEC Privatization Act (42  
3 U.S.C. 2297h-8(a)) is amended by adding at the end the  
4 following new paragraph:

5 “(8) CONTINUITY OF BENEFITS.—To the extent ap-  
6 propriations are provided in advance for this purpose or  
7 are otherwise available, not later than 30 days after the  
8 date of enactment of this paragraph, the Secretary shall  
9 implement such actions as are necessary to ensure that  
10 any employee who—

11 “(A) is involved in providing infrastructure or  
12 environmental remediation services at the Ports-  
13 mouth, Ohio, or the Paducah, Kentucky, Gaseous  
14 Diffusion Plant;

15 “(B) has been an employee of the Department  
16 of Energy’s predecessor management and inte-  
17 grating contractor (or its first or second tier sub-  
18 contractors), or of the Corporation, at the Ports-  
19 mouth, Ohio, or the Paducah, Kentucky, facility;  
20 and

21 “(C) was eligible as of April 1, 2005, to partici-  
22 pate in or transfer into the Multiple Employer Pen-  
23 sion Plan or the associated multiple employer retiree  
24 health care benefit plans, as defined in those plans,  
25 shall continue to be eligible to participate in or transfer  
26 into such pension or health care benefit plans.”.

1 **SEC. 634. DEMONSTRATION HYDROGEN PRODUCTION AT**  
2 **EXISTING NUCLEAR POWER PLANTS.**

3 (a) DEMONSTRATION PROJECTS.—The Secretary  
4 shall provide for the establishment of 2 projects in geo-  
5 graphic areas that are regionally and climatically diverse  
6 to demonstrate the commercial production of hydrogen at  
7 existing nuclear power plants.

8 (b) ECONOMIC ANALYSIS.—Prior to making an  
9 award under subsection (a), the Secretary shall determine  
10 whether the use of existing nuclear power plants is a cost-  
11 effective means of producing hydrogen.

12 (c) AUTHORIZATION OF APPROPRIATIONS.—There  
13 are authorized to be appropriated to the Secretary for the  
14 purposes of carrying out this section not more than  
15 \$100,000,000.

16 **SEC. 635. PROHIBITION ON ASSUMPTION BY UNITED**  
17 **STATES GOVERNMENT OF LIABILITY FOR**  
18 **CERTAIN FOREIGN INCIDENTS.**

19 (a) IN GENERAL.—Notwithstanding any other provi-  
20 sion of law, no officer of the United States or of any de-  
21 partment, agency, or instrumentality of the United States  
22 Government may enter into any contract or other arrange-  
23 ment, or into any amendment or modification of a contract  
24 or other arrangement, the purpose or effect of which  
25 would be to directly or indirectly impose liability on the  
26 United States Government, or any department, agency, or

1 instrumentality of the United States Government, or to  
2 otherwise directly or indirectly require an indemnity by the  
3 United States Government, for nuclear incidents occurring  
4 in connection with the design, construction, or operation  
5 of a production facility or utilization facility in any coun-  
6 try whose government has been identified by the Secretary  
7 of State as engaged in state sponsorship of terrorist activi-  
8 ties (specifically including any country the government of  
9 which, as of September 11, 2001, had been determined  
10 by the Secretary of State under section 620A(a) of the  
11 Foreign Assistance Act of 1961 (22 U.S.C. 2371(a)), sec-  
12 tion 6(j)(1) of the Export Administration Act of 1979 (50  
13 U.S.C. App. 2405(j)(1)), or section 40(d) of the Arms Ex-  
14 port Control Act (22 U.S.C. 2780(d)) to have repeatedly  
15 provided support for acts of international terrorism). This  
16 section shall not apply to nuclear incidents occurring as  
17 a result of missions, carried out under the direction of the  
18 Secretary, the Secretary of Defense, or the Secretary of  
19 State, that are necessary to safely secure, store, transport,  
20 or remove nuclear materials for nuclear safety or non-  
21 proliferation purposes.

22 (b) **DEFINITIONS.**—The terms used in this section  
23 shall have the same meaning as those terms have under  
24 section 11 of the Atomic Energy Act of 1954 (42 U.S.C.  
25 2014), unless otherwise expressly provided in this section.

1 **SEC. 636. AUTHORIZATION OF APPROPRIATIONS.**

2       There are authorized to be appropriated such sums  
3 as are necessary to carry out this subtitle and the amend-  
4 ments made by this subtitle.

5 **SEC. 637. NUCLEAR REGULATORY COMMISSION USER FEES**  
6 **AND ANNUAL CHARGES.**

7       (a) IN GENERAL.—Section 6101 of the Omnibus  
8 Budget Reconciliation Act of 1990 (42 U.S.C. 2214) is  
9 amended—

10           (1) in subsection (a)—

11                   (A) by striking “Except as provided in  
12 paragraph (3), the” and inserting “The” in  
13 paragraph (1); and

14                   (B) by striking paragraph (3); and

15           (2) in subsection (c)—

16                   (A) by striking “and” at the end of para-  
17 graph (2)(A)(i);

18                   (B) by striking the period at the end of  
19 paragraph (2)(A)(ii) and inserting a semicolon;

20                   (C) by adding at the end of paragraph  
21 (2)(A) the following new clauses:

22                           “(iii) amounts appropriated to the  
23 Commission for the fiscal year for imple-  
24 mentation of section 3116 of the Ronald  
25 W. Reagan National Defense Authorization  
26 Act for Fiscal Year 2005; and



1 “(iv) amounts appropriated to the  
2 Commission for homeland security activi-  
3 ties of the Commission for the fiscal year,  
4 except for the costs of fingerprinting and  
5 background checks required by section 149  
6 of the Atomic Energy Act of 1954 (42  
7 U.S.C. 2169) and the costs of conducting  
8 security inspections.”; and

9 (D) by amending paragraph (2)(B)(v) to  
10 read as follows:

11 “(v) 90 percent for fiscal year 2005  
12 and each fiscal year thereafter.”.

13 (b) REPEAL.—Section 7601 of the Consolidated Om-  
14 nibus Budget Reconciliation Act of 1985 (42 U.S.C. 2213)  
15 is repealed.

16 (c) EFFECTIVE DATE.—The amendments made by  
17 this section take effect on October 1, 2006.

## 18 **Subtitle B—Next Generation** 19 **Nuclear Plant Project**

### 20 **SEC. 641. PROJECT ESTABLISHMENT.**

21 (a) ESTABLISHMENT.—The Secretary shall establish  
22 a project to be known as the “Next Generation Nuclear  
23 Plant Project” (referred to in this subtitle as the  
24 “Project”).

1 (b) CONTENT.—The Project shall consist of the re-  
2 search, development, design, construction, and operation  
3 of a prototype plant, including a nuclear reactor that—

4 (1) is based on research and development activi-  
5 ties supported by the Generation IV Nuclear Energy  
6 Systems Initiative under section 942(d); and

7 (2) shall be used—

8 (A) to generate electricity;

9 (B) to produce hydrogen; or

10 (C) both to generate electricity and to  
11 produce hydrogen.

12 **SEC. 642. PROJECT MANAGEMENT.**

13 (a) DEPARTMENTAL MANAGEMENT.—

14 (1) IN GENERAL.—The Project shall be man-  
15 aged in the Department by the Office of Nuclear  
16 Energy, Science, and Technology.

17 (2) GENERATION IV NUCLEAR ENERGY SYS-  
18 TEMS PROGRAM.—The Secretary may combine the  
19 Project with the Generation IV Nuclear Energy Sys-  
20 tems Initiative.

21 (3) EXISTING DOE PROJECT MANAGEMENT EX-  
22 PERTISE.—The Secretary may utilize capabilities for  
23 review of construction projects for advanced sci-  
24 entific facilities within the Office of Science to track  
25 the progress of the Project.

1 (b) LABORATORY MANAGEMENT.—

2 (1) LEAD LABORATORY.—The Idaho National  
3 Laboratory shall be the lead National Laboratory for  
4 the Project and shall collaborate with other National  
5 Laboratories, institutions of higher education, other  
6 research institutes, industrial researchers, and inter-  
7 national researchers to carry out the Project.

8 (2) INDUSTRIAL PARTNERSHIPS.—

9 (A) IN GENERAL.—The Idaho National  
10 Laboratory shall organize a consortium of ap-  
11 propriate industrial partners that will carry out  
12 cost-shared research, development, design, and  
13 construction activities, and operate research fa-  
14 cilities, on behalf of the Project.

15 (B) COST-SHARING.—Activities of indus-  
16 trial partners funded by the Project shall be  
17 cost-shared in accordance with section 1002.

18 (C) PREFERENCE.—Preference in deter-  
19 mining the final structure of the consortium or  
20 any partnerships under this subtitle shall be  
21 given to a structure (including designating as a  
22 lead industrial partner an entity incorporated in  
23 the United States) that retains United States  
24 technological leadership in the Project while

1 maximizing cost sharing opportunities and  
2 minimizing Federal funding responsibilities.

3 (3) **PROTOTYPE PLANT SITING.**—The prototype  
4 nuclear reactor and associated plant shall be sited at  
5 the Idaho National Laboratory in Idaho.

6 (4) **REACTOR TEST CAPABILITIES.**—The  
7 Project shall use, if appropriate, reactor test capa-  
8 bilities at the Idaho National Laboratory.

9 (5) **OTHER LABORATORY CAPABILITIES.**—The  
10 Project may use, if appropriate, facilities at other  
11 National Laboratories.

12 **SEC. 643. PROJECT ORGANIZATION.**

13 (a) **MAJOR PROJECT ELEMENTS.**—The Project shall  
14 consist of the following major program elements:

15 (1) High-temperature hydrogen production  
16 technology development and validation.

17 (2) Energy conversion technology development  
18 and validation.

19 (3) Nuclear fuel development, characterization,  
20 and qualification.

21 (4) Materials selection, development, testing,  
22 and qualification.

23 (5) Reactor and balance-of-plant design, engi-  
24 neering, safety analysis, and qualification.

1 (b) PROJECT PHASES.—The Project shall be con-  
2 ducted in the following phases:

3 (1) FIRST PROJECT PHASE.—A first project  
4 phase shall be conducted to—

5 (A) select and validate the appropriate  
6 technology under subsection (a)(1);

7 (B) carry out enabling research, develop-  
8 ment, and demonstration activities on tech-  
9 nologies and components under paragraphs (2)  
10 through (4) of subsection (a);

11 (C) determine whether it is appropriate to  
12 combine electricity generation and hydrogen  
13 production in a single prototype nuclear reactor  
14 and plant; and

15 (D) carry out initial design activities for a  
16 prototype nuclear reactor and plant, including  
17 development of design methods and safety ana-  
18 lytical methods and studies under subsection  
19 (a)(5).

20 (2) SECOND PROJECT PHASE.—A second  
21 project phase shall be conducted to—

22 (A) continue appropriate activities under  
23 paragraphs (1) through (5) of subsection (a);

1 (B) develop, through a competitive process,  
2 a final design for the prototype nuclear reactor  
3 and plant;

4 (C) apply for licenses to construct and op-  
5 erate the prototype nuclear reactor from the  
6 Nuclear Regulatory Commission; and

7 (D) construct and start up operations of  
8 the prototype nuclear reactor and its associated  
9 hydrogen or electricity production facilities.

10 (c) PROJECT REQUIREMENTS.—

11 (1) IN GENERAL.—The Secretary shall ensure  
12 that the Project is structured so as to maximize the  
13 technical interchange and transfer of technologies  
14 and ideas into the Project from other sources of rel-  
15 evant expertise, including—

16 (A) the nuclear power industry, including  
17 nuclear powerplant construction firms, particu-  
18 larly with respect to issues associated with  
19 plant design, construction, and operational and  
20 safety issues;

21 (B) the chemical processing industry, par-  
22 ticularly with respect to issues relating to—

23 (i) the use of process energy for pro-  
24 duction of hydrogen; and

1 (ii) the integration of technologies de-  
2 veloped by the Project into chemical proc-  
3 essing environments; and

4 (C) international efforts in areas related to  
5 the Project, particularly with respect to hydro-  
6 gen production technologies.

7 (2) INTERNATIONAL COLLABORATION.—

8 (A) IN GENERAL.—The Secretary shall  
9 seek international cooperation, participation,  
10 and financial contributions for the Project.

11 (B) ASSISTANCE FROM INTERNATIONAL  
12 PARTNERS.—The Secretary, through the Idaho  
13 National Laboratory, may contract for assist-  
14 ance from specialists or facilities from member  
15 countries of the Generation IV International  
16 Forum, the Russian Federation, or other inter-  
17 national partners if the specialists or facilities  
18 provide access to cost-effective and relevant  
19 skills or test capabilities.

20 (C) PARTNER NATIONS.—The Project may  
21 involve demonstration of selected project objec-  
22 tives in a partner country.

23 (D) GENERATION IV INTERNATIONAL  
24 FORUM.—The Secretary shall ensure that inter-

1 national activities of the Project are coordinated  
2 with the Generation IV International Forum.

3 (3) REVIEW BY NUCLEAR ENERGY RESEARCH  
4 ADVISORY COMMITTEE.—

5 (A) IN GENERAL.—The Nuclear Energy  
6 Research Advisory Committee of the Depart-  
7 ment (referred to in this paragraph as the  
8 “NERAC”) shall—

9 (i) review all program plans for the  
10 Project and all progress under the Project  
11 on an ongoing basis; and

12 (ii) ensure that important scientific,  
13 technical, safety, and program manage-  
14 ment issues receive attention in the Project  
15 and by the Secretary.

16 (B) ADDITIONAL EXPERTISE.—The  
17 NERAC shall supplement the expertise of the  
18 NERAC or appoint subpanels to incorporate  
19 into the review by the NERAC the relevant  
20 sources of expertise described under paragraph  
21 (1).

22 (C) INITIAL REVIEW.—Not later than 180  
23 days after the date of enactment of this Act,  
24 the NERAC shall—



1 (i) review existing program plans for  
2 the Project in light of the recommenda-  
3 tions of the document entitled “Design  
4 Features and Technology Uncertainties for  
5 the Next Generation Nuclear Plant,” dated  
6 June 30, 2004; and

7 (ii) address any recommendations of  
8 the document not incorporated in program  
9 plans for the Project.

10 (D) FIRST PROJECT PHASE REVIEW.—On  
11 a determination by the Secretary that the ap-  
12 propriate activities under the first project phase  
13 under subsection (b)(1) are nearly complete, the  
14 Secretary shall request the NERAC to conduct  
15 a comprehensive review of the Project and to  
16 report to the Secretary the recommendation of  
17 the NERAC concerning whether the Project is  
18 ready to proceed to the second project phase  
19 under subsection (b)(2).

20 (E) TRANSMITTAL OF REPORTS TO CON-  
21 GRESS.—Not later than 60 days after receiving  
22 any report from the NERAC related to the  
23 Project, the Secretary shall submit to the ap-  
24 propriate committees of the Senate and the  
25 House of Representatives a copy of the report,

1           along with any additional views of the Secretary  
2           that the Secretary may consider appropriate.

3 **SEC. 644. NUCLEAR REGULATORY COMMISSION.**

4           (a) **IN GENERAL.**—In accordance with section 202 of  
5 the Energy Reorganization Act of 1974 (42 U.S.C. 5842),  
6 the Nuclear Regulatory Commission shall have licensing  
7 and regulatory authority for any reactor authorized under  
8 this subtitle.

9           (b) **LICENSING STRATEGY.**—Not later than 3 years  
10 after the date of enactment of this Act, the Secretary and  
11 the Chairman of the Nuclear Regulatory Commission shall  
12 jointly submit to the appropriate committees of the Senate  
13 and the House of Representatives a licensing strategy for  
14 the prototype nuclear reactor, including—

15           (1) a description of ways in which current li-  
16 censing requirements relating to light-water reactors  
17 need to be adapted for the types of prototype nu-  
18 clear reactor being considered by the Project;

19           (2) a description of analytical tools that the  
20 Nuclear Regulatory Commission will have to develop  
21 to independently verify designs and performance  
22 characteristics of components, equipment, systems,  
23 or structures associated with the prototype nuclear  
24 reactor;

1           (3) other research or development activities that  
2           may be required on the part of the Nuclear Regu-  
3           latory Commission in order to review a license appli-  
4           cation for the prototype nuclear reactor; and

5           (4) an estimate of the budgetary requirements  
6           associated with the licensing strategy.

7           (c) **ONGOING INTERACTION.**—The Secretary shall  
8           seek the active participation of the Nuclear Regulatory  
9           Commission throughout the duration of the Project to—

10           (1) avoid design decisions that will compromise  
11           adequate safety margins in the design of the reactor  
12           or impair the accessibility of nuclear safety-related  
13           components of the prototype reactor for inspection  
14           and maintenance;

15           (2) develop tools to facilitate inspection and  
16           maintenance needed for safety purposes; and

17           (3) develop risk-based criteria for any future  
18           commercial development of a similar reactor archi-  
19           tectures.

20 **SEC. 645. PROJECT TIMELINES AND AUTHORIZATION OF**  
21 **APPROPRIATIONS.**

22           (a) **TARGET DATE TO COMPLETE THE FIRST**  
23 **PROJECT PHASE.**—Not later than September 30, 2011,  
24 the Secretary shall—

1           (1) select the technology to be used by the  
2 Project for high-temperature hydrogen production  
3 and the initial design parameters for the prototype  
4 nuclear plant; or

5           (2) submit to Congress a report establishing an  
6 alternative date for making the selection.

7           (b) DESIGN COMPETITION FOR SECOND PROJECT  
8 PHASE.—

9           (1) IN GENERAL.—The Secretary, acting  
10 through the Idaho National Laboratory, shall fund  
11 not more than 4 teams for not more than 2 years  
12 to develop detailed proposals for competitive evalua-  
13 tion and selection of a single proposal for a final de-  
14 sign of the prototype nuclear reactor.

15           (2) SYSTEMS INTEGRATION.—The Secretary  
16 may structure Project activities in the second project  
17 phase to use the lead industrial partner of the com-  
18 petitively selected design under paragraph (1) in a  
19 systems integration role for final design and con-  
20 struction of the Project.

21           (c) TARGET DATE TO COMPLETE PROJECT CON-  
22 STRUCTION.—Not later than September 30, 2021, the  
23 Secretary shall—

1 (1) complete construction and begin operations  
2 of the prototype nuclear reactor and associated en-  
3 ergy or hydrogen facilities; or

4 (2) submit to Congress a report establishing an  
5 alternative date for completion.

6 (d) **AUTHORIZATION OF APPROPRIATIONS.**—There is  
7 authorized to be appropriated to the Secretary for re-  
8 search and construction activities under this subtitle (in-  
9 cluding for transfer to the Nuclear Regulatory Commis-  
10 sion for activities under section 644 as appropriate)—

11 (1) \$1,250,000,000 for the period of fiscal  
12 years 2006 through 2015; and

13 (2) such sums as are necessary for each of fis-  
14 cal years 2016 through 2021.

## 15 **Subtitle C—Nuclear Security**

### 16 **SEC. 651. NUCLEAR FACILITY THREATS.**

17 (a) **STUDY.**—The President, in consultation with the  
18 Nuclear Regulatory Commission (referred to in this sub-  
19 title as the “Commission”) and other appropriate Federal,  
20 State, and local agencies and private entities, shall con-  
21 duct a study to identify the types of threats that pose an  
22 appreciable risk to the security of the various classes of  
23 facilities licensed by the Commission under the Atomic  
24 Energy Act of 1954 (42 U.S.C. 2011 et seq.). Such study  
25 shall take into account, but not be limited to—

- 1 (1) the events of September 11, 2001;
- 2 (2) an assessment of physical, cyber, bio-  
3 chemical, and other terrorist threats;
- 4 (3) the potential for attack on facilities by mul-  
5 tiple coordinated teams of a large number of individ-  
6 uals;
- 7 (4) the potential for assistance in an attack  
8 from several persons employed at the facility;
- 9 (5) the potential for suicide attacks;
- 10 (6) the potential for water-based and air-based  
11 threats;
- 12 (7) the potential use of explosive devices of con-  
13 siderable size and other modern weaponry;
- 14 (8) the potential for attacks by persons with a  
15 sophisticated knowledge of facility operations;
- 16 (9) the potential for fires, especially fires of  
17 long duration;
- 18 (10) the potential for attacks on spent fuel  
19 shipments by multiple coordinated teams of a large  
20 number of individuals;
- 21 (11) the adequacy of planning to protect the  
22 public health and safety at and around nuclear fa-  
23 cilities, as appropriate, in the event of a terrorist at-  
24 tack against a nuclear facility; and

1           (12) the potential for theft and diversion of nu-  
2           clear materials from such facilities.

3           (b) SUMMARY AND CLASSIFICATION REPORT.—Not  
4 later than 180 days after the date of the enactment of  
5 this Act, the President shall transmit to Congress and the  
6 Commission a report—

7           (1) summarizing the types of threats identified  
8           under subsection (a); and

9           (2) classifying each type of threat identified  
10          under subsection (a), in accordance with existing  
11          laws and regulations, as either—

12                (A) involving attacks and destructive acts,  
13                including sabotage, directed against the facility  
14                by an enemy of the United States, whether a  
15                foreign government or other person, or other-  
16                wise falling under the responsibilities of the  
17                Federal Government; or

18                (B) involving the type of risks that Com-  
19                mission licensees should be responsible for  
20                guarding against.

21          (c) FEDERAL ACTION REPORT.—Not later than 90  
22 days after the date on which a report is transmitted under  
23 subsection (b), the President shall transmit to Congress  
24 a report on actions taken, or to be taken, to address the  
25 types of threats identified under subsection (b)(2)(A), in-

1 cluding identification of the Federal, State, and local  
2 agencies responsible for carrying out the obligations and  
3 authorities of the United States. Such report may include  
4 a classified annex, as appropriate.

5 (d) REGULATIONS.—Not later than 180 days after  
6 the date on which a report is transmitted under subsection  
7 (b), the Commission may revise, by rule, the design basis  
8 threats issued before the date of enactment of this section  
9 as the Commission considers appropriate based on the  
10 summary and classification report.

11 (e) PHYSICAL SECURITY PROGRAM.—The Commis-  
12 sion shall establish an operational safeguards response  
13 evaluation program that ensures that the physical protec-  
14 tion capability and operational safeguards response for  
15 sensitive nuclear facilities, as determined by the Commis-  
16 sion consistent with the protection of public health and  
17 the common defense and security, shall be tested periodi-  
18 cally through Commission approved or designed, observed,  
19 and evaluated force-on-force exercises to determine wheth-  
20 er the ability to defeat the design basis threat is being  
21 maintained. For purposes of this subsection, the term  
22 “sensitive nuclear facilities” includes at a minimum com-  
23 mercial nuclear power plants and category I fuel cycle fa-  
24 cilities.



1 (f) CONTROL OF INFORMATION.—Notwithstanding  
2 any other provision of law, the Commission may undertake  
3 any rulemaking under this subtitle in a manner that will  
4 fully protect safeguards and classified national security in-  
5 formation.

6 (g) FEDERAL SECURITY COORDINATORS.—

7 (1) REGIONAL OFFICES.—Not later than 18  
8 months after the date of enactment of this Act, the  
9 Commission shall assign a Federal security coordi-  
10 nator, under the employment of the Commission, to  
11 each region of the Commission.

12 (2) RESPONSIBILITIES.—The Federal security  
13 coordinator shall be responsible for—

14 (A) communicating with the Commission  
15 and other Federal, State, and local authorities  
16 concerning threats, including threats against  
17 such classes of facilities as the Commission de-  
18 termines to be appropriate;

19 (B) ensuring that such classes of facilities  
20 as the Commission determines to be appropriate  
21 maintain security consistent with the security  
22 plan in accordance with the appropriate threat  
23 level; and

24 (C) assisting in the coordination of secu-  
25 rity measures among the private security forces

1 at such classes of facilities as the Commission  
2 determines to be appropriate and Federal,  
3 State, and local authorities, as appropriate.

4 (h) TRAINING PROGRAM.—The President shall estab-  
5 lish a program to provide technical assistance and training  
6 to Federal agencies, the National Guard, and State and  
7 local law enforcement and emergency response agencies in  
8 responding to threats against a designated nuclear facility.

9 **SEC. 652. FINGERPRINTING AND CRIMINAL HISTORY**  
10 **RECORD CHECKS.**

11 Section 149 of the Atomic Energy Act of 1954 (42  
12 U.S.C. 2169) is amended—

13 (1) in subsection a.—

14 (A) by striking “a. The Nuclear” and all  
15 that follows through “section 147.” and insert-  
16 ing the following:

17 “a.(1)(A)(i) The Commission shall require each indi-  
18 vidual or entity described in clause (ii) to fingerprint each  
19 individual described in subparagraph (B) before the indi-  
20 vidual described in subparagraph (B) is permitted access  
21 under subparagraph (B).

22 “(ii) The individuals and entities referred to in clause  
23 (i) are individuals and entities that, on or before the date  
24 on which an individual is permitted access under subpara-  
25 graph (B)—

1           “(I) are licensed or certified to engage in an ac-  
2           tivity subject to regulation by the Commission;

3           “(II) have filed an application for a license or  
4           certificate to engage in an activity subject to regula-  
5           tion by the Commission; or

6           “(III) have notified the Commission in writing  
7           of an intent to file an application for licensing, cer-  
8           tification, permitting, or approval of a product or ac-  
9           tivity subject to regulation by the Commission.

10          “(B) The Commission shall require to be  
11          fingerprinted any individual who—

12                 “(i) is permitted unescorted access to—

13                         “(I) a utilization facility; or

14                         “(II) radioactive material or other property  
15                         subject to regulation by the Commission that  
16                         the Commission determines to be of such sig-  
17                         nificance to the public health and safety or the  
18                         common defense and security as to warrant  
19                         fingerprinting and background checks; or

20                 “(ii) is permitted access to safeguards informa-  
21                 tion under section 147.”;

22                 (B) by striking “All fingerprints obtained  
23                 by a licensee or applicant as required in the  
24                 preceding sentence” and inserting the following:

1           “(2) All fingerprints obtained by an individual or en-  
2 tity as required in paragraph (1)”;

3                   (C) by striking “The costs of any identi-  
4 fication and records check conducted pursuant  
5 to the preceding sentence shall be paid by the  
6 licensee or applicant.” and inserting the fol-  
7 lowing:

8           “(3) The costs of an identification or records check  
9 under paragraph (2) shall be paid by the individual or en-  
10 tity required to conduct the fingerprinting under para-  
11 graph (1)(A).”; and

12                   (D) by striking “Notwithstanding any  
13 other provision of law, the Attorney General  
14 may provide all the results of the search to the  
15 Commission, and, in accordance with regula-  
16 tions prescribed under this section, the Com-  
17 mission may provide such results to licensee or  
18 applicant submitting such fingerprints.” and in-  
19 serting the following:

20           “(4) Notwithstanding any other provision of law—

21                   “(A) the Attorney General may provide any re-  
22 sult of an identification or records check under para-  
23 graph (2) to the Commission; and

24                   “(B) the Commission, in accordance with regu-  
25 lations prescribed under this section, may provide

1 the results to the individual or entity required to  
2 conduct the fingerprinting under paragraph  
3 (1)(A).”;

4 (2) in subsection c.—

5 (A) by striking “, subject to public notice  
6 and comment, regulations—” and inserting “re-  
7 quirements—”; and

8 (B) in paragraph (2)(B), by striking  
9 “unescorted access to the facility of a licensee  
10 or applicant” and inserting “unescorted access  
11 to a utilization facility, radioactive material, or  
12 other property described in subsection  
13 a.(1)(B)”;

14 (3) by redesignating subsection d. as subsection  
15 e.; and

16 (4) by inserting after subsection c. the fol-  
17 lowing:

18 “d. The Commission may require a person or indi-  
19 vidual to conduct fingerprinting under subsection a.(1) by  
20 authorizing or requiring the use of any alternative biomet-  
21 ric method for identification that has been approved by—

22 “(1) the Attorney General; and

23 “(2) the Commission, by regulation.”.

1 **SEC. 653. USE OF FIREARMS BY SECURITY PERSONNEL.**

2 The Atomic Energy Act of 1954 is amended by in-  
3 serting after section 161 (42 U.S.C. 2201) the following:

4 **“SEC. 161A. USE OF FIREARMS BY SECURITY PERSONNEL.**

5 “a. DEFINITIONS.—In this section, the terms ‘hand-  
6 gun’, ‘rifle’, ‘shotgun’, ‘firearm’, ‘ammunition’, ‘machine-  
7 gun’, ‘short-barreled shotgun’, and ‘short-barreled rifle’  
8 have the meanings given the terms in section 921(a) of  
9 title 18, United States Code.

10 “b. AUTHORIZATION.—Notwithstanding subsections  
11 (a)(4), (a)(5), (b)(2), (b)(4), and (o) of section 922 of title  
12 18, United States Code, section 925(d)(3) of title 18,  
13 United States Code, section 5844 of the Internal Revenue  
14 Code of 1986, and any law (including regulations) of a  
15 State or a political subdivision of a State that prohibits  
16 the transfer, receipt, possession, transportation, importa-  
17 tion, or use of a handgun, a rifle, a shotgun, a short-bar-  
18 reled shotgun, a short-barreled rifle, a machinegun, a  
19 semiautomatic assault weapon, ammunition for any such  
20 gun or weapon, or a large capacity ammunition feeding  
21 device, in carrying out the duties of the Commission, the  
22 Commission may authorize the security personnel of any  
23 licensee or certificate holder of the Commission (including  
24 an employee of a contractor of such a licensee or certifi-  
25 cate holder) to transfer, receive, possess, transport, im-

1 port, and use 1 or more such guns, weapons, ammunition,  
2 or devices, if the Commission determines that—

3 “(1) the authorization is necessary to the dis-  
4 charge of the official duties of the security per-  
5 sonnel; and

6 “(2) the security personnel—

7 “(A) are not otherwise prohibited from  
8 possessing or receiving a firearm under Federal  
9 or State laws relating to possession of firearms  
10 by a certain category of persons;

11 “(B) have successfully completed any re-  
12 quirement under this section for training in the  
13 use of firearms and tactical maneuvers;

14 “(C) are engaged in the protection of—

15 “(i) a facility owned or operated by a  
16 licensee or certificate holder of the Com-  
17 mission that is designated by the Commis-  
18 sion; or

19 “(ii) radioactive material or other  
20 property owned or possessed by a licensee  
21 or certificate holder of the Commission, or  
22 that is being transported to or from a fa-  
23 cility owned or operated by such a licensee  
24 or certificate holder, and that has been de-  
25 termined by the Commission to be of sig-

1                   nificance to the common defense and secu-  
2                   rity or public health and safety; and

3                   “(D) are discharging the official duties of  
4                   the security personnel in transferring, receiving,  
5                   possessing, transporting, or importing the  
6                   weapons, ammunition, or devices.

7           “c. **BACKGROUND CHECKS.**—A person that receives,  
8 possesses, transports, imports, or uses a weapon, ammuni-  
9 tion, or a device under subsection (b) shall be subject to  
10 a background check by the Attorney General, based on  
11 fingerprints and including a background check under sec-  
12 tion 103(b) of the Brady Handgun Violence Prevention  
13 Act (Public Law 103–159; 18 U.S.C. 922 note) to deter-  
14 mine whether the person is prohibited from possessing or  
15 receiving a firearm under Federal or State law.

16           “d. **EFFECTIVE DATE.**—This section takes effect on  
17 the date on which guidelines are issued by the Commis-  
18 sion, with the approval of the Attorney General, to carry  
19 out this section.”

20 **SEC. 654. UNAUTHORIZED INTRODUCTION OF DANGEROUS**  
21 **WEAPONS.**

22           Section 229 of the Atomic Energy Act of 1954 (42  
23 U.S.C. 2278a) is amended—



1           (1) by striking “SEC. 229, TRESPASS UPON  
2           COMMISSION INSTALLATIONS.—” and inserting the  
3           following:

4           **“SEC. 229. TRESPASS ON COMMISSION INSTALLATIONS.”;**

5           (2) by adjusting the indentations of subsections  
6           a., b., and c. so as to reflect proper subsection in-  
7           dentations; and

8           (3) in subsection a.—

9           (A) in the first sentence, by striking “a.  
10           The” and inserting the following:

11           “a.(1) The”;

12           (B) in the second sentence, by striking  
13           “Every” and inserting the following:

14           “(2) Every”; and

15           (C) in paragraph (1) (as designated by  
16           subparagraph (A))—

17           (i) by striking “or in the custody” and  
18           inserting “in the custody”; and

19           (ii) by inserting “, or subject to the li-  
20           censing authority of the Commission or  
21           certification by the Commission under this  
22           Act or any other Act” before the period.

1 **SEC. 655. SABOTAGE OF NUCLEAR FACILITIES, FUEL, OR**  
2 **DESIGNATED MATERIAL.**

3 (a) IN GENERAL.—Section 236a. of the Atomic En-  
4 ergy Act of 1954 (42 U.S.C. 2284(a)) is amended—

5 (1) in paragraph (2), by striking “storage facil-  
6 ity” and inserting “treatment, storage, or disposal  
7 facility”;

8 (2) in paragraph (3)—

9 (A) by striking “such a utilization facility”  
10 and inserting “a utilization facility licensed  
11 under this Act”; and

12 (B) by striking “or” at the end;

13 (3) in paragraph (4)—

14 (A) by striking “facility licensed” and in-  
15 serting “, uranium conversion, or nuclear fuel  
16 fabrication facility licensed or certified”; and

17 (B) by striking the comma at the end and  
18 inserting a semicolon; and

19 (4) by inserting after paragraph (4) the fol-  
20 lowing:

21 “(5) any production, utilization, waste storage,  
22 waste treatment, waste disposal, uranium enrich-  
23 ment, uranium conversion, or nuclear fuel fabrica-  
24 tion facility subject to licensing or certification  
25 under this Act during construction of the facility, if  
26 the destruction or damage caused or attempted to be

1       caused could adversely affect public health and safe-  
2       ty during the operation of the facility;

3           “(6) any primary facility or backup facility  
4       from which a radiological emergency preparedness  
5       alert and warning system is activated; or

6           “(7) any radioactive material or other property  
7       subject to regulation by the Commission that, before  
8       the date of the offense, the Commission determines,  
9       by order or regulation published in the Federal Reg-  
10      ister, is of significance to the public health and safe-  
11      ty or to common defense and security;”.

12      (b) **CONFORMING AMENDMENT.**—Section 236 of the  
13      Atomic Energy Act of 1954 (42 U.S.C. 2284) is amended  
14      by striking “intentionally and willfully” each place it ap-  
15      pears and inserting “knowingly”.

16      **SEC. 656. SECURE TRANSFER OF NUCLEAR MATERIALS.**

17      (a) **AMENDMENT.**—Chapter 14 of the Atomic Energy  
18      Act of 1954 (42 U.S.C. 2201–2210b) (as amended by sec-  
19      tion 624(a)) is amended by adding at the end the following  
20      new section:

21      **“SEC. 170D. SECURE TRANSFER OF NUCLEAR MATERIALS.**

22           “a. The Nuclear Regulatory Commission shall estab-  
23      lish a system to ensure that materials described in sub-  
24      section b., when transferred or received in the United  
25      States by any party pursuant to an import or export li-

1 cense issued pursuant to this Act, are accompanied by a  
2 manifest describing the type and amount of materials  
3 being transferred or received. Each individual receiving or  
4 accompanying the transfer of such materials shall be sub-  
5 ject to a security background check conducted by appro-  
6 priate Federal entities.

7 “b. Except as otherwise provided by the Commission  
8 by regulation, the materials referred to in subsection a.  
9 are byproduct materials, source materials, special nuclear  
10 materials, high-level radioactive waste, spent nuclear fuel,  
11 transuranic waste, and low-level radioactive waste (as de-  
12 fined in section 2(16) of the Nuclear Waste Policy Act  
13 of 1982 (42 U.S.C. 10101(16))).”

14 (b) REGULATIONS.—Not later than 1 year after the  
15 date of the enactment of this Act, and from time to time  
16 thereafter as it considers necessary, the Nuclear Regu-  
17 latory Commission shall issue regulations identifying ra-  
18 dioactive materials or classes of individuals that, con-  
19 sistent with the protection of public health and safety and  
20 the common defense and security, are appropriate excep-  
21 tions to the requirements of section 170D of the Atomic  
22 Energy Act of 1954, as added by subsection (a) of this  
23 section.

24 (c) EFFECTIVE DATE.—The amendment made by  
25 subsection (a) shall take effect upon the issuance of regu-

1 lations under subsection (b), except that the background  
2 check requirement shall become effective on a date estab-  
3 lished by the Commission.

4 (d) **EFFECT ON OTHER LAW.**—Nothing in this sec-  
5 tion or the amendment made by this section shall waive,  
6 modify, or affect the application of chapter 51 of title 49,  
7 United States Code, part A of subtitle V of title 49,  
8 United States Code, part B of subtitle VI of title 49,  
9 United States Code, and title 23, United States Code.

10 (e) **TABLE OF SECTIONS AMENDMENT.**—The table of  
11 sections for chapter 14 of the Atomic Energy Act of 1954  
12 (as amended by section 624(b)) is amended by adding at  
13 the end the following new item:

“Sec. 170D. Secure transfer of nuclear materials.”.

14 **SEC. 657. DEPARTMENT OF HOMELAND SECURITY CON-**  
15 **SULTATION.**

16 Before issuing a license for a utilization facility, the  
17 Nuclear Regulatory Commission shall consult with the De-  
18 partment of Homeland Security concerning the potential  
19 vulnerabilities of the location of the proposed facility to  
20 terrorist attack.