

[CHAIRMEN'S PROPOSED CONFERENCE REPORT]

NOVEMBER 17, 2003

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 2003”.

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 2023”.

16 (b) INDEMNIFICATION OF DEPARTMENT OF ENERGY
17 CONTRACTORS.—Section 170 d.(1)(A) of the Atomic En-
18 ergy Act of 1954 (42 U.S.C. 2210(d)(1)(A)) is amended
19 by striking “December 31, 2004” and inserting “Decem-
20 ber 31, 2023”.

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, 2023”.

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 OF ENERGY LIABILITY LIMIT.**

24 (a) INDEMNIFICATION OF DEPARTMENT OF ENERGY
25 CONTRACTORS.—Section 170 d. of the Atomic Energy Act

1 of 1954 (42 U.S.C. 2210(d)) is amended by striking para-
2 graph (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
21 following—

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 2003, 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, 2019”.

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. PROHIBITION ON ASSUMPTION BY UNITED**
12 **STATES GOVERNMENT OF LIABILITY FOR**
13 **CERTAIN FOREIGN INCIDENTS.**

14 Section 170 of the Atomic Energy Act of 1954 (42
15 U.S.C. 2210) is amended by adding at the end the fol-
16 lowing new subsection:

17 “u. PROHIBITION ON ASSUMPTION OF LIABILITY FOR
18 CERTAIN FOREIGN INCIDENTS.—Notwithstanding this
19 section or any other provision of law, no officer of the
20 United States or of any department, agency, or instrumen-
21 tality of the United States Government may enter into any
22 contract or other arrangement, or into any amendment or
23 modification of a contract or other arrangement, the pur-
24 pose or effect of which would be to directly or indirectly
25 impose liability on the United States Government, or any

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

1 **SEC. 611. CIVIL PENALTIES.**

2 (a) REPEAL OF AUTOMATIC REMISSION.—Section
3 234A b.(2) of the Atomic Energy Act of 1954 (42 U.S.C.
4 2282a(b)(2)) is amended by striking the last sentence.

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

9 “d.(1) Notwithstanding subsection a., in the case of
10 any not-for-profit contractor, subcontractor, or supplier,
11 the total amount of civil penalties paid under subsection
12 a. may not exceed the total amount of fees paid within
13 any 1-year period (as determined by the Secretary) under
14 the contract under which the violation occurs.

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

19 (c) EFFECTIVE DATE.—The amendments made by
20 this section shall not apply to any violation of the Atomic
21 Energy Act of 1954 (42 U.S.C. 2011 et seq.) occurring
22 under a contract entered into before the date of enactment
23 of this section.

1 **Subtitle B—General Nuclear**
2 **Matters**

3 **SEC. 621. LICENSES.**

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

7 **SEC. 622. NRC TRAINING PROGRAM.**

8 (a) IN GENERAL.—In order to maintain the human
9 resource investment and infrastructure of the United
10 States in the nuclear sciences, health physics, and engi-
11 neering fields, in accordance with the statutory authorities
12 of the Nuclear Regulatory Commission relating to the ci-
13 vilian nuclear energy program, the Nuclear Regulatory
14 Commission shall carry out a training and fellowship pro-
15 gram to address shortages of individuals with critical nu-
16 clear safety regulatory skills.

17 (b) AUTHORIZATION OF APPROPRIATIONS.—

18 (1) IN GENERAL.—There are authorized to be
19 appropriated to the Nuclear Regulatory Commission
20 to carry out this section \$1,000,000 for each of fis-
21 cal years 2004 through 2008.

22 (2) AVAILABILITY.—Funds made available
23 under paragraph (1) shall remain available until ex-
24 pended.

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

2 Section 161 w. of the Atomic Energy Act of 1954
3 (42 U.S.C. 2201(w)) is amended—

4 (1) by striking “for or is issued” and all that
5 follows through “1702” and inserting “to the Com-
6 mission for, or is issued by the Commission, a li-
7 cense or certificate”;

8 (2) by striking “483a” and inserting “9701”;
9 and

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

12 **SEC. 624. ELIMINATION OF PENSION OFFSET.**

13 Section 161 of the Atomic Energy Act of 1954 (42
14 U.S.C. 2201) is amended by adding at the end the fol-
15 lowing:

16 “y. Exempt from the application of sections 8344 and
17 8468 of title 5, United States Code, an annuitant who was
18 formerly an employee of the Commission who is hired by
19 the Commission as a consultant, if the Commission finds
20 that the annuitant has a skill that is critical to the per-
21 formance of the duties of the Commission.”.

22 **SEC. 625. ANTITRUST REVIEW.**

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

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

6 **SEC. 626. DECOMMISSIONING.**

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

9 (1) by striking “and (3)” and inserting “(3)”;
10 and

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

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

21 The Department of Energy shall not, except as re-
22 quired under a contract entered into before the date of
23 enactment of this Act, reimburse any contractor or sub-
24 contractor of the Department for any legal fees or ex-

1 penses incurred with respect to a complaint subsequent
2 to—

3 (1) an adverse determination on the merits with
4 respect to such complaint against the contractor or
5 subcontractor by the Director of the Department of
6 Energy's Office of Hearings and Appeals pursuant
7 to part 708 of title 10, Code of Federal Regulations,
8 or by a Department of Labor Administrative Law
9 Judge pursuant to section 211 of the Energy Reor-
10 ganization Act of 1974 (42 U.S.C. 5851); or

11 (2) an adverse final judgment by any State or
12 Federal court with respect to such complaint against
13 the contractor or subcontractor for wrongful termi-
14 nation or retaliation due to the making of disclo-
15 sures protected under chapter 12 of title 5, United
16 States Code, section 211 of the Energy Reorganiza-
17 tion Act of 1974 (42 U.S.C. 5851), or any com-
18 parable State law,

19 unless the adverse determination or final judgment is re-
20 versed upon further administrative or judicial review.

21 **SEC. 628. DECOMMISSIONING PILOT PROGRAM.**

22 (a) PILOT PROGRAM.—The Secretary of Energy shall
23 establish a decommissioning pilot program to decommis-
24 sion and decontaminate the sodium-cooled fast breeder ex-
25 perimental test-site reactor located in northwest Arkansas

1 in accordance with the decommissioning activities con-
2 tained in the August 31, 1998, Department of Energy re-
3 port on the reactor.

4 (b) AUTHORIZATION OF APPROPRIATIONS.—There
5 are authorized to be appropriated to the Secretary of En-
6 ergy to carry out this section \$16,000,000.

7 **SEC. 629. REPORT ON FEASIBILITY OF DEVELOPING COM-**
8 **MERCIAL NUCLEAR ENERGY GENERATION**
9 **FACILITIES AT EXISTING DEPARTMENT OF**
10 **ENERGY SITES.**

11 Not later than 1 year after the date of the enactment
12 of this Act, the Secretary of Energy shall submit to Con-
13 gress a report on the feasibility of developing commercial
14 nuclear energy generation facilities at Department of En-
15 ergy sites in existence on the date of enactment of this
16 Act.

17 **SEC. 630. URANIUM SALES.**

18 (a) SALES, TRANSFERS, AND SERVICES.—Section
19 3112 of the USEC Privatization Act (42 U.S.C. 2297h-
20 10) is amended by striking subsections (d), (e), and (f)
21 and inserting the following:

22 “(3) The Secretary may transfer to the Corporation,
23 notwithstanding subsections (b)(2) and (d), natural ura-
24 nium in amounts sufficient to fulfill the Department of
25 Energy’s commitments under Article 4(B) of the Agree-

1 ment between the Department and the Corporation dated
2 June 17, 2002.

3 “(d) INVENTORY SALES.—(1) In addition to the
4 transfers and sales authorized under subsections (b) and
5 (c) and under paragraph (5) of this subsection, the United
6 States Government may transfer or sell uranium in any
7 form subject to paragraphs (2), (3), and (4).

8 “(2) Except as provided in subsections (b) and (c)
9 and paragraph (5) of this subsection, no sale or transfer
10 of uranium shall be made under this subsection by the
11 United States Government unless—

12 “(A) the President determines that the material
13 is not necessary for national security needs and the
14 sale or transfer has no adverse impact on implemen-
15 tation of existing government-to-government agree-
16 ments;

17 “(B) the price paid to the appropriate Federal
18 agency, if the transaction is a sale, will not be less
19 than the fair market value of the material; and

20 “(C) the sale or transfer to commercial nuclear
21 power end users is made pursuant to a contract of
22 at least 3 years’ duration.

23 “(3) Except as provided in paragraph (5), the United
24 States Government shall not make any transfer or sale
25 of uranium in any form under this subsection that would

1 cause the total amount of uranium transferred or sold pur-
2 suant to this subsection that is delivered for consumption
3 by commercial nuclear power end users to exceed—

4 “(A) 3,000,000 pounds of U₃O₈ equivalent in
5 fiscal year 2004, 2005, 2006, 2007, 2008, or 2009;

6 “(B) 5,000,000 pounds of U₃O₈ equivalent in
7 fiscal year 2010 or 2011;

8 “(C) 7,000,000 pounds of U₃O₈ equivalent in
9 fiscal year 2012; and

10 “(D) 10,000,000 pounds of U₃O₈ equivalent in
11 fiscal year 2013 or any fiscal year thereafter.

12 “(4) Except for sales or transfers under paragraph
13 (5), for the purposes of this subsection, the recovery of
14 uranium from uranium bearing materials transferred or
15 sold by the United States Government to the domestic
16 uranium industry shall be the preferred method of making
17 uranium available. The recovered uranium shall be count-
18 ed against the annual maximum deliveries set forth in this
19 section, when such uranium is sold to end users.

20 “(5) The United States Government may make the
21 following sales and transfers:

22 “(A) Sales or transfers to a Federal agency if
23 the material is transferred for the use of the receiv-
24 ing agency without any resale or transfer to another

1 entity and the material does not meet commercial
2 specifications.

3 “(B) Sales or transfers to any person for na-
4 tional security purposes, as determined by the Sec-
5 retary.

6 “(C) Sales or transfers to any State or local
7 agency or nonprofit, charitable, or educational insti-
8 tution for use other than the generation of electricity
9 for commercial use.

10 “(D) Sales or transfers to the Department of
11 Energy research reactor sales program.

12 “(E) Sales or transfers, at fair market value,
13 for emergency purposes in the event of a disruption
14 in supply to commercial nuclear power end users in
15 the United States.

16 “(F) Sales or transfers, at fair market value,
17 for use in a commercial reactor in the United States
18 with nonstandard fuel requirements.

19 “(G) Sales or transfers provided for under law
20 for use by the Tennessee Valley Authority in relation
21 to the Department of Energy’s highly enriched ura-
22 nium or tritium programs.

23 “(6) For purposes of this subsection, the term
24 “United States Government” does not include the Ten-
25 nessee Valley Authority.

1 “(e) SAVINGS PROVISION.—Nothing in this sub-
2 chapter modifies the terms of the Russian HEU Agree-
3 ment.

4 “(f) SERVICES.—Notwithstanding any other provi-
5 sion of this section, if the Secretary determines that the
6 Corporation has failed, or may fail, to perform any obliga-
7 tion under the Agreement between the Department of En-
8 ergy and the Corporation dated June 17, 2002, and as
9 amended thereafter, which failure could result in termi-
10 nation of the Agreement, the Secretary shall notify Con-
11 gress, in such a manner that affords Congress an oppor-
12 tunity to comment, prior to a determination by the Sec-
13 retary whether termination, waiver, or modification of the
14 Agreement is required. The Secretary is authorized to take
15 such action as he determines necessary under the Agree-
16 ment to terminate, waive, or modify provisions of the
17 Agreement to achieve its purposes.”.

18 (b) REPORT.—Not later than 3 years after the date
19 of enactment of this Act, the Secretary of Energy shall
20 report to Congress on the implementation of this section.
21 The report shall include a discussion of available excess
22 uranium inventories; all sales or transfers made by the
23 United States Government; the impact of such sales or
24 transfers on the domestic uranium industry, the spot mar-
25 ket uranium price, and the national security interests of

1 the United States; and any steps taken to remediate any
2 adverse impacts of such sales or transfers.

3 **SEC. 631. COOPERATIVE RESEARCH AND DEVELOPMENT**
4 **AND SPECIAL DEMONSTRATION PROJECTS**
5 **FOR THE URANIUM MINING INDUSTRY.**

6 (a) AUTHORIZATION OF APPROPRIATIONS.—There
7 are authorized to be appropriated to the Secretary of En-
8 ergy \$10,000,000 for each of fiscal years 2004, 2005, and
9 2006 for—

10 (1) cooperative, cost-shared agreements between
11 the Department of Energy and domestic uranium
12 producers to identify, test, and develop improved in
13 situ leaching mining technologies, including low-cost
14 environmental restoration technologies that may be
15 applied to sites after completion of in situ leaching
16 operations; and

17 (2) funding for competitively selected dem-
18 onstration projects with domestic uranium producers
19 relating to—

20 (A) enhanced production with minimal en-
21 vironmental impacts;

22 (B) restoration of well fields; and

23 (C) decommissioning and decontamination
24 activities.

1 (b) DOMESTIC URANIUM PRODUCER.—For purposes
2 of this section, the term “domestic uranium producer” has
3 the meaning given that term in section 1018(4) of the En-
4 ergy Policy Act of 1992 (42 U.S.C. 2296b–7(4)), except
5 that the term shall not include any producer that has not
6 produced uranium from domestic reserves on or after July
7 30, 1998.

8 (c) LIMITATION.—No activities funded under this
9 section may be carried out in the State of New Mexico.

10 **SEC. 632. WHISTLEBLOWER PROTECTION.**

11 (a) DEFINITION OF EMPLOYER.—Section 211(a)(2)
12 of the Energy Reorganization Act of 1974 (42 U.S.C.
13 5851(a)(2)) is amended—

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

16 (2) in subparagraph (D), by striking the period
17 at the end and inserting “; and” and

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

19 “(E) a contractor or subcontractor of the
20 Commission.”.

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

24 “(4) If the Secretary has not issued a final de-
25 cision within 540 days after the filing of a complaint

1 under paragraph (1), and there is no showing that
2 such delay is due to the bad faith of the person
3 seeking relief under this paragraph, such person
4 may bring an action at law or equity for de novo re-
5 view in the appropriate district court of the United
6 States, which shall have jurisdiction over such an ac-
7 tion without regard to the amount in controversy.”.

8 **SEC. 633. MEDICAL ISOTOPE PRODUCTION.**

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

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

14 (2) by redesignating subsection b. as subsection
15 c.; and

16 (3) by inserting after subsection a. the fol-
17 lowing:

18 “b. MEDICAL ISOTOPE PRODUCTION.—

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

20 “(A) HIGHLY ENRICHED URANIUM.—The
21 term ‘highly enriched uranium’ means uranium
22 enriched to include concentration of U-235
23 above 20 percent.

24 “(B) MEDICAL ISOTOPE.—The term ‘med-
25 ical isotope’ includes Molybdenum 99, Iodine

1 131, Xenon 133, and other radioactive mate-
2 rials used to produce a radiopharmaceutical for
3 diagnostic, therapeutic procedures or for re-
4 search and development.

5 “(C) **RADIOPHARMACEUTICAL.**—The term
6 ‘radiopharmaceutical’ means a radioactive iso-
7 tope that—

8 “(i) contains byproduct material com-
9 bined with chemical or biological material;
10 and

11 “(ii) is designed to accumulate tempo-
12 rarily in a part of the body for therapeutic
13 purposes or for enabling the production of
14 a useful image for use in a diagnosis of a
15 medical condition.

16 “(D) **RECIPIENT COUNTRY.**—The term ‘re-
17 cipient country’ means Canada, Belgium,
18 France, Germany, and the Netherlands.

19 “(2) **LICENSES.**—The Commission may issue a
20 license authorizing the export (including shipment to
21 and use at intermediate and ultimate consignees
22 specified in the license) to a recipient country of
23 highly enriched uranium for medical isotope produc-
24 tion if, in addition to any other requirements of this

1 Act (except subsection a.), the Commission deter-
2 mines that—

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

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

15 “(i) uses an alternative nuclear reac-
16 tor fuel; or

17 “(ii) is the subject of an agreement
18 with the United States Government to con-
19 vert to an alternative nuclear reactor fuel
20 when alternative nuclear reactor fuel can
21 be used in the reactor.

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

24 “(A) IN GENERAL.—The Commission shall
25 review the adequacy of physical protection re-

1 requirements that, as of the date of an applica-
2 tion under paragraph (2), are applicable to the
3 transportation and storage of highly enriched
4 uranium for medical isotope production or con-
5 trol of residual material after irradiation and
6 extraction of medical isotopes.

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

15 “(4) FIRST REPORT TO CONGRESS.—

16 “(A) NAS STUDY.—The Secretary shall
17 enter into an arrangement with the National
18 Academy of Sciences to conduct a study to
19 determine—

20 “(i) the feasibility of procuring sup-
21 plies of medical isotopes from commercial
22 sources that do not use highly enriched
23 uranium;

1 “(ii) the current and projected de-
2 mand and availability of medical isotopes
3 in regular current domestic use;

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

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

15 “(B) FEASIBILITY.—For the purpose of
16 this subsection, the use of low enriched uranium
17 to produce medical isotopes shall be determined
18 to be feasible if—

19 “(i) low enriched uranium targets
20 have been developed and demonstrated for
21 use in the reactors and target processing
22 facilities that produce significant quantities
23 of medical isotopes to serve United States
24 needs for such isotopes;

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

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

10 “(C) REPORT BY THE SECRETARY.—Not
11 later than 5 years after the date of enactment
12 of the Energy Policy Act of 2003, the Secretary
13 shall submit to Congress a report that—

14 “(i) contains the findings of the Na-
15 tional Academy of Sciences made in the
16 study under subparagraph (A); and

17 “(ii) discloses the existence of any
18 commitments from commercial producers
19 to provide domestic requirements for med-
20 ical isotopes without use of highly enriched
21 uranium consistent with the feasibility cri-
22 teria described in subparagraph (B) not
23 later than the date that is 4 years after
24 the date of submission of the report.

1 “(5) SECOND REPORT TO CONGRESS.—If the
2 study of the National Academy of Sciences deter-
3 mines under paragraph (4)(A)(i) that the procure-
4 ment of supplies of medical isotopes from commer-
5 cial sources that do not use highly enriched uranium
6 is feasible, but the Secretary is unable to report the
7 existence of commitments under paragraph
8 (4)(C)(ii), not later than the date that is 6 years
9 after the date of enactment of the Energy Policy Act
10 of 2003, the Secretary shall submit to Congress a
11 report that describes options for developing domestic
12 supplies of medical isotopes in quantities that are
13 adequate to meet domestic demand without the use
14 of highly enriched uranium consistent with the cost
15 increase described in paragraph (4)(B)(iii).

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

24 “(7) SUNSET PROVISION.—After the Secretary
25 submits a certification under paragraph (6), the

1 Commission shall, by rule, terminate its review of
2 export license applications under this subsection.”.

3 **SEC. 634. FERNALD BYPRODUCT MATERIAL.**

4 Notwithstanding any other law, the material in the
5 concrete silos at the Fernald uranium processing facility
6 managed on the date of enactment of this Act by the De-
7 partment of Energy shall be considered byproduct mate-
8 rial (as defined by section 11 e.(2) of the Atomic Energy
9 Act of 1954 (42 U.S.C. 2014(e)(2))). The Department of
10 Energy may dispose of the material in a facility regulated
11 by the Nuclear Regulatory Commission or by an Agree-
12 ment State. If the Department of Energy disposes of the
13 material in such a facility, the Nuclear Regulatory Com-
14 mission or the Agreement State shall regulate the material
15 as byproduct material under that Act. This material shall
16 remain subject to the jurisdiction of the Department of
17 Energy until it is received at a commercial, Nuclear Regu-
18 latory Commission-licensed, or Agreement State-licensed
19 facility, at which time the material shall be subject to the
20 health and safety requirements of the Nuclear Regulatory
21 Commission or the Agreement State with jurisdiction over
22 the disposal site.

1 **SEC. 635. SAFE DISPOSAL OF GREATER-THAN-CLASS C RA-**
2 **DIOACTIVE WASTE.**

3 (a) DESIGNATION OF RESPONSIBILITY.—The Sec-
4 retary of Energy shall designate an Office within the De-
5 partment of Energy to have the responsibility for activities
6 needed to develop a new, or use an existing, facility for
7 safely disposing of all low-level radioactive waste with con-
8 centrations of radionuclides that exceed the limits estab-
9 lished by the Nuclear Regulatory Commission for Class
10 C radioactive waste (referred to in this section as “GTCC
11 waste”).

12 (b) COMPREHENSIVE PLAN.—The Secretary of En-
13 ergy shall develop a comprehensive plan for permanent
14 disposal of GTCC waste which includes plans for a dis-
15 posal facility. This plan shall be transmitted to Congress
16 in a series of reports, including the following:

17 (1) REPORT ON SHORT-TERM PLAN.—Not later
18 than 180 days after the date of enactment of this
19 Act, the Secretary of Energy shall submit to Con-
20 gress a plan describing the Secretary’s operational
21 strategy for continued recovery and storage of
22 GTCC waste until a permanent disposal facility is
23 available.

24 (2) UPDATE OF 1987 REPORT.—

25 (A) IN GENERAL.—Not later than 1 year
26 after the date of enactment of this Act, the Sec-

1 retary of Energy shall submit to Congress an
2 update of the Secretary's February 1987 report
3 submitted to Congress that made comprehen-
4 sive recommendations for the disposal of GTCC
5 waste.

6 (B) CONTENTS.—The update under this
7 paragraph shall contain—

8 (i) a detailed description and identi-
9 fication of the GTCC waste that is to be
10 disposed;

11 (ii) a description of current domestic
12 and international programs, both Federal
13 and commercial, for management and dis-
14 position of GTCC waste;

15 (iii) an identification of the Federal
16 and private options and costs for the safe
17 disposal of GTCC waste;

18 (iv) an identification of the options for
19 ensuring that, wherever possible, genera-
20 tors and users of GTCC waste bear all rea-
21 sonable costs of waste disposal;

22 (v) an identification of any new statu-
23 tory authority required for disposal of
24 GTCC waste; and

1 (vi) in coordination with the Environ-
2 mental Protection Agency and the Nuclear
3 Regulatory Commission, an identification
4 of any new regulatory guidance needed for
5 the disposal of GTCC waste.

6 (3) REPORT ON COST AND SCHEDULE FOR
7 COMPLETION OF ENVIRONMENTAL IMPACT STATE-
8 MENT AND RECORD OF DECISION.—Not later than
9 180 days after the date of submission of the update
10 required under paragraph (2), the Secretary of En-
11 ergy shall submit to Congress a report containing an
12 estimate of the cost and schedule to complete a draft
13 and final environmental impact statement and to
14 issue a record of decision for a permanent disposal
15 facility, utilizing either a new or existing facility, for
16 GTCC waste.

17 **SEC. 636. PROHIBITION ON NUCLEAR EXPORTS TO COUN-**
18 **TRIES THAT SPONSOR TERRORISM.**

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

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

23 (2) by adding at the end the following new sub-
24 section:

1 “b.(1) Notwithstanding any other provision of law,
2 including specifically section 121 of this Act, and except
3 as provided in paragraphs (2) and (3), no nuclear mate-
4 rials and equipment or sensitive nuclear technology, in-
5 cluding items and assistance authorized by section 57 b.
6 of this Act and regulated under part 810 of title 10, Code
7 of Federal Regulations, and nuclear-related items on the
8 Commerce Control List maintained under part 774 of title
9 15 of the Code of Federal Regulations, shall be exported
10 or reexported, or transferred or retransferred whether di-
11 rectly or indirectly, and no Federal agency shall issue any
12 license, approval, or authorization for the export or reex-
13 port, or transfer, or retransfer, whether directly or indi-
14 rectly, of these items or assistance (as defined in this para-
15 graph) to any country whose government has been identi-
16 fied by the Secretary of State as engaged in state sponsor-
17 ship of terrorist activities (specifically including any coun-
18 try the government of which has been determined by the
19 Secretary of State under section 620A(a) of the Foreign
20 Assistance Act of 1961 (22 U.S.C. 2371(a)), section
21 6(j)(1) of the Export Administration Act of 1979 (50
22 U.S.C. App. 2405(j)(1)), or section 40(d) of the Arms Ex-
23 port Control Act (22 U.S.C. 2780(d)) to have repeatedly
24 provided support for acts of international terrorism).

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

13 “(3) The President may waive the application of
14 paragraph (1) to a country if the President determines
15 and certifies to Congress that the waiver will not result
16 in any increased risk that the country receiving the waiver
17 will acquire nuclear weapons, nuclear reactors, or any ma-
18 terials or components of nuclear weapons and—

19 “(A) the government of such country has not
20 within the preceding 12-month period willfully aided
21 or abetted the international proliferation of nuclear
22 explosive devices to individuals or groups or willfully
23 aided and abetted an individual or groups in acquir-
24 ing unsafeguarded nuclear materials;

1 “(B) in the judgment of the President, the gov-
2 ernment of such country has provided adequate, ver-
3 ifiable assurances that it will cease its support for
4 acts of international terrorism;

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

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

11 (b) **APPLICABILITY TO EXPORTS APPROVED FOR**
12 **TRANSFER BUT NOT TRANSFERRED.**—Subsection b. of
13 section 129 of Atomic Energy Act of 1954, as added by
14 subsection (a) of this section, shall apply with respect to
15 exports that have been approved for transfer as of the date
16 of the enactment of this Act but have not yet been trans-
17 ferred as of that date.

18 **SEC. 637. URANIUM ENRICHMENT FACILITIES.**

19 (a) **NUCLEAR REGULATORY COMMISSION REVIEW OF**
20 **APPLICATIONS.**—

21 (1) **IN GENERAL.**—In order to facilitate a time-
22 ly review and approval of an application in a pro-
23 ceeding for a license for the construction and oper-
24 ation of a uranium enrichment facility under sec-
25 tions 53 and 63 of the Atomic Energy Act of 1954

1 (42 U.S.C. 2073, 2093) (referred to in this sub-
2 section as a “covered proceeding”), the Nuclear Reg-
3 ulatory Commission shall, not later than 30 days
4 after the receipt of the application, establish, by
5 order, the schedule for the conduct of any hearing
6 that may be requested by any person whose interest
7 may be affected by the covered proceeding.

8 (2) FINAL AGENCY DECISION.—The schedule
9 shall provide that a final decision by the Commission
10 on the application shall be made not later than the
11 date that is 2 years after the date of submission of
12 the application by the applicant.

13 (3) COMPLIANCE WITH SCHEDULE.—

14 (A) IN GENERAL.—The Commission shall
15 establish a process to assess compliance with
16 the schedule established under paragraph (1)
17 on an ongoing basis during the course of the re-
18 view of the application, including ensuring com-
19 pliance with schedules and milestones that are
20 established for the conduct of any covered pro-
21 ceeding by the Atomic Safety and Licensing
22 Board.

23 (B) REPORT.—The Commission shall sub-
24 mit to Congress on a bimonthly basis a report
25 describing the status of compliance with the

1 schedule established under paragraph (1), in-
2 cluding a description of the status of actions re-
3 quired to be completed pursuant to the schedule
4 by officers and employees of—

5 (i) the Commission in undertaking the
6 safety and environmental review of applica-
7 tions; and

8 (ii) the Atomic Safety and Licensing
9 Board in the conduct of any covered pro-
10 ceeding.

11 (4) ENVIRONMENTAL REVIEW.—

12 (A) IN GENERAL.—In evaluating an appli-
13 cation under the National Environmental Policy
14 Act of 1969 (42 U.S.C. 4321 et seq.) for licens-
15 ing of a facility in a covered proceeding, the
16 Commission shall limit the consideration of
17 need to whether the licensing of the facility
18 would advance the national interest of encour-
19 aging in the United States—

20 (i) additional secure, reliable uranium
21 enrichment capacity;

22 (ii) diverse supplies and suppliers of
23 uranium enrichment capacity; and

24 (iii) the deployment of advanced cen-
25 trifuge enrichment technology.

1 (B) COMMENT.—In carrying out subpara-
2 graph (A), the Commission shall consider and
3 solicit the views of other affected Federal agen-
4 cies.

5 (C) ATOMIC SAFETY AND LICENSING
6 BOARD.—

7 (i) IN GENERAL.—Except as provided
8 in clause (ii), in any covered proceeding,
9 the Commission shall allow the litigation
10 and resolution by the Atomic Safety and
11 Licensing Board of issues arising under
12 the National Environmental Policy Act of
13 1969 (42 U.S.C. 4321 et seq.), on the
14 basis of information submitted by the ap-
15 plicant in its environmental report, prior to
16 publication of any required environmental
17 impact statement.

18 (ii) EXCEPTIONS.—On the publication
19 of any required environmental impact
20 statement, issues may be proffered for res-
21 olution by the Atomic Safety and Licensing
22 Board only if information or conclusions in
23 the environmental impact statement differ
24 significantly from the information or con-

1 clusions in the environmental report sub-
2 mitted by the applicant.

3 (D) ENVIRONMENTAL JUSTICE.—In a cov-
4 ered proceeding, the Commission shall apply the
5 criteria in Appendix C of the final report enti-
6 tled “Environmental Review Guidance for Li-
7 censing Actions Associated with NMSS Pro-
8 grams” (NUREG-1748), published in August
9 2003, in any required review of environmental
10 justice.

11 (5) LOW-LEVEL WASTE.—In any covered pro-
12 ceeding, the Commission shall—

13 (A) deem the obligation of the Secretary of
14 Energy pursuant to section 3113 of the USEC
15 Privitization Act (42 U.S.C. 2297 h-11) to con-
16 stitute a plausible strategy with regard to the
17 disposition of depleted uranium generated by
18 such facility; and

19 (B) treat any residual material that re-
20 mains following the extraction of any usable re-
21 source value from depleted uranium as low-level
22 radioactive waste under part 61 of title 10,
23 Code of Federal Regulations.

24 (6) ADJUDICATORY HEARING ON LICENSING OF
25 URANIUM ENRICHMENT FACILITIES.—Section 193(b)

1 of the Atomic Energy Act of 1954 (42 U.S.C.
2 2243(b)) is amended by striking paragraph (2) and
3 inserting the following:

4 “(2) TIMING.—On the issuance of a final deci-
5 sion on the application by the Atomic Safety and Li-
6 censing Board, the Commission shall issue and make
7 immediately effective any license for the construction
8 and operation of a uranium enrichment facility
9 under sections 53 and 63, on a determination by the
10 Commission that the issuance of the license would
11 not cause irreparable injury to the public health and
12 safety or the common defense and security, notwith-
13 standing the pendency before the Commission of any
14 appeal or petition for review of any decision of the
15 Atomic Safety and Licensing Board.”.

16 (b) DEPARTMENT OF ENERGY RESPONSIBILITIES.—

17 (1) IN GENERAL.—Not later than 180 days
18 after a request is made to the Secretary of Energy
19 by an applicant for or recipient of a license for a
20 uranium enrichment facility under section 53, 63, or
21 193 of the Atomic Energy Act of 1954 ((42 U.S.C.
22 2073, 2093, 2243), the Secretary shall enter into a
23 memorandum of agreement with the applicant or li-
24 censee that provides a schedule for the transfer to
25 the Secretary, not later than 5 years after the gen-

1 eration of any depleted uranium hexafluoride, of title
2 and possession of the depleted uranium hexafluoride
3 to be generated by the applicant or licensee.

4 (2) COST.—

5 (A) IN GENERAL.—Subject to subpara-
6 graphs (B) and (C), the memorandum of agree-
7 ment shall specify the cost to be assessed by the
8 Secretary for the transfer to the Secretary of
9 the depleted uranium hexafluoride.

10 (B) NONDISCRIMINATORY BASIS.—The
11 cost shall be determined by the Secretary on a
12 nondiscriminatory basis.

13 (C) COST.—Taking into account the phys-
14 ical and chemical characteristics of such de-
15 pleted uranium hexafluoride, the cost shall not
16 exceed the cost assessed by the Secretary for
17 the acceptance of depleted uranium hexafluoride
18 under—

19 (i) the memorandum of agreement be-
20 tween the United States Department of
21 Energy and the United States Enrichment
22 Corporation Relating to Depleted Ura-
23 nium, dated June 30, 1998; and

1 (ii) the Agreement Between the U.S.
2 Department of Energy and USEC Inc.,
3 dated June 17, 2002.

4 **SEC. 638. NATIONAL URANIUM STOCKPILE.**

5 (a) STOCKPILE CREATION.—The Secretary of En-
6 ergy may create a national low-enriched uranium stockpile
7 with the goals to—

- 8 (1) enhance national energy security; and
9 (2) reduce global proliferation threats.

10 (b) SOURCE OF MATERIAL.—The Secretary shall ob-
11 tain material for the stockpile from—

- 12 (1) material derived from blend-down of Rus-
13 sian highly enriched uranium derived from weapons
14 materials; and
15 (2) domestically mined and enriched uranium.

16 (c) LIMITATION ON SALES OR TRANSFERS.—Sales or
17 transfer of materials in the stockpile shall occur pursuant
18 to section 3112 of the USEC Privatization Act (42 U.S.C.
19 2297h–10), as amended by section 630 of this Act.

20 **Subtitle C—Advanced Reactor**
21 **Hydrogen Cogeneration Project**

22 **SEC. 651. PROJECT ESTABLISHMENT.**

23 The Secretary of Energy (in this subtitle referred to
24 as the “Secretary”) is directed to establish an Advanced
25 Reactor Hydrogen Cogeneration Project.

1 **SEC. 652. PROJECT DEFINITION.**

2 The project shall consist of the research, develop-
3 ment, design, construction, and operation of a hydrogen
4 production cogeneration research facility that, relative to
5 the current commercial reactors, enhances safety features,
6 reduces waste production, enhances thermal efficiencies,
7 increases proliferation resistance, and has the potential for
8 improved economics and physical security in reactor siting.
9 This facility shall be constructed so as to enable research
10 and development on advanced reactors of the type selected
11 and on alternative approaches for reactor-based produc-
12 tion of hydrogen.

13 **SEC. 653. PROJECT MANAGEMENT.**

14 (a) **MANAGEMENT.**—The project shall be managed
15 within the Department by the Office of Nuclear Energy,
16 Science, and Technology.

17 (b) **LEAD LABORATORY.**—The lead laboratory for the
18 project, providing the site for the reactor construction,
19 shall be the Idaho National Engineering and Environ-
20 mental Laboratory (in this subtitle referred to as
21 “INEEL”).

22 (c) **STEERING COMMITTEE.**—The Secretary shall es-
23 tablish a national steering committee with membership
24 from the national laboratories, universities, and industry
25 to provide advice to the Secretary and the Director of the

1 Office of Nuclear Energy, Science, and Technology on
2 technical and program management aspects of the project.

3 (d) COLLABORATION.—Project activities shall be con-
4 ducted at INEEL, other national laboratories, univer-
5 sities, domestic industry, and international partners.

6 **SEC. 654. PROJECT REQUIREMENTS.**

7 (a) RESEARCH AND DEVELOPMENT.—

8 (1) IN GENERAL.—The project shall include
9 planning, research and development, design, and
10 construction of an advanced, next-generation, nu-
11 clear energy system suitable for enabling further re-
12 search and development on advanced reactor tech-
13 nologies and alternative approaches for reactor-based
14 generation of hydrogen.

15 (2) REACTOR TEST CAPABILITIES AT INEEL.—
16 The project shall utilize, where appropriate, exten-
17 sive reactor test capabilities resident at INEEL.

18 (3) ALTERNATIVES.—The project shall be de-
19 signed to explore technical, environmental, and eco-
20 nomic feasibility of alternative approaches for reac-
21 tor-based hydrogen production.

22 (4) INDUSTRIAL LEAD.—The industrial lead for
23 the project shall be a company incorporated in the
24 United States.

25 (b) INTERNATIONAL COLLABORATION.—

1 (1) IN GENERAL.—The Secretary shall seek
2 international cooperation, participation, and finan-
3 cial contribution in this project.

4 (2) ASSISTANCE FROM INTERNATIONAL PART-
5 NERS.—The Secretary may contract for assistance
6 from specialists or facilities from member countries
7 of the Generation IV International Forum, the Rus-
8 sian Federation, or other international partners
9 where such specialists or facilities provide access to
10 cost-effective and relevant skills or test capabilities.

11 (3) GENERATION IV INTERNATIONAL FORUM.—
12 International activities shall be coordinated with the
13 Generation IV International Forum.

14 (4) GENERATION IV NUCLEAR ENERGY SYS-
15 TEMS PROGRAM.—The Secretary may combine this
16 project with the Generation IV Nuclear Energy Sys-
17 tems Program.

18 (c) DEMONSTRATION.—The overall project, which
19 may involve demonstration of selected project objectives
20 in a partner nation, must demonstrate both electricity and
21 hydrogen production and may provide flexibility, where
22 technically and economically feasible in the design and
23 construction, to enable tests of alternative reactor core
24 and cooling configurations.

1 (d) PARTNERSHIPS.—The Secretary shall establish
2 cost-shared partnerships with domestic industry or inter-
3 national participants for the research, development, de-
4 sign, construction, and operation of the research facility,
5 and preference in determining the final project structure
6 shall be given to an overall project which retains United
7 States leadership while maximizing cost sharing opportu-
8 nities and minimizing Federal funding responsibilities.

9 (e) TARGET DATE.—The Secretary shall select tech-
10 nologies and develop the project to provide initial testing
11 of either hydrogen production or electricity generation by
12 2010, or provide a report to Congress explaining why this
13 date is not feasible.

14 (f) WAIVER OF CONSTRUCTION TIMELINES.—The
15 Secretary is authorized to conduct the Advanced Reactor
16 Hydrogen Cogeneration Project without the constraints of
17 DOE Order 413.3, relating to program and project man-
18 agement for the acquisition of capital assets, as necessary
19 to meet the specified operational date.

20 (g) COMPETITION.—The Secretary may fund up to
21 2 teams for up to 1 year to develop detailed proposals for
22 competitive evaluation and selection of a single proposal
23 and concept for further progress. The Secretary shall de-
24 fine the format of the competitive evaluation of proposals.

1 (h) USE OF FACILITIES.—Research facilities in in-
2 dustry, national laboratories, or universities either within
3 the United States or with cooperating international part-
4 ners may be used to develop the enabling technologies for
5 the research facility. Utilization of domestic university-
6 based facilities shall be encouraged to provide educational
7 opportunities for student development.

8 (i) ROLE OF NUCLEAR REGULATORY COMMISSION.—

9 (1) IN GENERAL.—The Nuclear Regulatory
10 Commission shall have licensing and regulatory au-
11 thority for any reactor authorized under this sub-
12 title, pursuant to section 202 of the Energy Reorga-
13 nization Act of 1974 (42 U.S.C. 5842).

14 (2) RISK-BASED CRITERIA.—The Secretary
15 shall seek active participation of the Nuclear Regu-
16 latory Commission throughout the project to develop
17 risk-based criteria for any future commercial devel-
18 opment of a similar reactor architecture.

19 (j) REPORT—The Secretary shall develop and trans-
20 mit to Congress a comprehensive project plan not later
21 than April 30, 2004. The project plan shall be updated
22 annually with each annual budget submission.

23 **SEC. 655. AUTHORIZATION OF APPROPRIATIONS.**

24 (a) RESEARCH, DEVELOPMENT, AND DESIGN PRO-
25 GRAMS.—The following sums are authorized to be appro-

1 priated to the Secretary for all activities under this sub-
2 title except for construction activities described in sub-
3 section (b):

4 (1) For fiscal year 2004, \$35,000,000.

5 (2) For each of fiscal years 2005 through 2008,
6 \$150,000,000.

7 (3) For fiscal years beyond 2008, such sums as
8 are necessary.

9 (b) CONSTRUCTION.—There are authorized to be ap-
10 propriated to the Secretary for all project-related con-
11 struction activities, to be available until expended,
12 \$500,000,000.

13 **Subtitle D—Nuclear Security**

14 **SEC. 661. NUCLEAR FACILITY THREATS.**

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

24 (1) the events of September 11, 2001;

1 (2) an assessment of physical, cyber, bio-
2 chemical, and other terrorist threats;

3 (3) the potential for attack on facilities by mul-
4 tiple coordinated teams of a large number of individ-
5 uals;

6 (4) the potential for assistance in an attack
7 from several persons employed at the facility;

8 (5) the potential for suicide attacks;

9 (6) the potential for water-based and air-based
10 threats;

11 (7) the potential use of explosive devices of con-
12 siderable size and other modern weaponry;

13 (8) the potential for attacks by persons with a
14 sophisticated knowledge of facility operations;

15 (9) the potential for fires, especially fires of
16 long duration;

17 (10) the potential for attacks on spent fuel
18 shipments by multiple coordinated teams of a large
19 number of individuals;

20 (11) the adequacy of planning to protect the
21 public health and safety at and around nuclear fa-
22 cilities, as appropriate, in the event of a terrorist at-
23 tack against a nuclear facility; and

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

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

5 (1) summarizing the types of threats identified
6 under subsection (a); and

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

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

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

19 (c) FEDERAL ACTION REPORT.—Not later than 90
20 days after the date on which a report is transmitted under
21 subsection (b), the President shall transmit to Congress
22 a report on actions taken, or to be taken, to address the
23 types of threats identified under subsection (b)(2)(A), in-
24 cluding identification of the Federal, State, and local
25 agencies responsible for carrying out the obligations and

1 authorities of the United States. Such report may include
2 a classified annex, as appropriate.

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

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

23 (f) CONTROL OF INFORMATION.—Notwithstanding
24 any other provision of law, the Commission may undertake
25 any rulemaking under this subtitle in a manner that will

1 fully protect safeguards and classified national security in-
2 formation.

3 (g) FEDERAL SECURITY COORDINATORS.—

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

9 (2) RESPONSIBILITIES.—The Federal security
10 coordinator shall be responsible for—

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

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

21 (C) assisting in the coordination of secu-
22 rity measures among the private security forces
23 at such classes of facilities as the Commission
24 determines to be appropriate and Federal,
25 State, and local authorities, as appropriate.

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

6 **SEC. 662. FINGERPRINTING FOR CRIMINAL HISTORY**
7 **RECORD CHECKS.**

8 (a) IN GENERAL.—Subsection a. of section 149 of
9 the Atomic Energy Act of 1954 (42 U.S.C. 2169(a)) is
10 amended—

11 (1) by striking “a. The Nuclear” and all that
12 follows through “section 147.” and inserting the fol-
13 lowing:

14 “a. IN GENERAL.—

15 “(1) REQUIREMENTS.—

16 “(A) IN GENERAL.— The Commission
17 shall require each individual or entity—

18 “(i) that is licensed or certified to en-
19 gage in an activity subject to regulation by
20 the Commission;

21 “(ii) that has filed an application for
22 a license or certificate to engage in an ac-
23 tivity subject to regulation by the Commis-
24 sion; or

1 “(iii) that has notified the Commis-
2 sion, in writing, of an intent to file an ap-
3 plication for licensing, certification, permit-
4 ting, or approval of a product or activity
5 subject to regulation by the Commission,
6 to fingerprint each individual described in sub-
7 paragraph (B) before the individual is per-
8 mitted unescorted access or access, whichever is
9 applicable, as described in subparagraph (B).

10 “(B) INDIVIDUALS REQUIRED TO BE
11 FINGERPRINTED.—The Commission shall re-
12 quire to be fingerprinted each individual who—

13 “(i) is permitted unescorted access
14 to—

15 “(I) a utilization facility; or

16 “(II) radioactive material or
17 other property subject to regulation
18 by the Commission that the Commis-
19 sion determines to be of such signifi-
20 cance to the public health and safety
21 or the common defense and security
22 as to warrant fingerprinting and back-
23 ground checks; or

24 “(ii) is permitted access to safeguards
25 information under section 147.”;

1 (2) by striking “All fingerprints obtained by a
2 licensee or applicant as required in the preceding
3 sentence” and inserting the following:

4 “(2) SUBMISSION TO THE ATTORNEY GEN-
5 ERAL.—All fingerprints obtained by an individual or
6 entity as required in paragraph (1)”;

7 (3) by striking “The costs of any identification
8 and records check conducted pursuant to the pre-
9 ceding sentence shall be paid by the licensee or ap-
10 plicant.” and inserting the following:

11 “(3) COSTS.—The costs of any identification
12 and records check conducted pursuant to paragraph
13 (1) shall be paid by the individual or entity required
14 to conduct the fingerprinting under paragraph
15 (1)(A).”; and

16 (4) by striking “Notwithstanding any other pro-
17 vision of law, the Attorney General may provide all
18 the results of the search to the Commission, and, in
19 accordance with regulations prescribed under this
20 section, the Commission may provide such results to
21 licensee or applicant submitting such fingerprints.”
22 and inserting the following:

23 “(4) PROVISION TO INDIVIDUAL OR ENTITY RE-
24 QUIRED TO CONDUCT FINGERPRINTING.—Notwith-
25 standing any other provision of law, the Attorney

1 General may provide all the results of the search to
2 the Commission, and, in accordance with regulations
3 prescribed under this section, the Commission may
4 provide such results to the individual or entity re-
5 quired to conduct the fingerprinting under para-
6 graph (1)(A).”.

7 (b) ADMINISTRATION—Subsection c. of section 149
8 of the Atomic Energy Act of 1954 (42 U.S.C. 2169(e))
9 is amended—

10 (1) by striking “, subject to public notice and
11 comment, regulations—” and inserting “require-
12 ments—”; and

13 (2) by striking, in paragraph (2)(B),
14 “unescorted access to the facility of a licensee or ap-
15 plicant” and inserting “unescorted access to a utili-
16 zation facility, radioactive material, or other prop-
17 erty described in subsection a.(1)(B)”.

18 (c) BIOMETRIC METHODS.—Subsection d. of section
19 149 of the Atomic Energy Act of 1954 (42 U.S.C.
20 2169(d)) is redesignated as subsection e., and the fol-
21 lowing is inserted after subsection c.:

22 “d. USE OF OTHER BIOMETRIC METHODS.—The
23 Commission may satisfy any requirement for a person to
24 conduct fingerprinting under this section using any other
25 biometric method for identification approved for use by

1 the Attorney General, after the Commission has approved
2 the alternative method by rule.”.

3 **SEC. 663. USE OF FIREARMS BY SECURITY PERSONNEL OF**
4 **LICENSEES AND CERTIFICATE HOLDERS OF**
5 **THE COMMISSION.**

6 Section 161 of the Atomic Energy Act of 1954 (42
7 U.S.C. 2201) is amended by adding at the end the fol-
8 lowing subsection:

9 “(z)(1) notwithstanding section 922(o), (v), and
10 (w) of title 18, United States Code, or any similar
11 provision of any State law or any similar rule or reg-
12 ulation of a State or any political subdivision of a
13 State prohibiting the transfer or possession of a
14 handgun, a rifle or shotgun, a short-barreled shot-
15 gun, a short-barreled rifle, a machinegun, a semi-
16 automatic assault weapon, ammunition for the fore-
17 going, or a large capacity ammunition feeding de-
18 vice, authorize security personnel of licensees and
19 certificate holders of the Commission (including em-
20 ployees of contractors of licensees and certificate
21 holders) to receive, possess, transport, import, and
22 use 1 or more of those weapons, ammunition, or de-
23 vices, if the Commission determines that—

1 “(A) such authorization is necessary to the
2 discharge of the security personnel’s official du-
3 ties; and

4 “(B) the security personnel—

5 “(i) are not otherwise prohibited from
6 possessing or receiving a firearm under
7 Federal or State laws pertaining to posses-
8 sion of firearms by certain categories of
9 persons;

10 “(ii) have successfully completed re-
11 quirements established through guidelines
12 implementing this subsection for training
13 in use of firearms and tactical maneuvers;

14 “(iii) are engaged in the protection
15 of—

16 “(I) facilities owned or operated
17 by a Commission licensee or certifi-
18 cate holder that are designated by the
19 Commission; or

20 “(II) radioactive material or
21 other property owned or possessed by
22 a person that is a licensee or certifi-
23 cate holder of the Commission, or that
24 is being transported to or from a fa-
25 cility owned or operated by such a li-

1 censee or certificate holder, and that
2 has been determined by the Commis-
3 sion to be of significance to the com-
4 mon defense and security or public
5 health and safety; and

6 “(iv) are discharging their official du-
7 ties.

8 “(2) Such receipt, possession, transportation,
9 importation, or use shall be subject to—

10 “(A) chapter 44 of title 18, United States
11 Code, except for section 922(a)(4), (o), (v), and
12 (w);

13 “(B) chapter 53 of title 26, United States
14 Code, except for section 5844; and

15 “(C) a background check by the Attorney
16 General, based on fingerprints and including a
17 check of the system established under section
18 103(b) of the Brady Handgun Violence Preven-
19 tion Act (18 U.S.C. 922 note) to determine
20 whether the person applying for the authority is
21 prohibited from possessing or receiving a fire-
22 arm under Federal or State law.

23 “(3) This subsection shall become effective
24 upon the issuance of guidelines by the Commission,

1 with the approval of the Attorney General, to govern
2 the implementation of this subsection.

3 “(4) In this subsection, the terms “handgun”,
4 “rifle”, “shotgun”, “firearm”, “ammunition”, “ma-
5 chinegun”, “semiautomatic assault weapon”, “large
6 capacity ammunition feeding device”, “short-bar-
7 reled shotgun”, and “short-barreled rifle” shall have
8 the meanings given those terms in section 921(a) of
9 title 18, United States Code.”.

10 **SEC. 664. UNAUTHORIZED INTRODUCTION OF DANGEROUS**
11 **WEAPONS.**

12 Section 229 a. of the Atomic Energy Act of 1954 (42
13 U.S.C. 2278a(a)) is amended in the first sentence by in-
14 serting “or subject to the licensing authority of the Com-
15 mission or to certification by the Commission under this
16 Act or any other Act” before the period at the end.

17 **SEC. 665. SABOTAGE OF NUCLEAR FACILITIES OR FUEL.**

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

20 (1) in paragraph (2), by striking “storage facil-
21 ity” and inserting “storage, treatment, or disposal
22 facility”;

23 (2) in paragraph (3)—

1 (A) by striking “such a utilization facility”
2 and inserting “a utilization facility licensed
3 under this Act”; and

4 (B) by striking “or” at the end;

5 (3) in paragraph (4)—

6 (A) by striking “facility licensed” and in-
7 serting “, uranium conversion, or nuclear fuel
8 fabrication facility licensed or certified”; and

9 (B) by striking the comma at the end and
10 inserting a semicolon; and

11 (4) by inserting after paragraph (4) the fol-
12 lowing:

13 “(5) any production, utilization, waste storage,
14 waste treatment, waste disposal, uranium enrich-
15 ment, uranium conversion, or nuclear fuel fabrica-
16 tion facility subject to licensing or certification
17 under this Act during construction of the facility, if
18 the destruction or damage caused or attempted to be
19 caused could adversely affect public health and safe-
20 ty during the operation of the facility;

21 “(6) any primary facility or backup facility
22 from which a radiological emergency preparedness
23 alert and warning system is activated; or

24 “(7) any radioactive material or other property
25 subject to regulation by the Nuclear Regulatory

1 Commission that, before the date of the offense, the
2 Nuclear Regulatory Commission determines, by
3 order or regulation published in the Federal Reg-
4 ister, is of significance to the public health and safe-
5 ty or to common defense and security.”.

6 (b) PENALTIES.—Section 236 of the Atomic Energy
7 Act of 1954 (42 U.S.C. 2284) is amended by striking
8 “\$10,000 or imprisoned for not more than 20 years, or
9 both, and, if death results to any person, shall be impris-
10 oned for any term of years or for life” both places it ap-
11 pears and inserting “\$1,000,000 or imprisoned for up to
12 life without parole”.

13 **SEC. 666. SECURE TRANSFER OF NUCLEAR MATERIALS.**

14 (a) AMENDMENT.—Chapter 14 of the Atomic Energy
15 Act of 1954 (42 U.S.C. 2201–2210b) is amended by add-
16 ing at the end the following new section:

17 **“SEC. 170C. SECURE TRANSFER OF NUCLEAR MATERIALS.**

18 “a. The Nuclear Regulatory Commission shall estab-
19 lish a system to ensure that materials described in sub-
20 section b., when transferred or received in the United
21 States by any party pursuant to an import or export li-
22 cense issued pursuant to this Act, are accompanied by a
23 manifest describing the type and amount of materials
24 being transferred or received. Each individual receiving or
25 accompanying the transfer of such materials shall be sub-

1 ject to a security background check conducted by appro-
2 priate Federal entities.

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

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

20 (c) EFFECTIVE DATE.—The amendment made by
21 subsection (a) shall take effect upon the issuance of regu-
22 lations under subsection (b), except that the background
23 check requirement shall become effective on a date estab-
24 lished by the Commission.

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

7 (e) TABLE OF SECTIONS AMENDMENT.—The table of
8 sections for chapter 14 of the Atomic Energy Act of 1954
9 is amended by adding at the end the following new item:

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

10 **SEC. 667. DEPARTMENT OF HOMELAND SECURITY CON-**
11 **SULTATION.**

12 Before issuing a license for a utilization facility, the
13 Nuclear Regulatory Commission shall consult with the De-
14 partment of Homeland Security concerning the potential
15 vulnerabilities of the location of the proposed facility to
16 terrorist attack.

17 **SEC. 668. AUTHORIZATION OF APPROPRIATIONS.**

18 (a) IN GENERAL.—There are authorized to be appro-
19 priated such sums as are necessary to carry out this sub-
20 title and the amendments made by this subtitle.

21 (b) AGGREGATE AMOUNT OF CHARGES.—Section
22 6101(c)(2)(A) of the Omnibus Budget Reconciliation Act
23 of 1990 (42 U.S.C. 2214(c)(2)(A)) is amended—

24 (1) in clause (i), by striking “and” at the end;

1 (2) in clause (ii), by striking the period at the
2 end and inserting “; and” and
3 (3) by adding at the end the following:
4 “(iii) amounts appropriated to the
5 Commission for homeland security activi-
6 ties of the Commission for the fiscal year,
7 except for the costs of fingerprinting and
8 background checks required by section 149
9 of the Atomic Energy Act of 1954 (42
10 U.S.C. 2169) and the costs of conducting
11 security inspections.”.