

110TH CONGRESS  
2D SESSION

# S. 3215

To require the Secretary of Energy to enter into cooperative agreements with private entities to share the cost of obtaining construction and operating licenses for certain types of recycling facilities, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

JUNE 26, 2008

Mr. DOMENICI (for himself, Mr. SESSIONS, Ms. LANDRIEU, and Ms. MURKOWSKI) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

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## A BILL

To require the Secretary of Energy to enter into cooperative agreements with private entities to share the cost of obtaining construction and operating licenses for certain types of recycling facilities, and for other purposes.

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

3       **SECTION 1. SHORT TITLE.**

4       This Act may be cited as the “Strengthening Man-  
5       agement of Advanced Recycling Technologies Act of  
6       2008” or the “SMART Act of 2008”.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) COMMISSION.—The term “Commission”  
4 means the Nuclear Regulatory Commission.

5 (2) PRIVATE ENTITY.—The term “private enti-  
6 ty” means—

7 (A) a person, municipality, or electric util-  
8 ity (as those terms are defined in section 3 of  
9 the Federal Power Act (16 U.S.C. 796)); and

10 (B) any legal successor, representative,  
11 agent, or agency of any person or entity de-  
12 scribed in subsection (a).

13 (3) SECRETARY.—The term “Secretary” means  
14 the Secretary of Energy.

15 **SEC. 3. COST-SHARE COMMERCIAL NUCLEAR LICENSING**  
16 **PROGRAM.**

17 (a) IN GENERAL.—The Secretary shall offer to enter  
18 into 1 or more cooperative agreements with private enti-  
19 ties—

20 (1) to develop the required licensing documenta-  
21 tion and technical criteria for new recycling plants,  
22 as determined by the Commission by rule;

23 (2) to conduct design and engineering work on  
24 not less than 1, but not more than 2, recycling tech-  
25 nology designs—

1 (A) that is sufficient to develop the designs  
2 to a state of design completion; and

3 (B) to allow for the development of firm  
4 cost estimates with respect to the development  
5 of the recycling technologies; and

6 (3) to share the cost of obtaining construction  
7 and operating licenses for not more than 2 used fuel  
8 recycling facilities with a maximum individual capac-  
9 ity of 2,500 metric tons per year and a minimum ca-  
10 pacity of not less than 500 metric tons.

11 (b) COMPETITIVE BASIS.—Assistance under this sec-  
12 tion shall be awarded on a competitive basis.

13 (c) MATCHING FUNDS.—As a condition of awarding  
14 assistance under this section, the Secretary shall require  
15 that Federal funds provided under this section be matched  
16 with equal matching funds from a non-Federal source.

17 (d) PREREQUISITES.—Assistance under this section  
18 shall be awarded only to private entities that propose to  
19 develop recycling facilities that—

20 (1) do not separate pure plutonium;

21 (2) reduce the burden on geological repositories  
22 for ultimate waste disposal;

23 (3) promote extraction of additional useful en-  
24 ergy from used fuel from recycling or reuse;

1           (4) use only fuel that is produced from reactors  
2           that are located in the United States; and

3           (5) produce fuel for civilian nuclear power reac-  
4           tors that are located in the United States.

5 **SEC. 4. LONG-TERM CONTRACTS FOR RECYCLING COMMER-**  
6 **CIAL USED NUCLEAR FUEL.**

7           (a) IN GENERAL.—Subject to subsection (b), the Sec-  
8           retary shall offer to enter into long-term contracts with  
9           private entities to recycle commercial used nuclear fuel.

10          (b) PREREQUISITES.—The Secretary may enter into  
11          a long-term contract under subsection (a) only if the recy-  
12          cling—

13               (1) does not separate pure plutonium;

14               (2) reduces the burden on geological reposi-  
15               tories for ultimate waste disposal;

16               (3) promotes extraction of additional useful en-  
17               ergy from used fuel from recycling or reuse;

18               (4) uses only fuel that is produced from reac-  
19               tors that are located in the United States; and

20               (5) produces fuel for civilian nuclear power re-  
21               actors that are located in the United States.

22 **SEC. 5. INCENTIVES FOR SITING OF TEMPORARY USED**  
23 **FUEL STORAGE FACILITIES.**

24          (a) DEFINITIONS.—In this section:

1           (1) AGREEMENT.—The term “agreement”  
 2 means a temporary used fuel storage facility agree-  
 3 ment entered into under subsection (e).

4           (2) FIRST USED FUEL RECEIPT.—The term  
 5 “first used fuel receipt” means the receipt of used  
 6 fuel by a temporary used fuel storage facility at a  
 7 site within the jurisdiction of a unit of local govern-  
 8 ment that is a party to an agreement.

9           (3) UNIT OF LOCAL GOVERNMENT.—The term  
 10 “unit of local government” means any borough, city,  
 11 county, parish, town, township, village, or other gen-  
 12 eral purpose political subdivision of a State, or asso-  
 13 ciation of 2 or more political subdivisions of a State.

14           (4) USED FUEL.—The term “used fuel”  
 15 means—

16                   (A) high-level radioactive waste produced  
 17 by facilities with which the Secretary has en-  
 18 tered into a long-term contract under section 4;  
 19 or

20                   (B) used nuclear fuel.

21           (b) AUTHORIZATION.—The Secretary shall offer to  
 22 enter into temporary used fuel storage facility agreements  
 23 in accordance with this section.

24           (c) NOTICE FROM UNITS OF LOCAL GOVERNMENT  
 25 TO SECRETARY.—Not later than 180 days after the date

1 of enactment of this Act, representatives of a unit of local  
 2 government may submit to the Secretary written notice  
 3 that the unit of local government is willing to have a pri-  
 4 vately owned and operated temporary used fuel storage fa-  
 5 cility located at an identified site within the jurisdiction  
 6 of the units of local government.

7 (d) PRELIMINARY COMPENSATION.—

8 (1) IN GENERAL.—The Secretary shall make  
 9 payments of \$1,000,000 each year to not more than  
 10 11 units of local government that have submitted  
 11 notices under subsection (c).

12 (2) MULTIPLE NOTICES.—If more than 11 no-  
 13 tices are received under subsection (c), the Secretary  
 14 shall make payments to the first 11 units of local  
 15 government, based on the order in which the notices  
 16 are received.

17 (3) TIMING.—The payments shall be made an-  
 18 nually for a 3-year period, on the anniversary date  
 19 of the filing of the notice under subsection (c).

20 (e) AGREEMENT.—

21 (1) IN GENERAL.—On the docketing of an ap-  
 22 plication for a license for a temporary used fuel stor-  
 23 age facility at a site within the jurisdiction of an  
 24 unit of local government by the Commission, the  
 25 Secretary shall offer to enter into a temporary used

1 fuel storage facility economic impact agreement with  
2 the unit of local government.

3 (2) TERMS AND CONDITIONS.—An agreement  
4 between the Secretary and a unit of local govern-  
5 ment under this subsection shall contain such terms  
6 and conditions (including such financial and institu-  
7 tional arrangements) as the Secretary and the unit  
8 of local government determine to be reasonable and  
9 appropriate.

10 (3) AMENDMENT.—An agreement may be—

11 (A) amended only with the mutual consent  
12 of the parties to the agreement; and

13 (B) terminated only in accordance with  
14 paragraph (4).

15 (4) TERMINATION.—The Secretary shall termi-  
16 nate an agreement if the Secretary determines that  
17 any major element of the temporary used fuel stor-  
18 age facility required under the agreement will not be  
19 completed.

20 (5) NUMBER OF AGREEMENTS.—Not more than  
21 2 agreements may be in effect at any time.

22 (6) PAYMENT SCHEDULE.—

23 (A) IN GENERAL.—If the Secretary enters  
24 into an agreement under this subsection, the  
25 Secretary shall make to the unit of local govern-

1           ment and the State in which the unit of local  
2           government is located—

3                   (i) payments of—

4                           (I) on the date of entering into  
5                           the agreement under this subsection,  
6                           \$6,000,000;

7                           (II) during the period beginning  
8                           on the date of entering into an agree-  
9                           ment and ending on the date of first  
10                          used fuel receipt or denial of the li-  
11                          cense application for a temporary  
12                          used fuel storage facility by the Com-  
13                          mission,       whichever       is       later,  
14                          \$10,000,000 for each year; and

15                          (III) during the period beginning  
16                          on the date of first used fuel receipt  
17                          and ending on the date of closure of  
18                          the facility, a total of the higher of—

19                                   (aa) \$15,000,000 for each  
20                                   year; or

21                                   (bb) \$15,000 per metric ton  
22                                   of used fuel received at the facil-  
23                                   ity for each year, up to a max-  
24                                   imum of \$25,000,000 for each  
25                                   year; and



1 (ii) a payment of \$20,000,000 on clo-  
2 sure of the facility.

3 (B) TIMING OF ANNUAL PAYMENTS.—The  
4 Secretary shall make annual payments under  
5 subparagraph (A)(i)—

6 (i) in the case of annual payments de-  
7 scribed in subparagraph (A)(i)(II), on the  
8 anniversary of the date of the docketing of  
9 the license application by the Commission;  
10 and

11 (ii) in the case of annual payments  
12 described in subparagraph (A)(i)(III), on  
13 the date of the first used fuel receipt and  
14 thereafter on the anniversary date of the  
15 first used fuel receipt, in lieu of annual  
16 payments described in subparagraph  
17 (A)(i)(II).

18 (C) TERMINATION OF AUTHORITY.—Sub-  
19 ject to subparagraph (A)(ii), the authority to  
20 make payments under this paragraph termi-  
21 nates on the date of closure of the facility.

22 **SEC. 6. ACCEPTANCE, STORAGE, AND SETTLEMENT OF**  
23 **CLAIMS.**

24 (a) IN GENERAL.—The Secretary shall offer to enter  
25 into a long-term contract for the storage of used fuel from

1 civilian nuclear power plants with a private entity that  
2 owns or operates an independent used fuel storage facility  
3 licensed by the Commission that is located within the ju-  
4 risdiction of a unit of local government to which payments  
5 are made pursuant to section 5(e).

6 (b) SETTLEMENT AND ACCEPTANCE OF USED  
7 FUEL.—

8 (1) IN GENERAL.—At the request of a party to  
9 a contract under section 302(a) of the Nuclear  
10 Waste Policy Act of 1982 (42 U.S.C. 10222(a)), the  
11 Secretary may enter into an agreement for the set-  
12 tlement of all claims against the Secretary under a  
13 contract for failure to dispose of high-level radio-  
14 active waste or used nuclear fuel not later than Jan-  
15 uary 31, 1998.

16 (2) TERMS AND CONDITIONS.—A settlement  
17 agreement described in paragraph (1)—

18 (A) shall contain such terms and condi-  
19 tions (including such financial and institutional  
20 arrangements) as the Secretary and the party  
21 to the contract determine to be reasonable and  
22 appropriate; and

23 (B) may include the acceptance of used  
24 fuel from the party to the contract for storage

1 at a facility with respect to which the Secretary  
2 has a long-term contract under paragraph (1).

3 (c) EFFECT OF ACCEPTANCE.—Acceptance of used  
4 fuel by the Secretary under subsection (b) shall constitute  
5 transfer of title to the Secretary.

6 (d) PRIORITY FOR ACCEPTANCE FOR CLOSED FA-  
7 CILITIES.—If a request for fuel acceptance is made under  
8 paragraph (2) by a facility that has produced used nuclear  
9 fuel and that is shut down permanently and the facility  
10 has been decommissioned, the Secretary shall provide pri-  
11 ority for the acceptance of the fuel produced by the facil-  
12 ity.

13 (e) TRANSPORTATION OF USED FUEL.—

14 (1) IN GENERAL.—The Secretary shall provide  
15 for the transportation of used fuel accepted by the  
16 Secretary under this subsection.

17 (2) SYSTEMS AND COMPONENTS.—

18 (A) IN GENERAL.—The Secretary shall  
19 procure all systems and components necessary  
20 to transport used fuel from facilities designated  
21 by contract holders to 1 or more storage facili-  
22 ties under this subsection.

23 (B) CASKS.—The Secretary shall—

24 (i) use transportation and storage  
25 casks that are approved by the Commis-

1                   sion in use at facilities designated by con-  
 2                   tract holders; and  
 3                   (ii) compensate the owner and oper-  
 4                   ator of each facility for the use of the  
 5                   casks.

6 **SEC. 7. FUNDING.**

7       (a) **CONTRACTS AND FEES.**—Section 302(a) of the  
 8 Nuclear Waste Policy Act of 1982 (42 U.S.C. 10222(a))  
 9 is amended—

10           (1) in paragraph (2)—

11                   (A) by striking “(2) For” and inserting  
 12                   the following:

13                   “(2) **FEE FOR ELECTRICITY FROM CIVILIAN NU-**  
 14                   **CLEAR POWER REACTORS.**—

15                           “(A) **IN GENERAL.**—For”; and

16                           (B) by adding at the end the following:

17                           “(B) **ADJUSTED FEE.**—For electricity gen-  
 18                           erated by a civilian nuclear power reactor and  
 19                           sold on or after the date that is 90 days after  
 20                           the date of enactment of the Strengthening  
 21                           Management of Advanced Recycling Tech-  
 22                           nologies Act of 2008, the fee under paragraph  
 23                           (1) shall be 1 mill per kilowatt-hour.”; and  
 24                           (2) in paragraph (4)—

1 (A) by designating the first through fifth  
 2 sentences as subparagraphs (A) through (E),  
 3 respectively; and

4 (B) by striking subparagraph (E) (as so  
 5 designated) and inserting the following:

6 “(E) EFFECTIVE DATE OF ADJUSTED  
 7 FEE.—The adjusted fee proposed by the Sec-  
 8 retary shall be effective on the date a law is en-  
 9 acted approving the proposed adjustment of the  
 10 Secretary.”.

11 (b) ESTABLISHMENT OF NUCLEAR WASTE FUNDS.—  
 12 Section 302 of the Nuclear Waste Policy Act of 1982 (42  
 13 U.S.C. 10222) is amended by striking subsection (c) and  
 14 inserting the following:

15 “(c) ESTABLISHMENT OF NUCLEAR WASTE  
 16 FUNDS.—

17 “(1) NUCLEAR WASTE REVOLVING FUND.—

18 “(A) ESTABLISHMENT.—There is estab-  
 19 lished in the Treasury of the United States a  
 20 separate revolving fund, to be known as the Nu-  
 21 clear Waste Revolving Fund (referred to in this  
 22 section as the ‘Waste Fund’).

23 “(B) CONTENTS.—Subject to paragraph  
 24 (2)(B)(i), the Waste Fund shall consist of—

1 “(i) all interest realized by the Sec-  
2 retary under subsection (e), which have  
3 been and shall be deposited in the Waste  
4 Fund immediately on receipt;

5 “(ii) any appropriation made to the  
6 Waste Fund; and

7 “(iii) any unexpended balances avail-  
8 able on January 7, 1983, for functions or  
9 activities necessary or incident to the dis-  
10 posal of civilian high level radioactive  
11 waste or civilian used nuclear fuel, which  
12 shall be transferred to the Waste Fund on  
13 the date of enactment of this subpara-  
14 graph.

15 “(2) NUCLEAR WASTE LEGACY FUND.—

16 “(A) ESTABLISHMENT.—There is estab-  
17 lished in the Treasury of the United States a  
18 separate fund, to be known as the Nuclear  
19 Waste Legacy Fund (referred to in this section  
20 as the ‘Legacy Fund’).

21 “(B) CONTENTS.—The Legacy Fund shall  
22 consist of—

23 “(i) the amount of the corpus minus  
24 \$1 billion which shall be transferred from

1 the Waste Fund on the date of enactment  
2 of this subparagraph;

3 “(ii) fees paid under subsections (a)  
4 and (b); and

5 “(iii) any appropriations made to the  
6 Legacy Fund.”.

7 (c) AUTHORIZED USES OF NUCLEAR WASTE  
8 FUNDS.—Section 302(d) of the Nuclear Waste Policy Act  
9 (42 U.S.C. 10222(d)) is amended in the first sentence—

10 (1) in the matter preceding paragraph (1), by  
11 inserting “management of used nuclear fuel or”  
12 after “only for purposes of”;

13 (2) in paragraph (5), by striking “and” after  
14 the semicolon at the end;

15 (3) in paragraph (6), by striking “and 219.”  
16 and inserting “141, and 219 and section 5 of the  
17 Strengthening Management of Advanced Recycling  
18 Technologies Act of 2008; and”; and

19 (4) by inserting after paragraph (6) the fol-  
20 lowing:

21 “(7) any costs associated with storage and recy-  
22 cling of used nuclear fuel incurred pursuant to sec-  
23 tions 3, 4, and 5 of the Strengthening Management  
24 of Advanced Recycling Technologies Act of 2008.”.

1 (d) ADMINISTRATION OF FUNDS.—Section 302(e) of  
 2 the Nuclear Waste Policy Act of 1982 (42 U.S.C.  
 3 10222(e)) is amended—

4 (1) by redesignating paragraphs (4) through  
 5 (6) as paragraphs (6) through (8), respectively; and

6 (2) by striking “(e) ADMINISTRATION OF  
 7 WASTE FUND” and all that follows through the end  
 8 of paragraph (3) and inserting the following:

9 “(e) ADMINISTRATION OF FUNDS.—

10 “(1) IN GENERAL.—The Secretary of the  
 11 Treasury shall maintain the Waste Fund and the  
 12 Legacy Fund (referred to in this subsection as the  
 13 ‘Funds’).

14 “(2) ANNUAL REPORTS.—After consultation  
 15 with the Secretary of the Treasury, the Secretary  
 16 shall report annually to Congress on the financial  
 17 condition and operations of the Funds during the  
 18 preceding fiscal year.

19 “(3) BUDGET.—

20 “(A) SUBMISSION.—The Secretary shall  
 21 submit the budget of the Funds to the Office  
 22 of Management and Budget triennially along  
 23 with the budget of the Department of Energy  
 24 submitted in accordance with chapter 11 of title  
 25 31, United States Code.



1           “(B) ADMINISTRATION.—The budget of  
2 the Funds shall—

3           “(i) contain estimates made by the  
4 Secretary of expenditures from the Funds,  
5 and other relevant financial matters, for  
6 the succeeding 3 fiscal years; and

7           “(ii) be included in the budget for the  
8 United States Government.

9           “(4) EXPENDITURES.—

10          “(A) WASTE FUND.—

11          “(i) IN GENERAL.—Subject to sub-  
12 section (d) and any limitations in appro-  
13 priations Acts, the Secretary may make ex-  
14 penditures from the Waste Fund without  
15 further appropriation and without fiscal  
16 year limitation to carry out this Act.

17          “(ii) CERTAIN PAYMENTS.—Notwith-  
18 standing clause (i), the Secretary shall  
19 make expenditures from the Waste Fund  
20 to make payments under contracts and  
21 agreements entered into by the Secretary  
22 under sections 4(a), 5(e), and 5(f) of the  
23 Strengthening Management of Advanced  
24 Recycling Technologies Act of 2008 with-

1 out further appropriation and without fis-  
2 cal year limitation.

3 “(B) LEGACY FUND.—The Secretary may  
4 make expenditures from the Legacy Fund, sub-  
5 ject to appropriations, to remain available until  
6 expended.

7 “(5) INVESTMENTS.—If the Secretary deter-  
8 mines that either of the Funds contains at any time  
9 amounts in excess of current needs, the Secretary  
10 may request the Secretary of the Treasury to invest  
11 such amounts, or any portion of such amounts as  
12 the Secretary determines to be appropriate, in obli-  
13 gations of the United States—

14 “(A) having maturities determined by the  
15 Secretary of the Treasury to be appropriate to  
16 the needs of the Fund; and

17 “(B) bearing interest at rates determined  
18 to be appropriate by the Secretary of the Treas-  
19 ury, taking into consideration the current aver-  
20 age market yield on outstanding marketable ob-  
21 ligations of the United States with remaining  
22 periods to maturity comparable to the matu-  
23 rities of those investments, except that the in-  
24 terest rate on the investments shall not exceed

1           the average interest rate applicable to existing  
2           borrowing.”.

3       (e) CONFORMING AMENDMENTS.—

4           (1) Section 6 of the Nuclear Waste Policy Act  
5           of 1982 (42 U.S.C. 10105) is repealed.

6           (2) Section 302 of the Nuclear Waste Policy  
7           Act of 1982 (42 U.S.C. 10222) is amended by strik-  
8           ing the section heading and inserting the following:  
9           “NUCLEAR WASTE FUNDS”.

10 **SEC. 8. WASTE CONFIDENCE.**

11       For purposes of a determination by the Commission  
12       on whether to grant, amend, or renew any license under  
13       the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.)  
14       and this Act, the obligation of the Secretary to develop  
15       a repository in accordance with the Nuclear Waste Policy  
16       Act of 1982 (42 U.S.C. 10101 et seq.) shall provide suffi-  
17       cient and independent grounds for any further findings  
18       by the Commission of reasonable assurances that used nu-  
19       clear fuel and high-level radioactive waste would be dis-  
20       posed of safely and in a timely manner.

○