

111TH CONGRESS  
2D SESSION

# S. 3251

To improve energy efficiency and the use of renewable energy by Federal agencies, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

APRIL 22, 2010

Mr. CARPER 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 improve energy efficiency and the use of renewable energy by Federal agencies, 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 “Improving Energy Ef-  
5       ficiency and Renewable Energy Use By Federal Agencies  
6       Act of 2010”.

7       **SEC. 2. POWER PURCHASE AGREEMENT PROGRAM.**

8       (a) DEFINITIONS.—In this section:

9               (1) COST-EFFECTIVE.—The term “cost-effec-  
10       tive” means, with respect to a power purchase agree-

1        ment entered into by the head of an executive agen-  
2        cy for a Federal facility that is owned or controlled  
3        by the executive agency, that the 30-year average  
4        cost for the purchase of electricity under the power  
5        purchase agreement from 1 or more renewable en-  
6        ergy generating systems is not greater than an  
7        amount equal to 110 percent of the cost of an equal  
8        quantity of electricity from the current electricity  
9        supplier of the Federal facility, taking into consider-  
10       ation each—

11                (A) applicable cost, including any cost re-  
12                sulting from—

- 13                        (i) a demand charge;  
14                        (ii) an applicable rider;  
15                        (iii) a fuel adjustment charge; or  
16                        (iv) any other surcharge; and

17                (B) reasonably anticipated increase in the  
18                cost of the electricity resulting from—

- 19                        (i) inflation;  
20                        (ii) increased regulatory requirements;  
21                        (iii) decreased availability of fossil  
22                fuels; and  
23                        (iv) any other factor that may in-  
24                crease the cost of electricity.

1           (2) EXECUTIVE AGENCY.—The term “executive  
2           agency” has the meaning given the term in section  
3           4 of the Office of Federal Procurement Policy Act  
4           (41 U.S.C. 403).

5           (3) FEDERAL FACILITY.—The term “Federal  
6           facility” has the meaning given the term in section  
7           543(f)(C) of the National Energy Conservation Pol-  
8           icy Act (42 U.S.C. 8253(f)(C)).

9           (4) GOVERNMENT CORPORATION.—The term  
10          “Government corporation” has the meaning given  
11          the term in section 103 of title 5, United States  
12          Code.

13          (5) RENEWABLE ENERGY SOURCE.—The term  
14          “renewable energy source” has the meaning given  
15          the term in section 551 of the National Energy Con-  
16          servation Policy Act (42 U.S.C. 8259).

17          (b) POWER PURCHASE AGREEMENT PROJECTS.—

18               (1) AUTHORIZATION OF HEADS OF EXECUTIVE  
19               AGENCIES.—In accordance with paragraphs (2) and  
20               (3), the head of each executive agency or a designee  
21               may establish 1 or more projects under which the  
22               head of the executive agency may offer to enter into  
23               power purchase agreements during the 10-year pe-  
24               riod beginning on the date of enactment of this Act  
25               for the purchase of electricity from 1 or more Fed-

1       eral facilities that are owned or controlled by the ex-  
2       ecutive agency from renewable energy sources lo-  
3       cated at the Federal facility.

4           (2) COST-EFFECTIVE REQUIREMENT.—A head  
5       of an executive agency described in paragraph (1)  
6       may offer to enter into a power purchase agreement  
7       described in that paragraph only if the power pur-  
8       chase agreement is cost-effective.

9           (3) TERM OF POWER PURCHASE AGREE-  
10       MENT.—Notwithstanding any other provision of law  
11       (including regulations), the term of a power pur-  
12       chase agreement described in paragraph (1) may not  
13       be longer than a period of 30 years.

14          (4) ALLOCATION OF INCREMENTAL COSTS.—  
15       Each head of an executive agency (including the Ad-  
16       ministrator of General Services) who enters into a  
17       power purchase agreement under paragraph (1) for  
18       the purchase of electricity at a Federal facility that  
19       is owned or controlled by the executive agency for  
20       distribution to 1 or more other executive agencies  
21       shall allocate, on an annual basis for the period cov-  
22       ered by the power purchase agreement, the incre-  
23       mental cost or incremental savings of the power pur-  
24       chase agreement for the purchase of electricity at a  
25       Federal facility from renewable energy sources (as

1 compared to the cost of electricity from the elec-  
2 tricity supplier of the Federal facility) among each  
3 user of the Federal facility based on the proportion  
4 that—

5 (A) the electricity usage of the user of the  
6 Federal facility; bears to

7 (B) the aggregate electricity usage of all  
8 users of the Federal facility.

9 (c) POWER PURCHASE AGREEMENTS WITH MUL-  
10 TIPLE FEDERAL FACILITIES.—An executive agency may  
11 enter into an interagency agreement as part of a power  
12 purchase agreement that involves more than 1 Federal fa-  
13 cility.

14 (d) NEGOTIATED RATE AS BASIS FOR DETERMINING  
15 COST EFFECTIVENESS OF FUTURE ENERGY EFFICIENCY  
16 OR RENEWABLE ENERGY PROJECTS.—An executive agen-  
17 cy that enters into a power purchase agreement may not  
18 use the negotiated rate as a basis for determining the busi-  
19 ness case or economic feasibility of future energy efficiency  
20 or renewable energy projects.

21 (e) REGULATIONS.—The Secretary of Energy shall  
22 promulgate such regulations as are necessary to carry out  
23 this section.

24 (f) AUTHORIZATION OF APPROPRIATIONS.—There  
25 are authorized to be appropriated to carry out this section

1 such sums as are necessary for each of fiscal years 2010  
 2 through 2019, to remain available until expended.

3 **SEC. 3. FEDERAL FACILITY ENERGY EFFICIENCY AND RE-**  
 4 **NEWABLE ENERGY PROJECTS FUND.**

5 (a) ESTABLISHMENT.—There is established in the  
 6 Treasury of the United States a revolving fund, to be  
 7 known as the “Federal Facility Energy Efficiency and Re-  
 8 newable Energy Projects Fund” (referred to in this sec-  
 9 tion as the “Fund”), consisting of such amounts as are  
 10 appropriated to the Fund under subsection (b).

11 (b) TRANSFERS TO FUND.—

12 (1) AUTHORIZATION OF APPROPRIATIONS.—

13 There are authorized to be appropriated to the Fund  
 14 \$500,000,000, to remain available until expended.

15 (2) LOAN REPAYMENTS.—There are appro-  
 16 priated to the Fund, out of funds of the Treasury  
 17 not otherwise appropriated, amounts equivalent to  
 18 loan amounts repaid and received in the Treasury  
 19 under subsection (e).

20 (c) EXPENDITURES FROM FUND.—

21 (1) IN GENERAL.—Subject to paragraph (2), on  
 22 request by the Secretary of Energy (referred to in  
 23 this section as the “Secretary”), the Secretary of the  
 24 Treasury shall transfer from the Fund to the Sec-  
 25 retary such amounts as the Secretary determines are

1 necessary to provide assistance for energy efficiency  
 2 and renewable energy projects carried out at Federal  
 3 facilities in accordance with subsection (e).

4 (2) ADMINISTRATIVE EXPENSES.—An amount  
 5 not exceeding 10 percent of the amounts in the  
 6 Fund shall be available for each fiscal year to pay  
 7 the administrative expenses necessary to carry out  
 8 this section.

9 (d) TRANSFERS OF AMOUNTS.—

10 (1) IN GENERAL.—The amounts required to be  
 11 transferred to the Fund under this section shall be  
 12 transferred at least monthly from the general fund  
 13 of the Treasury to the Fund on the basis of esti-  
 14 mates made by the Secretary of the Treasury.

15 (2) ADJUSTMENTS.—Proper adjustment shall  
 16 be made in amounts subsequently transferred to the  
 17 extent prior estimates were in excess of or less than  
 18 the amounts required to be transferred.

19 (e) FEDERAL FACILITY ENERGY EFFICIENCY AND  
 20 RENEWABLE ENERGY PROJECTS FUND PROGRAM.—

21 (1) IN GENERAL.—The Secretary of Energy  
 22 shall establish a Federal facility energy efficiency  
 23 and renewable energy projects fund program under  
 24 which the Secretary shall make loans to Federal  
 25 agencies to assist the agencies in reducing energy

1 use and related purposes, as determined by the Sec-  
2 retary.

3 (2) GUIDELINES FOR APPLICATIONS.—Not later  
4 than 180 days after the date of enactment of this  
5 Act, the Secretary shall issue guidelines for Federal  
6 agencies to submit applications for loans under this  
7 subsection.

8 (3) ELIGIBILITY.—Each Federal agency shall  
9 be eligible to submit an application for a loan under  
10 this subsection.

11 (4) LOAN AWARDS.—

12 (A) IN GENERAL.—The Secretary shall  
13 award loans under this subsection on a competi-  
14 tive basis.

15 (B) ALLOCATION.—The Secretary shall  
16 convene a committee of Federal agencies to de-  
17 termine allocation from the Fund to carry out  
18 this subsection after a competitive assessment  
19 of the technical and economic effectiveness of  
20 each application for a loan under this sub-  
21 section.

22 (C) SELECTION.—In determining whether  
23 to provide a loan to a Federal agency for a  
24 project under this subsection, the Secretary  
25 shall consider—



- 1 (i) the cost-effectiveness of the  
2 project;
- 3 (ii) the amount of energy and cost  
4 savings anticipated to the Federal Govern-  
5 ment;
- 6 (iii) the amount of funding committed  
7 to the project by the agency;
- 8 (iv) the extent that a project will le-  
9 verage financing from other non-Federal  
10 sources; and
- 11 (v) any other factor that the Secretary  
12 determines will result in the greatest  
13 amount of energy and cost savings to the  
14 Federal Government.

15 **SEC. 4. INCENTIVES FOR FEDERAL AGENCIES FOR UTILITY**  
16 **ENERGY SAVINGS CONTRACTS.**

17 Not later than 180 days after the date of enactment  
18 of this Act, the Secretary of Energy, in consultation with  
19 the Secretary of Defense and the Administrator of General  
20 Services, shall promulgate regulations that enable Federal  
21 agencies to retain the financial savings that result from  
22 entering into utility energy savings contracts.

1 **SEC. 5. RENEWABLE ENERGY FACILITIES SURVEYS BY FED-**  
2 **ERAL AGENCIES.**

3 (a) IN GENERAL.—Not later than 180 days after the  
4 date of enactment of this Act, the Secretary of Energy,  
5 in consultation with the Secretary of Defense and the Ad-  
6 ministrator of General Services, shall promulgate regula-  
7 tions that establish appropriate methods and procedures  
8 for use by Federal agencies to implement, unless incon-  
9 sistent with the mission of the Federal agencies or imprac-  
10 ticable due to environmental constraints, the identification  
11 of all potential locations at Federal facilities of the agen-  
12 cies for renewable energy projects (including available  
13 land, building roofs, and parking structures).

14 (b) IDENTIFICATION OF POTENTIAL LOCATIONS.—  
15 Not later than 1 year after the date of the promulgation  
16 of regulations under subsection (a), each Federal agency  
17 shall complete the report of the agency that identifies po-  
18 tential locations described in subsection (a).

19 **SEC. 6. ADOPTION OF PERSONAL COMPUTER POWER SAV-**  
20 **INGS TECHNIQUES BY FEDERAL AGENCIES.**

21 (a) IN GENERAL.—Not later than 180 days after the  
22 date of enactment of this Act, the Secretary of Energy,  
23 in consultation with the Secretary of Defense, the Sec-  
24 retary of Veterans Affairs, and the Administrator of Gen-  
25 eral Services, shall issue guidance for Federal agencies to  
26 employ advanced tools allowing energy savings through

1 the use of computer hardware, energy efficiency software,  
2 and power management tools.

3 (b) REPORTS ON PLANS AND SAVINGS.—Not later  
4 than 90 days after the date of the issuance of the guidance  
5 under subsection (a), each Federal agency shall submit to  
6 the Secretary of Energy a report that describes—

7 (1) the plan of the agency for implementing the  
8 guidance within the agency; and

9 (2) estimated energy and financial savings from  
10 employing the tools described in subsection (a).

11 **SEC. 7. FEDERAL ENERGY MANAGEMENT AND DATA COL-**  
12 **LECTION STANDARD.**

13 (a) IN GENERAL.—Not later than 1 year after the  
14 date of enactment of this Act, the Secretary of Energy,  
15 in consultation with the Secretary of Defense, the Admin-  
16 istrator of General Services, and relevant industry and  
17 nonprofit groups, shall develop and issue guidance on a  
18 Federal energy management and data collection standard.

19 (b) REQUIREMENTS.—Guidance described in sub-  
20 section (a) shall include, at a minimum, a plan for the  
21 General Services Administration to publish energy con-  
22 sumption data for individual Federal facilities on a single,  
23 searchable website, accessible by the public at no cost to  
24 access.

1 **SEC. 8. ADVANCED METERING BEST PRACTICES FOR AD-**  
 2 **VANCED METERING.**

3 Section 543(e) of the National Energy Conservation  
 4 Policy Act (42 U.S.C. 8253(e) is amended by striking  
 5 paragraph (3) and inserting the following:

6 “(3) PLAN.—

7 “(A) IN GENERAL.—Not later than 180  
 8 days after the date on which guidelines are es-  
 9 tablished under paragraph (2), in a report sub-  
 10 mitted by the agency under section 548(a), each  
 11 agency shall submit to the Secretary a plan de-  
 12 scribing the manner in which the agency will  
 13 implement the requirements of paragraph (1),  
 14 including—

15 “(i) how the agency will designate  
 16 personnel primarily responsible for achiev-  
 17 ing the requirements; and

18 “(ii) a demonstration by the agency,  
 19 complete with documentation, of any find-  
 20 ing that advanced meters or advanced me-  
 21 tering devices (as those terms are used in  
 22 paragraph (1)), are not practicable.

23 “(B) UPDATES.—Reports submitted under  
 24 subparagraph (A) shall be updated annually.

25 “(4) BEST PRACTICES REPORT.—

1           “(A) IN GENERAL.—Not later than 180  
2           days after the date of enactment of the Improv-  
3           ing Energy Efficiency and Renewable Energy  
4           Use By Federal Agencies Act of 2010, the Sec-  
5           retary of Energy, in consultation with the Sec-  
6           retary of Defense and the Administrator of  
7           General Services, shall develop, and issue a re-  
8           port on, best practices for the use of advanced  
9           metering of energy use in Federal facilities,  
10          buildings, and equipment by Federal agencies.

11          “(B) UPDATING.—The report described  
12          under subparagraph (A) shall be updated annu-  
13          ally.

14          “(C) COMPONENTS.—The report shall in-  
15          clude, at a minimum—

16               “(i) summaries and analysis of the re-  
17               ports by agencies under paragraph (3);

18               “(ii) recommendations on standard re-  
19               quirements or guidelines for automated en-  
20               ergy management systems, including—

21                   “(I) potential common commu-  
22                   nications standards to allow data  
23                   sharing and reporting;

24                   “(II) means of facilitating contin-  
25                   uous commissioning of buildings and

1 evidence-based maintenance of build-  
 2 ings and building systems; and

3 “(III) standards for sufficient  
 4 levels of security and protection  
 5 against cyber threats to ensure sys-  
 6 tems cannot be controlled by unau-  
 7 thorized persons; and

8 “(iii) an analysis of—

9 “(I) the types of advanced meter-  
 10 ing and monitoring systems being pi-  
 11 loted, tested, or installed in Federal  
 12 buildings; and

13 “(II) existing techniques used  
 14 within the private sector or other non-  
 15 Federal government buildings.”.

16 **SEC. 9. AVAILABILITY OF FUNDS FOR DESIGN UPDATES.**

17 Section 3307, of title 40, United States Code, is  
 18 amended—

19 (1) by redesignating subsections (d) through (h)  
 20 as subsections (e) through (i), respectively; and

21 (2) by inserting after subsection (c) the fol-  
 22 lowing:

23 “(d) AVAILABILITY OF FUNDS FOR DESIGN UP-  
 24 DATES.—

1           “(1) IN GENERAL.—Subject to paragraph (2),  
 2           for any project for which congressional approval is  
 3           received under subsection (a) and for which the de-  
 4           sign has been substantially completed but construc-  
 5           tion has not begun, the Administrator of General  
 6           Services may use appropriated funds to update the  
 7           project design to meet applicable Federal building  
 8           energy efficiency standards established under section  
 9           305 of the Energy Conservation and Production Act  
 10          (42 U.S.C. 6834) and other requirements estab-  
 11          lished under section 3312.

12           “(2) LIMITATION.—The use of funds under  
 13          paragraph (1) shall not exceed 125 percent of the  
 14          estimated energy or other cost savings associated  
 15          with the updates as determined by a life-cycle cost  
 16          analysis under section 544 of the National Energy  
 17          Conservation Policy Act (42 U.S.C. 8254).”.

18 **SEC. 10. CONTINUOUS COMMISSIONING WITHIN THE FED-**  
 19 **ERAL BUILDING STOCK.**

20          (a) IN GENERAL.—Section 3312 of title 40, United  
 21 States Code, is amended—

22           (1) by redesignating subsections (c) through (g)  
 23          as subsections (d) through (h), respectively; and

24           (2) by inserting after subsection (b) the fol-  
 25          lowing:

1       “(c) CONTINUOUS COMMISSIONING WITHIN THE  
2 FEDERAL BUILDING STOCK.—

3               “(1) IN GENERAL.—Not later than 1 year after  
4 the date of enactment of the Improving Energy Effi-  
5 ciency and Renewable Energy Use By Federal Agen-  
6 cies Act of 2010, the Administrator and the Sec-  
7 retary of Energy shall incorporate commissioning  
8 and recommissioning standards (as those terms are  
9 defined in section 543(f) of the National Energy  
10 Conservation Policy Act (42 U.S.C. 8253(f))), for all  
11 real property that—

12                       “(A) is more than \$10,000,000 in value;

13                       “(B) has more than 50,000 square feet; or

14                       “(C) has energy intensity of more than \$2  
15 per square foot.

16               “(2) REGULATIONS.—Not later than 180 days  
17 after the date of enactment of the Improving Energy  
18 Efficiency and Renewable Energy Use By Federal  
19 Agencies Act of 2010, the Administrator and the  
20 Secretary of Energy shall promulgate such regula-  
21 tions as are necessary to carry out this subsection.”.

22       (b) CONFORMING AMENDMENTS.—Section 3312 of  
23 title 40, United States Code, is amended—



1           (1) in subsection (e)(1) (as redesignated by  
2           subsection (a)(1)), by striking “and (c)” and insert-  
3           ing “and (d)”;

4           (2) in the first sentence of subsection (f) (as so  
5           redesignated), by striking “and (c)” and inserting  
6           “and (d)”;

7           (3) in subsection (g) (as so redesignated), by  
8           striking “subsection (b), (c), or (d) or for failure to  
9           carry out any recommendation under subsection (e)”  
10          and inserting “subsection (b), (d), or (e) or for fail-  
11          ure to carry out any recommendation under sub-  
12          section (f)”.

13 **SEC. 11. ELIMINATION OF STATE MATCHING REQUIRE-**  
14 **MENT FOR ENERGY EFFICIENCY UPGRADES**  
15 **AT GUARD AND RESERVE ARMORIES AND**  
16 **READINESS CENTERS.**

17          Section 18236 of title 10, United States Code, is  
18          amended—

19               (1) in subsection (b), by striking “A contribu-  
20               tion” and inserting “Except as provided under sub-  
21               section (e), a contribution”; and

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

1 “(e) A contribution made at an armory or readiness  
 2 center under paragraph (4) or (5) of section 18233(a) of  
 3 this title for an energy efficiency upgrade shall cover—

4 “(1) 100 percent of the cost of architectural,  
 5 engineering and design services related to the up-  
 6 grade (including advance architectural, engineering  
 7 and design services under section 18233(e) of this  
 8 title); and

9 “(2) 100 percent of the cost of construction re-  
 10 lated to the upgrade (exclusive of the cost of archi-  
 11 tectural, engineering and design services).”.

12 **SEC. 12. AUDIT; REPORT.**

13 (a) AUDIT.—Not later than 180 days after the date  
 14 of enactment of this Act, the Comptroller General of the  
 15 United States shall carry out an audit to determine—

16 (1) the cost-effectiveness of energy savings per-  
 17 formance contracts; and

18 (2) the ability of Federal agencies to manage  
 19 effectively energy savings performance contracts.

20 (b) REPORT.—Not later than 90 days after the date  
 21 described in subsection (a), the Comptroller General of the  
 22 United States shall submit to the appropriate committees  
 23 of Congress a report that contains a description of the  
 24 results of the audit carried out under subsection (a).

○