

110TH CONGRESS
1ST SESSION

H. R. 2848

To amend the Public Utility Regulatory Policies Act of 1978 to promote energy independence and self-sufficiency by providing for the use of net metering by certain small electric energy generation systems, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JUNE 25, 2007

Mr. CARDOZA (for himself and Mr. FERGUSON) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Oversight and Government Reform, Financial Services, and Science and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To amend the Public Utility Regulatory Policies Act of 1978 to promote energy independence and self-sufficiency by providing for the use of net metering by certain small electric energy generation systems, 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 “Solar Opportunity and
5 Local Access Rights Act”.

1 **SEC. 2. NET METERING AND INTERCONNECTION STAND-**
2 **ARDS.**

3 (a) IN GENERAL.—Section 113 of the Public Utility
4 Regulatory Policies Act of 1978 (16 U.S.C. 2623) is
5 amended by adding at the end the following:

6 “(d) NET METERING.—

7 “(1) DEFINITIONS.—In this subsection and
8 subsection (e):

9 “(A) CUSTOMER-GENERATOR.—The term
10 ‘customer-generator’ means the owner or oper-
11 ator of a qualified generation unit.

12 “(B) ELECTRIC GENERATION UNIT.—The
13 term ‘electric generation unit’ means—

14 “(i) a qualified generation unit; and

15 “(ii) any electric generation unit that
16 qualifies for net metering under a net me-
17 tering tariff or rule approved by a State.

18 “(C) LOCAL DISTRIBUTION SYSTEM.—The
19 term ‘local distribution system’ means any sys-
20 tem for the distribution of electric energy to the
21 ultimate consumer of the electricity, whether or
22 not the owner or operator of the system is a re-
23 tail electric supplier.

24 “(D) NET METERING.—The term ‘net me-
25 tering’ means the process of—

1 “(i) measuring the difference between
2 the electricity supplied to a customer-gen-
3 erator and the electricity generated by the
4 customer-generator that is delivered to a
5 local distribution system at the same point
6 of interconnection during an applicable
7 billing period; and

8 “(ii) providing an energy credit to the
9 customer-generator in the form of a kilo-
10 watt-hour credit for each kilowatt-hour of
11 energy produced by the customer-generator
12 from a qualified generation unit.

13 “(E) QUALIFIED GENERATION UNIT.—The
14 term ‘qualified generation unit’ means an elec-
15 tric energy generation unit that uses as the en-
16 ergy source of the unit solar energy to generate
17 electricity to heat or cool.

18 “(i) has a generating capacity of not
19 more than 2,000 kilowatts;

20 “(ii) is located on premises that are
21 owned, operated, leased, or otherwise con-
22 trolled by the customer-generator;

23 “(iii) operates in parallel with the re-
24 tail electric supplier; and

1 “(iv) is intended primarily to offset all
2 or part of the requirements of the cus-
3 tomer-generator for electric energy.

4 “(F) RETAIL ELECTRIC SUPPLIER.—The
5 term ‘retail electric supplier’ means any electric
6 utility that sells electric energy to the ultimate
7 consumer of the energy.

8 “(2) ADOPTION.—Not later than 1 year after
9 the date of enactment of this subsection, each State
10 regulatory authority (with respect to each electric
11 utility for which the State regulatory authority has
12 ratemaking authority), and each nonregulated elec-
13 tric utility, shall—

14 “(A) provide public notice and conduct a
15 hearing with respect to the standards estab-
16 lished under paragraph (3); and

17 “(B) on the basis of the hearing, adopt the
18 standard.

19 “(3) ESTABLISHMENT OF NET METERING
20 STANDARD.—

21 “(A) IN GENERAL.—Each retail electric
22 supplier shall offer to arrange (either directly or
23 through a local distribution company or other
24 third party) to make net metering available, on
25 a first-come, first-served basis, to each of the

1 retail customers of the retail electric supplier in
2 accordance with the requirements described in
3 subparagraph (B) and other provisions of this
4 subsection.

5 “(B) REQUIREMENTS.—The requirements
6 referred to in subparagraph (A) are, with re-
7 spect to a retail electric supplier, that—

8 “(i) rates and charges and contract
9 terms and conditions for the sale of electric
10 energy to customer-generators shall be the
11 same as the rates and charges and con-
12 tract terms and conditions that would be
13 applicable if the customer-generator did
14 not own or operate a qualified generation
15 unit and use a net metering system; and

16 “(ii) each retail electric supplier shall
17 notify all of the retail customers of the re-
18 tail electric supplier of the standard estab-
19 lished under this paragraph as soon as
20 practicable after the adoption of the stand-
21 ard.

22 “(4) NET ENERGY MEASUREMENT.—

23 “(A) IN GENERAL.—Each retail electric
24 supplier shall arrange to provide to customer-
25 generators who qualify for net metering under

1 subsection (b) an electrical energy meter capa-
2 ble of net metering and measuring, to the max-
3 imum extent practicable, the flow of electricity
4 to or from the customer, using a single meter
5 and single register.

6 “(B) IMPRACTICABILITY.—In a case in
7 which it is not practicable to provide a meter to
8 a customer-generator under subparagraph (A),
9 a retail electric supplier (either directly or
10 through a local distribution company or other
11 third party) shall, at the expense of the retail
12 electric supplier, install 1 or more of those elec-
13 tric energy meters for the customer-generators
14 concerned.

15 “(5) BILLING.—

16 “(A) IN GENERAL.—Each retail electric
17 supplier subject to subsection (b) shall calculate
18 the electric energy consumption for a customer
19 using a net metering system in accordance with
20 subparagraphs (B) through (D).

21 “(B) MEASUREMENT OF ELECTRICITY.—
22 The retail electric supplier shall measure the
23 net electricity produced or consumed during the
24 billing period using the metering installed in ac-
25 cordance with paragraph (4).

“(C) BILLING AND CREDITING.—

“(i) BILLING.—If the electricity supplied by the retail electric supplier exceeds the electricity generated by the customer-generator during the billing period, the customer-generator shall be billed for the net electric energy supplied by the retail electric supplier in accordance with normal billing practices

“(ii) CREDITING.—

“(I) IN GENERAL.—If electric energy generated by the customer-generator exceeds the electric energy supplied by the retail electric supplier during the billing period, the customer-generator shall be billed for the appropriate customer charges for that billing period and credited for the excess electric energy generated during the billing period, with the credit appearing as a kilowatt-hour credit on the bill for the following billing period.

“(II) APPLICATION OF CREDITS.—Any kilowatt-hour credits provided to a customer-generator under

1 this clause shall be applied to cus-
2 tomer-generator electric energy con-
3 sumption on the following billing pe-
4 riod bill (except for a billing period
5 that ends in the next calendar year).

6 “(III) CARRYOVER OF UNUSED
7 CREDITS.—At the beginning of each
8 12-month period, any unused kilo-
9 watt-hour credits remaining from the
10 preceding year will carry over to the
11 new 12-month period.

12 “(D) USE OF TIME-DIFFERENTIATED
13 RATES.—

14 “(i) IN GENERAL.—Except as pro-
15 vided in clause (ii), if a customer-generator
16 is using a meter and retail billing arrange-
17 ment that has time-differentiated rates—

18 “(I) the kilowatt-hour credit shall
19 be based on the ratio representing the
20 difference in retail rates for each
21 time-of-use rate; or

22 “(II) the credits shall be reflected
23 on the bill of the customer-generator
24 as a monetary credit reflecting retail
25 rates at the time of generation of the

1 electric energy by the customer-gener-
2 ator.

3 “(ii) DIFFERENT TARIFFS OR SERV-
4 ICES.—A retail electric supplier shall offer
5 a customer-generator the choice of a time-
6 differentiated energy tariff rate or a
7 nontime-differentiated energy tariff rate, if
8 the retail electric supplier offers the choice
9 to customers in the same rate class as the
10 customer-generator.

11 “(6) PERCENT LIMITATIONS.—

12 “(A) 4 PERCENT LIMITATION.—The stand-
13 ard established under this subsection shall not
14 apply for a calendar year in the case of a cus-
15 tomer-generator served by a local distribution
16 company if the total generating capacity of all
17 customer-generators with net metering systems
18 served by the local distribution company in the
19 calendar year is equal to or more than 4 per-
20 cent of the capacity necessary to meet the aver-
21 age forecasted aggregate customer peak de-
22 mand of the company for the calendar year.

23 “(B) 2 PERCENT LIMITATION.—The stand-
24 ard established under this subsection shall not
25 apply for a 12-month period in the case of a

1 customer-generator served by a local distribu-
2 tion company if the total generating capacity of
3 all customer-generators with net metering sys-
4 tems served by the local distribution company
5 in the calendar year using a single type of
6 qualified generation units (as described in para-
7 graph (1)(D)(i)) is equal to or more than 2 per-
8 cent of the capacity necessary to meet the fore-
9 casted aggregate customer peak demand of the
10 company for the calendar year.

11 “(C) RECORDS AND NOTICE.—

12 “(i) RECORDS.—Each retail electric
13 supplier shall maintain, and make available
14 to the public, records of—

15 “(I) the total generating capacity
16 of customer-generators of the system
17 of the retail electric supplier that are
18 using net metering; and

19 “(II) the type of generating sys-
20 tems and energy source used by the
21 electric generating systems used by
22 the customer-generators.

23 “(ii) NOTICE.—Each such retail elec-
24 tric supplier shall notify the State regu-
25 latory authority and the Commission at

1 each time at which the total generating ca-
2 pacity of the customer-generators of the
3 retail electric supplier reaches a level that
4 equals or exceeds—

5 “(I) 75 percent of the limitation
6 specified in subparagraph (B); or

7 “(II) the limitation specified in
8 subparagraph (B).

9 “(7) OWNERSHIP OF CREDITS.—

10 “(A) IN GENERAL.—For purposes of Fed-
11 eral and State laws providing renewable energy
12 credits or greenhouse gas credits, a customer-
13 generator with a qualified generation unit and
14 net metering shall be treated as owning and
15 having title to the renewable energy attributes,
16 renewable energy credits and greenhouse gas
17 emission credits relating to any electricity pro-
18 duced by the qualified generation unit.

19 “(B) RETAIL ELECTRIC SUPPLIERS.—No
20 retail electric supplier shall claim title to or
21 ownership of any renewable energy attributes,
22 renewable energy credits, or greenhouse gas
23 emission credits of a customer-generator as a
24 result of interconnecting the customer-generator

1 or providing or offering the customer-generator
2 net metering.

3 “(8) SAFETY AND PERFORMANCE STAND-
4 ARDS.—

5 “(A) IN GENERAL.—A qualified generation
6 unit and net metering system used by a cus-
7 tomer-generator shall meet all applicable safety
8 and performance and reliability standards es-
9 tablished by—

10 “(i) the national electrical code;

11 “(ii) the Institute of Electrical and
12 Electronics Engineers;

13 “(iii) Underwriters Laboratories; or

14 “(iv) the American National Stand-
15 ards Institute.

16 “(B) ADDITIONAL CHARGES.—The Com-
17 mission shall, after consultation with State reg-
18 ulatory authorities and nonregulated local dis-
19 tribution systems and after notice and oppor-
20 tunity for comment, prohibit by regulation the
21 imposition of additional charges by retail elec-
22 tric suppliers and local distribution systems for
23 equipment or services for safety or performance
24 that are in addition to those necessary to meet

1 the standards and requirements referred to in
2 subparagraph (A) and subsection (e).

3 “(9) DETERMINATION OF COMPLIANCE.—

4 “(A) IN GENERAL.—Any State regulatory
5 authority (with respect to each electric utility
6 for which the authority has ratemaking author-
7 ity), and each nonregulated electric utility, may
8 apply to the Commission for a determination
9 that any State net metering requirement or reg-
10 ulations complies with this subsection.

11 “(B) ORDERS.—In the absence of a deter-
12 mination under subparagraph (A), the Commis-
13 sion, on the motion of the Commission or pur-
14 suant to the petition of any interested person,
15 may, after notice and opportunity for a hearing
16 on the record, issue an order requiring against
17 any retail electric supplier or local distribution
18 company to require compliance with this sub-
19 section.

20 “(C) ENFORCEMENT.—

21 “(i) IN GENERAL.—Any person who
22 violates this subsection shall be subject to
23 a civil penalty in the amount of \$500 for
24 each day that the violation continues.

1 “(ii) ASSESSMENT.—The penalty may
2 be assessed by the Commission, after no-
3 tice and opportunity for hearing, in the
4 same manner as penalties are assessed
5 under section 31(d) of the Federal Power
6 Act (16 U.S.C. 823b(d)).

7 “(e) INTERCONNECTION STANDARDS.—

8 “(1) MODEL STANDARDS.—

9 “(A) IN GENERAL.—Not later than 1 year
10 after the date of enactment of this subsection,
11 the Commission shall publish model standards
12 for the physical connection between local dis-
13 tribution systems and qualified generation units
14 and electric generation units that—

15 “(i) are qualified generation units (as
16 defined in subsection (d)(1)(D) (other than
17 clause (ii) of subsection (d)(1)(D)); and

18 “(ii) do not exceed 2,000 kilowatts of
19 capacity.

20 “(B) PURPOSES.—The model standards
21 shall be designed to—

22 “(i) encourage the use of qualified
23 generation units; and

24 “(ii) ensure the safety and reliability
25 of the qualified generation units and the

1 local distribution systems interconnected
2 with the qualified generation units.

3 “(C) EXPEDITED PROCEDURES.—

4 “(i) IN GENERAL.—The model stand-
5 ards shall have 2 separate expedited proce-
6 dures, including—

7 “(I) a standard for inter-
8 connecting qualified generation units
9 of not more than 15 kilowatts; and

10 “(II) a separate standard that
11 expedites interconnection for qualified
12 generation units of more than 15 kilo-
13 watts but not more than 2,000 kilo-
14 watts.

15 “(ii) BEST PRACTICES.—The expe-
16 dited procedures shall be based on the best
17 practices that have been used in States
18 that have adopted interconnection stand-
19 ards.

20 “(iii) MODEL RULE.—In designing the
21 expedited procedures, the Commission shall
22 consider Interstate Renewable Energy
23 Council Model Rule MR–I2005.

24 “(D) ADOPTION OF STANDARDS.—

1 “(i) IN GENERAL.—Not later than 2
2 years after the date of enactment of this
3 subsection, each State shall—

4 “(I) adopt the model standards
5 established under this paragraph, with
6 or without modification; and

7 “(II) submit the standards to the
8 Commission for approval.

9 “(ii) APPROVAL OF MODIFICATION.—
10 The Commission shall approve a modifica-
11 tion of the model standards only if the
12 Commission determines that the modifica-
13 tion is—

14 “(I) consistent with or superior
15 to the purpose of the standards; and

16 “(II) required by reason of local
17 conditions.

18 “(E) NONAPPROVAL OF STANDARDS FOR A
19 STATE.—If standards have not been approved
20 under this paragraph by the Commission for
21 any State during the 2-year period beginning
22 on the date of enactment of this subsection, the
23 Commission shall, by rule or order, enforce the
24 model standards of the Commission in the State

1 until such time as State standards are approved
2 by the Commission.

3 “(F) UPDATES.—

4 “(i) IN GENERAL.—Not later than 2
5 years after the date of enactment of this
6 subsection and after notice and oppor-
7 tunity for comment, the Commission shall
8 publish an update of the model standards,
9 after considering changes in the underlying
10 standards and technologies.

11 “(ii) AVAILABILITY.—The updates
12 shall be made available to State regulatory
13 authorities for the consideration of the au-
14 thorities.

15 “(2) SAFETY, RELIABILITY, PERFORMANCE,
16 AND COST.—

17 “(A) IN GENERAL.—The standards under
18 this subsection shall establish such measures
19 for the safety and reliability of the affected
20 equipment and local distribution systems as are
21 appropriate.

22 “(B) ADMINISTRATION.—The standards
23 shall—

1 “(i) be consistent with all applicable
2 safety and performance standards estab-
3 lished by—

4 “(I) the national electrical code;

5 “(II) the Institute of Electrical
6 and Electronics Engineers;

7 “(III) Underwriters Laboratories;

8 or

9 “(IV) the American National
10 Standards Institute; and

11 “(ii) impose not more than such min-
12 imum cost and technical burdens to the
13 interconnecting customer generator as the
14 Commission determines, by rule, are prac-
15 ticable.

16 “(3) ADDITIONAL CHARGES.—The model stand-
17 ards under this subsection shall prohibit the imposi-
18 tion of additional charges by local distribution sys-
19 tems for equipment or services for interconnection
20 that are in excess of—

21 “(A) the charges necessary to meet the
22 standards; and

23 “(B) the charges and equipment require-
24 ments identified in the best practices of States
25 with interconnection standards.

1 “(4) RELATIONSHIP TO EXISTING LAW REGARD-
 2 ING INTERCONNECTION.—Nothing in this subsection
 3 affects the application of section 111(d)(15) relating
 4 to interconnection.

5 “(5) CONSUMER-FRIENDLY CONTRACTS.—

6 “(A) IN GENERAL.—The Commission
 7 shall—

8 “(i) promulgate regulations that en-
 9 sure that simplified contracts will be used
 10 for the interconnection of electric energy
 11 by electric energy transmission or local dis-
 12 tribution systems and generating facilities
 13 that have a power production capacity of
 14 not greater than 2,000 kilowatts; and

15 “(ii) consider the best practices for
 16 consumer-friendly contracts that are used
 17 by States or national associations of State
 18 regulators.

19 “(B) LIABILITY OR INSURANCE.—The con-
 20 tracts shall not require liability or other insur-
 21 ance in excess of the liability or insurance that
 22 is typically carried by customer-generators for
 23 general liability.”.

24 (b) CONFORMING AMENDMENT.—Section 1262 of the
 25 Public Utility Holding Company Act of 2005 (42 U.S.C.

1 16451) is amended by striking paragraph (5) and insert-
 2 ing the following:

3 “(5) ELECTRIC UTILITY COMPANY.—

4 “(A) IN GENERAL.—The term ‘electric
 5 utility company’ means any company that owns
 6 or operates facilities used for the generation,
 7 transmission, or distribution of electric energy
 8 for sale.

9 “(B) EXCLUSION.—The term ‘electric util-
 10 ity company’ does not include an electric gen-
 11 eration unit (as defined in section 113(d) of the
 12 Public Utility Regulatory Policies Act of
 13 1978).’.

14 **SEC. 3. RELATIONSHIP TO STATE LAW.**

15 Section 117(b) of the Public Utility Regulatory Poli-
 16 cies Act of 1978 (16 U.S.C. 2627(b)) is amended—

17 (1) by striking “Nothing” and inserting the fol-
 18 lowing:

19 “(1) IN GENERAL.—Except as provided in para-
 20 graph (2), nothing”; and

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

22 “(2) NET METERING AND INTERCONNECTION
 23 STANDARDS.—

24 “(A) IN GENERAL.—Subject to subpara-
 25 graph (B), no State or nonregulated utility may

1 adopt or enforce any standard or requirement
 2 concerning net metering or interconnection that
 3 restricts access to the electric power trans-
 4 mission or local distribution system by qualified
 5 generators beyond those standards and require-
 6 ments established under section 113.

7 “(B) EQUIVALENT OR GREATER ACCESS.—
 8 Nothing in this Act precludes a State from
 9 adopting or enforcing incentives or require-
 10 ments to encourage qualified generation and net
 11 metering that—

12 “(i) are in addition to or equivalent to
 13 incentives or requirements under section
 14 113; or

15 “(ii) afford greater access to the elec-
 16 tric power transmission and local distribu-
 17 tion systems by qualified generators (as
 18 defined in section 113) or afford greater
 19 compensation or credit for electricity gen-
 20 erated by the qualified generators.”.

21 **SEC. 4. CONTRACTS FOR RENEWABLE ENERGY FOR EXECU-**
 22 **TIVE AGENCIES.**

23 Section 501(b)(1)(B) of title 40, United States Code,
 24 is amended—

1 (1) by striking “A contract” and inserting the
 2 following:

3 “(i) IN GENERAL.—Except as pro-
 4 vided in clause (ii), a contract”; and

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

6 “(ii) RENEWABLE ENERGY.—A con-
 7 tract for renewable energy (as defined in
 8 section 203(b) of the Energy Policy Act of
 9 2005 (42 U.S.C. 15852(b))) may be made
 10 for a period of not more than 30 years.”.

11 **SEC. 5. SOLAR ENERGY SYSTEMS BUILDING PERMIT RE-**
 12 **QUIREMENTS FOR RECEIPT OF COMMUNITY**
 13 **DEVELOPMENT BLOCK GRANT FUNDS.**

14 Section 104 of the Housing and Community Develop-
 15 ment Act of 1974 (42 U.S.C. 5304) is amended by adding
 16 at the end the following new subsection:

17 “(n) REQUIREMENTS FOR BUILDING PERMITS RE-
 18 GARDING SOLAR ENERGY SYSTEMS.—

19 “(1) IN GENERAL.—A grant under section 106
 20 for a fiscal year may be made only if the grantee
 21 certifies to the Secretary that—

22 “(A) in the case of a grant under section
 23 106(a) for any Indian tribe or insular area,
 24 during such fiscal year the cost of any permit
 25 or license, for construction or installation of any

1 solar energy system for any structure, that is
2 required by the tribe or insular area or by any
3 other unit of general local government or other
4 political subdivision of such tribe or insular
5 area, complies with paragraph (2);

6 “(B) in the case of a grant under section
7 106(b) for any metropolitan city or urban coun-
8 ty, during such fiscal year the cost of any per-
9 mit or license, for construction or installation of
10 any solar energy system for any structure, that
11 is required by the metropolitan city or urban
12 county, or by any other political subdivision of
13 such city or county, complies with paragraph
14 (2); and

15 “(C) in the case of a grant under section
16 106(d) for any State, during such fiscal year
17 the cost of any permit or license, for construc-
18 tion or installation of any solar energy system
19 for any structure, that is required by the State,
20 or by any other unit of general local govern-
21 ment within any nonentitlement area of such
22 State, or other political subdivision within any
23 nonentitlement area of such State or such a
24 unit of general local government, complies with
25 paragraph (2).

1 “(2) LIMITATION ON COST.—The cost of permit
2 or license for construction or installation of any
3 solar energy system complies with this paragraph
4 only if such cost does not exceed the following
5 amount:

6 “(A) RESIDENTIAL STRUCTURES.—In the
7 case of a structure primarily for residential use,
8 \$500.

9 “(B) NONRESIDENTIAL STRUCTURES.—In
10 the case of a structure primarily for nonresiden-
11 tial use, 1.0 percent of the total cost of the in-
12 stallation or construction of the solar energy
13 system, but not in excess of \$10,000.

14 “(3) NONCOMPLIANCE.—If the Secretary deter-
15 mines that a grantee of a grant made under section
16 106 is not in compliance with a certification under
17 paragraph (1)—

18 “(A) the Secretary shall notify the grantee
19 of such determination; and

20 “(B) if the grantee has not corrected such
21 noncompliance before the expiration of the 6-
22 month period beginning upon notification under
23 subparagraph (A), such grantee shall not be eli-
24 gible for 5 percent of any amounts awarded
25 under a grant under section 106 for the first

1 fiscal year that commences after the expiration
2 of such 6-month period.

3 “(4) SOLAR ENERGY SYSTEM.—For purposes of
4 this subsection, the term ‘solar energy system’
5 means, with respect to a structure, equipment that
6 uses solar energy to generate electricity for, or to
7 heat or cool (or provide hot water for use in), such
8 structure.”.

9 **SEC. 6. PROHIBITION OF RESTRICTIONS ON RESIDENTIAL**
10 **INSTALLATION OF SOLAR ENERGY SYSTEM.**

11 (a) REGULATIONS.—Within 180 days after the enact-
12 ment of this Act, the Secretary of Housing and Urban
13 Development, in consultation with the Secretary of En-
14 ergy, shall issue regulations—

15 (1) to prohibit any private covenant, contract
16 provision, lease provision, homeowners’ association
17 rule or bylaw, or similar restriction, that impairs the
18 ability of the owner or lessee of any residential
19 structure designed for occupancy by 1 family to in-
20 stall, construct, maintain, or use a solar energy sys-
21 tem on such residential property; and

22 (2) to require that whenever any such covenant,
23 provision, rule or bylaw, or restriction requires ap-
24 proval for the installation or use of a solar energy
25 system, the application for approval shall be proc-

1 essed and approved by the appropriate approving en-
2 tity in the same manner as an application for ap-
3 proval of an architectural modification to the prop-
4 erty, and shall not be willfully avoided or delayed.

5 (b) CONTENTS.—The regulations required under sub-
6 section (a) shall provide that—

7 (1) such a covenant, provision, rule or bylaw, or
8 restriction impairs the installation, construction,
9 maintenance, or use of a solar energy system if it—

10 (A) unreasonably delays or prevents instal-
11 lation, maintenance, or use;

12 (B) unreasonably increases the cost of in-
13 stallation, maintenance, or use; or

14 (C) precludes use of such a system; and

15 (2) any fee or cost imposed on the owner or les-
16 see of such a residential structure by such a cov-
17 enant, provision, rule or bylaw, or restriction shall
18 be considered unreasonable if—

19 (A) such fee or cost is not reasonable in
20 comparison to the cost of the solar energy sys-
21 tem or the value of its use; or

22 (B) treatment of solar energy systems by
23 the covenant, provision, rule or bylaw, or re-
24 striction is not reasonable in comparison with
25 treatment of comparable systems by the same

1 covenant, provision, rule or bylaw, or restric-
2 tion.

3 (c) SOLAR ENERGY SYSTEM.—For purposes of this
4 section, the term “solar energy system” means, with re-
5 spect to a structure, equipment that uses solar energy to
6 generate electricity for, or to heat or cool (or provide hot
7 water for use in), such structure.

8 **SEC. 7. CENTER FOR ADVANCED SOLAR RESEARCH.**

9 (a) ESTABLISHMENT.—The Secretary of Energy
10 shall establish a Center for Advanced Solar Research and
11 Development within the Office of Energy Efficiency and
12 Renewable Energy to carry out an advanced solar research
13 and development program to coordinate and promote the
14 further development of solar technologies. This program
15 shall include a competitive grant program for academia
16 and private research in solar technologies. The Center
17 shall serve as a clearinghouse for United States solar re-
18 search and development, supporting research, develop-
19 ment, and demonstration of advanced solar energy sys-
20 tems. The Center shall advance—

21 (1) performance, reliability, environmental im-
22 pact, and cost-competitiveness of solar thermal and
23 photovoltaic technologies;

24 (2) large-scale photovoltaic and solar thermal
25 power plants;

1 (3) thermal and electricity storage technologies
2 to enhance the dispatchability of solar energy;

3 (4) fuel production technologies using solar en-
4 ergy;

5 (5) innovation in manufacturing techniques and
6 processes for solar energy systems;

7 (6) materials and devices to improve photo-
8 voltaic conversion efficiencies and reduce costs;

9 (7) policy analysis aimed at increasing use of
10 solar energy technologies, and monitoring the effec-
11 tiveness of existing policies; and

12 (8) comprehensive solar systems integration.

13 (b) AUTHORIZATION OF APPROPRIATIONS.—There
14 are authorized to be appropriated to the Secretary of En-
15 ergy for carrying out this section \$25,000,000 for each
16 of the fiscal years 2007 through 2011, to remain available
17 until expended.

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