

Calendar No. 360

110TH CONGRESS }
1st Session }

SENATE

{ REPORT
110-162

ENERGY TECHNOLOGY TRANSFER ACT

SEPTEMBER 17, 2007.—Ordered to be printed

Mr. BINGAMAN, from the Committee on Energy and Natural Resources, submitted the following

R E P O R T

[To accompany H.R. 85]

The Committee on Energy and Natural Resources, to which was referred the Act (H.R. 85) to provide for the establishment of centers to encourage demonstration and commercial application of advanced energy methods and technologies, having considered the same, reports favorably thereon without amendment and recommends that the Act do pass.

PURPOSE OF THE MEASURE

The purpose of H.R. 85 is to amend section 917 of the Energy Policy Act of 2005 (42 U.S.C. 16197) to give the Secretary of Energy additional direction in making grants to Advanced Energy Efficiency Technology Transfer Centers.

BACKGROUND AND NEED

Section 917 of the Energy Policy Act of 2005 directs the Secretary of Energy to make grants to nonprofit institutions, state and local governments, or universities to establish a geographically dispersed network of Advanced Energy Efficiency Technology Transfer Centers. The purpose of the Centers is to encourage demonstration and commercial application of advanced energy efficiency methods and technologies through education and outreach to building and industrial professionals, and to other individuals and organizations interested in energy efficiency.

As enacted, section 917 gives little guidance to the Secretary on awarding grants, the activities for which Centers may use grants, the contents of grant applications, selection criteria, and the duration of grants. In addition, section 917 limits the scope of the pro-

gram to the transfer of advanced energy efficiency technology, and the section is unclear on whether it permits the Secretary to make grants to existing community outreach networks, such as the Cooperative Extension System.

H.R. 85 is needed to improve the Advanced Energy Efficiency Technology Transfer Center program, by expanding it to all advanced energy technology transfer, including cooperative extension services in the list of eligible grant recipients, providing additional criteria for the Secretary to consider in awarding grants, and establishing new requirements and restrictions on grant recipients. In addition, H.R. 85 is needed to eliminate an unnecessary advisory committee authorized by section 917.

LEGISLATIVE HISTORY

H.R. 85 was introduced in the House of Representatives by Congresswoman Biggert. The Committee on Science and Technology ordered it reported, with an amendment in the nature of a substitute on February 28, 2007. The House passed it, 395–1, on March 12, 2007.

The Subcommittee on Energy of the Committee on Energy and Natural Resources held a legislative hearing on H.R. 85 on May 22, 2007. The Committee on Energy and Natural Resources ordered the bill favorably reported, without amendment, on July 25, 2007.

COMMITTEE RECOMMENDATION

The Committee on Energy and Natural Resources, in open business session on July 25, 2007, by a voice vote of a quorum present, recommends that the Senate pass H.R. 85.

SECTION-BY-SECTION ANALYSIS

Section 1 designates “the Energy Technology Transfer Act” as the short title.

Section 2 amends section 917 of the Energy Policy Act of 2005.

Section 917(a) authorizes the Secretary of Energy to make grants to nonprofit institutions, State and local governments, cooperative extension services, or institutions of higher education (or consortia thereof), to establish a geographically dispersed network of Advanced Energy Efficiency Technology Centers. As originally enacted, subsection (a) required the Secretary to begin making grants within 18 months after the date of enactment of the Energy Policy Act of 2005 (August 8, 2005), did not include cooperative extension services in the list of institutions eligible to receive grants, and required the Secretary to consider the special needs and opportunities for increased energy efficiency for manufactured and site-built housing. As amended, subsection (a) requires the Secretary to begin making grants within 18 months after the date of enactment of H.R. 85, includes cooperative extension services in the list of eligible institutions, and directs the Secretary to give priority to applicants already operating or partnered with an outreach program capable of transferring knowledge and information about advanced energy efficiency technology, to ensure that the program enables the transfer of knowledge about a variety of technologies in a variety of geographical areas, and to give preference to applicants that

would significantly expand or fill a gap in existing energy technology transfer programs.

Section 917(b) provides that each Advanced Energy Efficiency Technology Transfer Center shall operate a program to encourage demonstration and commercial application of advanced energy methods and technologies through education and outreach to building and industrial professionals, and to other individuals and organizations with an interest in efficient energy use. As amended, subsection (b) lists 6 specific activities for which funds awarded under section 917 may be used. Permissible activities under subsection (b), as amended, include developing and distributing materials on energy conservation technologies, carrying out demonstrations, developing and conducting seminars and other learning activities, providing onsite energy evaluations, examining energy efficiency needs of energy end-users to develop research projects for the Department of Energy, and hiring experts to carry out these activities.

Section 917(c) requires a person seeking a grant to submit an application to the Secretary. As amended, subsection (c) lists the minimum contents of an application. It requires applicants to describe their outreach programs, geographical areas of service, their technology transfer capabilities, the activities they plan to carry out, why these activities fit their regions, the number and types of energy users they expect to reach, and how they will assess success of the program.

Section 917(d) sets out the selection criteria the Secretary is to use to award grants. As originally enacted, subsection (d) required to the Secretary to consider the ability of the applicant to carry out the proposed activities and the extent to which the applicant will coordinate the activities of the Center with other entities. As amended, subsection (d) also requires the Secretary to consider the appropriateness of the applicant's outreach program and the likelihood that the proposed activities could be expanded or used as a model for other areas.

Section 917(e) provides that the cost sharing requirements of section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352) apply to grants awarded under section 917.

Section 917(f) provides that grants shall be awarded for five years. In the third year of operation the grantees are to be evaluated by the Department of Energy. If the evaluation is unsatisfactory, the grant is to be terminated. If the evaluation is positive, the grant may be extended for an additional three years and if a later evaluation is positive, the grant may be extended for a final three years.

Section 917(g) forbids the use of funds under this section for construction of facilities.

Section 917(h) defines the terms Advanced Energy Methods and Technologies, Center, Distributed Generation, Cooperative Extension, and Land-Grant Colleges and Universities.

Section 917(i) authorizes such sums as may be appropriated to carry out section 917.

COST AND BUDGET CONSIDERATIONS

The following estimate of costs of this measure has been provided by the Congressional Budget Office:

AUGUST 15, 2007.

Hon. JEFF BINGAMAN,
Chairman, Committee on Energy and Natural Resources,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 85, the Energy Technology Transfer Act.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Megan Carroll.

Sincerely,

PETER R. ORSZAG.

Enclosure.

H.R. 85—Energy Technology Transfer Act

H.R. 85 would amend a provision of the Energy Policy Act of 2005 that authorizes the Department of Energy (DOE) to provide grants to state and local governments, nonprofit organizations, and institutions of higher learning for purposes of educating the public about energy-efficient technologies. H.R. 85 would specify additional criteria for DOE to consider in awarding such grants and would establish new requirements for recipients of those grants.

Based on information from DOE, CBO estimates that implementing H.R. 85 would not significantly affect the federal budget. We expect that any change in the value of grants awarded under the legislation or the agency's costs to administer them would not exceed \$500,000 annually, assuming the availability of appropriated funds. Enacting H.R. 85 would not affect direct spending or revenues.

H.R. 85 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would impose no costs on state, local, or tribal governments.

On March 7, 2007, CBO transmitted a cost estimate for H.R. 85 as ordered reported by the House Committee on Science and Technology on February 28, 2007. The two versions of H.R. 85 are similar, and our cost estimates are the same.

The CBO staff contact for this estimate is Megan Carroll. This estimate was approved by Peter H. Fontaine, Assistant Director for Budget Analysis.

REGULATORY IMPACT

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out H.R. 85.

The bill is not a regulatory measure in the sense of imposing Government-established standards or significant economic responsibilities on private individuals and businesses.

The Secretary may need to collect some personal information from grant applicants. The Committee expects the Secretary to limit the collection of personal information to the minimum amount needed to adequately administer the programs, and therefore anticipates little impact on personal privacy.

Enactment of H.R. 85 will result in the production of various applications, reports, and performance assessments necessary to the

administration of the various programs authorized by the bill. Again, the Committee expects the Secretary to limit paperwork requirements to the minimum amount needed to adequately administer the program.

EXECUTIVE COMMUNICATION

At a legislative hearing before the Committee on Energy and Natural Resources on May 22, 2007, the Department of Energy provided the following testimony on H.R. 85:

STATEMENT OF DAVID R. HILL, GENERAL COUNSEL, DEPARTMENT OF ENERGY

Chairman Dorgan, Senator Murkowski, and members of the Committee, my name is David Hill and I am the General Counsel of the U.S. Department of Energy (Department or DOE). I want to thank you for the opportunity to appear today and offer preliminary comments on five energy-related bills that the Congress is considering. The bills before the Committee today each make valuable contributions to our national discussion on energy security, but in some cases could benefit from further review, discussion and modification. The Department looks forward to working with the Committee to resolve these issues. I would like to discuss the elements of each bill, as well as present some of the DOE activities that are already underway in areas addressed by the bills.

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H.R. 85

Turning to H.R. 85, this bill targets the demonstration and commercial application of advanced energy methods and technologies, a goal that effectively summarizes what we as a nation must do to successfully move innovative products and processes from the laboratory into everyday use. This bill amends Section 917 of the Energy Policy Act of 2005 (EPACT), which established advanced Energy Efficiency Technology Transfer Centers. EERE recently announced a solicitation under Section 917. It is our belief that extension services, which are added here, already can participate in the Centers. In addition, there are some technical issues which require further review and discussion, and we look forward to working with the Committee to resolve these minor concerns.

The Department also is addressing the challenge of successful technology transfer by, among other things, supporting a robust and widespread regional and local outreach effort to ensure the adoption and commercial application of industrial and building energy system technologies and practices. For example, in coordination with the Department Golden Field Office, we are instituting a new method of project management, called Stage Gating that incorporates the demonstration of technologies in the last stage of Federal development as part of deployment/

technology transfer for commercialization. Through our Industrial Technologies Program, EERE works through Congressionally established Industrial Assessment Centers to provide energy evaluations and to help deploy advanced energy methods and technologies to small and medium-sized companies. Recently we have broadened this effort by establishing a Memorandum of Understanding (MOU) with the Manufacturing Extension Partnership (MEP) program of the Department of Commerce National Institute of Science and Technology (NIST). The MEP program consists of 59 main centers across the Nation, and will significantly increase our ability to deploy advanced energy methods and technologies to thousands of manufacturing facilities and buildings.

EERE is currently establishing working relationships with the various types of centers I have mentioned to coordinate the demonstration and application of advanced energy methods and technologies. Key to this coordinated effort will be the integration of deployment activities with EERE state partnerships. Any kind of regionally focused efforts would need state involvement to leverage state-sponsored energy programs.

Thus, given the activity level already underway with a broad range of centers, it would not seem that the establishment of the additional centers would be needed. There is much to work with to advance our technology transfer goals, and our focus at the Department is on the successful support, use, and coordination of our tools at hand.

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CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill H.R. 85, as ordered reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

THE ENERGY POLICY ACT OF 2005

PUBLIC LAW 109-58—AUG. 8, 2005

AN ACT To ensure jobs for our future with secure, affordable, and reliable energy.

* * * * *

TITLE IX—RESEARCH AND DEVELOPMENT

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Subtitle A—Energy Efficiency

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[SEC. 917. ADVANCED ENERGY EFFICIENCY TECHNOLOGY TRANSFER CENTERS.

[(a) GRANTS.—Not later than 18 months after the date of enactment of this Act, the Secretary shall make grants to nonprofit institutions, State and local governments, or universities (or consortia thereof), to establish a geographically dispersed network of Advanced Energy Efficiency Technology Transfer Centers, to be located in areas the Secretary determines have the greatest need of the services of such Centers. In establishing the network, the Secretary shall consider the special needs and opportunities for increased energy efficiency for manufactured and site-built housing.

[(b) ACTIVITIES.—

[(1) IN GENERAL.—Each Center shall operate a program to encourage demonstration and commercial application of advanced energy methods and technologies through education and outreach to building and industrial professionals, and to other individuals and organizations with an interest in efficient energy use.

[(2) ADVISORY PANEL.—Each Center shall establish an advisory panel to advise the Center on how best to accomplish the activities under paragraph (1).

[(c) APPLICATION.—A person seeking a grant under this section shall submit to the Secretary an application in such form and containing such information as the Secretary may require. The Secretary may award a grant under this section to an entity already in existence if the entity is otherwise eligible under this section.

[(d) SELECTION CRITERIA.—The Secretary shall award grants under this section on the basis of the following criteria, at a minimum:

[(1) The ability of the applicant to carry out the activities described in subsection (b)(1).

[(2) The extent to which the applicant will coordinate the activities of the Center with other entities, such as State and local governments, utilities, and educational and research institutions.

[(e) COST-SHARING.—In carrying out this section, the Secretary shall require cost-sharing in accordance with the requirements of section 988 for commercial application activities.

[(f) ADVISORY COMMITTEE.—The Secretary shall establish an advisory committee to advise the Secretary on the establishment of Centers under this section. The advisory committee shall be composed of individuals with expertise in the area of advanced energy methods and technologies, including at least one representative from—

[(1) State or local energy offices;

[(2) energy professionals;

[(3) trade or professional associations;

[(4) architects, engineers, or construction professionals;

[(5) manufacturers;

[(6) the research community; and

[(7) nonprofit energy or environmental organizations.

[(g) DEFINITIONS.—For purposes of this section:

[(1) ADVANCED ENERGY METHODS AND TECHNOLOGIES.—The term “advanced energy methods and technologies” means all methods and technologies that promote energy efficiency and

conservation, including distributed generation technologies, and life-cycle analysis of energy use.

[(2) CENTER.—The term “Center” means an Advanced Energy Technology Transfer Center established pursuant to this section.]

[(3) DISTRIBUTED GENERATION.—The term “distributed generation” means an electric power generation facility that is designed to serve retail electric consumers at or near the facility site.]

[(h) AUTHORIZATION OF APPROPRIATIONS.—In addition to amounts otherwise authorized to be appropriated in section 911, there are authorized to be appropriated for the program under this section such sums as may be appropriated.]

SEC. 917. ADVANCED ENERGY TECHNOLOGY TRANSFER CENTERS.

(a) GRANTS.—*Not later than 18 months after the date of enactment of the Energy Technology Transfer Act, the Secretary shall make grants to nonprofit institutions, State and local governments, cooperative extension services, or institutions of higher education (or consortia thereof), to establish a geographically dispersed network of Advanced Energy Technology Transfer Centers, to be located in areas the Secretary determines have the greatest need of the services of such Centers. In making awards under this section, the Secretary shall—*

(1) *give priority to applicants already operating or partnered with an outreach program capable of transferring knowledge and information about advanced energy efficiency methods and technologies;*

(2) *ensure that, to the extent practicable, the program enables the transfer of knowledge and information—*

(A) *about a variety of technologies and*

(B) *in a variety of geographic areas;*

(3) *give preference to applicants that would significantly expand on or fill a gap in existing programs in a geographical region; and*

(4) *consider the special needs and opportunities for increased energy efficiency for manufactured and site-built housing, including construction, renovation, and retrofit.*

(b) ACTIVITIES.—*Each Center shall operate a program to encourage demonstration and commercial application of advanced energy methods and technologies through education and outreach to building and industrial professionals, and to other individuals and organizations with an interest in efficient energy use. Funds awarded under this section may be used for the following activities:*

(1) *Developing and distributing informational materials on technologies that could use energy more efficiently.*

(2) *Carrying out demonstrations of advanced energy methods and technologies.*

(3) *Developing and conducting seminars, workshops, long-distance learning sessions, and other activities to aid in the dissemination of knowledge and information on technologies that could use energy more efficiently.*

(4) *Providing or coordinating onsite energy evaluations, including instruction on the commissioning of building heating and cooling systems, for a wide range of energy end-users.*

(5) *Examining the energy efficiency needs of energy end-users to develop recommended research projects for the Department.*

(6) *Hiring experts in energy efficient technologies to carry out activities described in paragraphs (1) through (5).*

(c) *APPLICATION.—A person seeking a grant under this section shall submit to the Secretary an application in such form and containing such information as the Secretary may require. The Secretary may award a grant under this section to an entity already in existence if the entity is otherwise eligible under this section. The application shall include, at a minimum—*

(1) *a description of the applicant's outreach program, and the geographic region it would serve, and of why the program would be capable of transferring knowledge and information about advanced energy technologies that increase efficiency of energy use;*

(2) *a description of the activities the applicant would carry out, of the technologies that would be transferred, and of any other organizations that will help facilitate a regional approach to carrying out those activities;*

(3) *a description of how the proposed activities would be appropriate to the specific energy needs of the geographic region to be served;*

(4) *an estimate of the number and types of energy end-users expected to be reached through such activities; and*

(5) *a description of how the applicant will assess the success of the program.*

(d) *SELECTION CRITERIA.—The Secretary shall award grants under this section on the basis of the following criteria, at a minimum:*

(1) *The ability of the applicant to carry out the proposed activities.*

(2) *The extent to which the applicant will coordinate the activities of the Center with other entities as appropriate, such as State and local governments, utilities, institutions of higher education, and National Laboratories.*

(3) *The appropriateness of the applicant's outreach program for carrying out the program described in this section.*

(4) *The likelihood that proposed activities could be expanded or used as a model for other areas.*

(e) *COST-SHARING.—In carrying out this section, the Secretary shall require cost-sharing in accordance with the requirements of section 988 for commercial application activities.*

(f) *DURATION.—*

(1) *INITIAL GRANT PERIOD.—A grant awarded under this section shall be for a period of 5 years.*

(2) *INITIAL EVALUATION.—Each grantee under this section shall be evaluated during its third year of operation under procedures established by the Secretary to determine if the grantee is accomplishing the purposes of this section described in subsection (a). The Secretary shall terminate any grant that does not receive a positive evaluation. If an evaluation is positive, the Secretary may extend the grant for 3 additional years beyond the original term of the grant.*

(3) *ADDITIONAL EXTENSION.—If a grantee receives an extension under paragraph (2), the grantee shall be evaluated again*

during the second year of the extension. The Secretary shall terminate any grant that does not receive a positive evaluation. If an evaluation is positive, the Secretary may extend the grant for a final additional period of 3 additional years beyond the original extension.

(4) *LIMITATION.*—No grantee may receive more than 11 years of support under this section without reapplying for support and competing against all other applicants seeking a grant at that time.

(g) *PROHIBITION.*—None of the funds awarded under this section may be used for the construction of facilities.

(h) *DEFINITIONS.*—For purposes of this section:

(1) *ADVANCED ENERGY METHODS AND TECHNOLOGIES.*—The term “advanced energy methods and technologies” means all methods and technologies that promote energy efficiency and conservation, including distributed generation technologies, and life-cycle analysis of energy use.

(2) *CENTER.*—The term “Center” means an Advanced Energy Technology Transfer Center established pursuant to this section.

(3) *DISTRIBUTED GENERATION.*—The term “distributed generation” means an electric power generation technology, including photovoltaic, small wind, and micro-combined heat and power, that serves electric consumers at or near the site of production.

(4) *COOPERATIVE EXTENSION.*—The term “Cooperative Extension” means the extension services established at the land-grant colleges and universities under the Smith-Lever Act of May 8, 1914.

(5) *LAND-GRANT COLLEGES AND UNIVERSITIES.*—The term “land-grant colleges and universities” means—

(A) 1862 Institutions (as defined in section 2 of the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7601));

(B) 1890 Institutions (as defined in section 2 of that Act); and

(C) 1994 Institutions (as defined in section 2 of that Act).

(i) *AUTHORIZATION OF APPROPRIATIONS.*—In addition to amounts otherwise authorized to be appropriated in section 911, there are authorized to be appropriated for the program under this section such sums as may be appropriated.

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