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110TH CONGRESS, 1st Session | HOUSE OF REPRESENTATIVES | REPORT 110–38

ENERGY TECHNOLOGY TRANSFER ACT

MARCH 8, 2007.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. GORDON of Tennessee, from the Committee on Science and Technology, submitted the following

R E P O R T

[To accompany H.R. 85]

[Including cost estimate of the Congressional Budget Office]

The Committee on Science and Technology, to whom was referred the bill (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 with an amendment and recommends that the bill as amended do pass.

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59–006

I. AMENDMENT

The amendment is as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Energy Technology Transfer Act".

SEC. 2. ENERGY TECHNOLOGY TRANSFER.

Section 917 of the Energy Policy Act of 2005 (42 U.S.C. 16197) is amended to read as follows:

"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.".

II. PURPOSE OF THE BILL

The purpose of the bill is to recast Section 917 of the Energy Policy Act of 2005 to provide more specificity and other improvements to the Advanced Energy Technology Transfer Center Program that was created by that Act.

III. BACKGROUND AND NEED FOR THE LEGISLATION

Affordable energy is essential to the Nation's continued prosperity. Volatile world oil markets, along with soaring natural gas and electricity prices, have replaced the relatively low energy prices enjoyed over most of the two decades before the turn of the century. Recent events have illustrated the important connections between energy policy and national security policy. In addition, there are increasing concerns

about the environmental impact of energy use. Consequently, conservation of energy and renewable energy are once again on the forefront of the Nation's agenda.

According to Department of Energy (DOE) 2003 statistics, buildings consume more energy than any other sector of the economy, including industrial processes and transportation. Buildings consume 39 percent of primary energy in the United States and 70 percent of electricity. Innovations in energy-efficient building technologies, materials, techniques and systems combined with advances in photovoltaic and other distributed clean energy technologies have the potential to dramatically transform the pattern of energy consumption associated with buildings. These technologies—coupled with a whole building approach that optimizes the interactions among building systems and components—enable buildings to use considerably less energy, while also helping to meet national goals for sustainable development, environmental protection, and energy security.

During the first session of the 109th Congress, the Committee on Science reported energy research, development, and demonstration (RD&D) legislation that authorized programs enacted as part of the Energy Policy Act of 2005 (EPACT) (P.L. 109–58). One of these programs, enacted as Section 917 of EPACT, established an Advanced Energy Technology Transfer Center program to improve the flow of state-of-the-art information on energy use and conservation in buildings to the building sector. During the second session of the 109th Congress, Section 13 of the bill H.R. 5656 was a rewrite of Section 917, adding detail to the bill's sections on priorities, uses of grants, contents of applications, and selection criteria. It also added provisions on duration, evaluation, and renewal of grants, prohibits the use of grant funds for construction of facilities, and removes the advisory committee provisions of the original Section 917. This bill continues the effort to update this program, making minor improvements to Section 13 of H.R. 5656.

IV. Hearing Summary

During the 109th Congress, the House Committee on Science held the following hearings relevant to H.R. 5656:

On February 15, 2006, the Committee on Science held a hearing on "An Overview of the Federal R&D Budget for Fiscal Year 2007." Appearing as witnesses were (1) Dr. John H. Marburger III, Director, Office of Science and Technology Policy; (2) Dr. Samuel W. Bodman, Secretary, Department of Energy (DOE); (3) Dr. David A. Sampson, Deputy Secretary, Department of Commerce; (4) Dr. Arden Bement, Director, National Science Foundation; and (5) Dr. Charles E. McQueary, Under Secretary for Science and Technology, Department of Homeland Security.

On April 27, 2005, the Subcommittee on Energy held a hearing on "Priorities in the Department of Energy Budget for Fiscal Year 2006." Appearing as witnesses were (1) Dr. Raymond Orbach, Director of the Office of Science, DOE; (2) Mr. Douglas Faulkner, Principal Deputy Assistant Secretary for Energy Efficiency and Renewable Energy, DOE; (3) Mr. Mark Maddox, Principal Deputy Assistant Secretary for Fossil Energy, DOE; (4) Mr. Robert Shane Johnson, Deputy Director for Technology in the Office of Nuclear Energy, Science and Technology, DOE; and (5) Mr. Kevin Kolevar, Director Office of Electricity Delivery and Energy Reliability, DOE.

V. Committee Actions

On January 4, 2007, H.R. 85, a bill to provide for the establishment of centers to encourage demonstration and commercial application of advanced energy methods and technologies, was introduced by Congresswoman Biggert and referred to the Committee on Science and Technology. The bill was held at the Full Committee. On February 28, 2007, the Committee met to consider H.R. 85 and ordered the bill reported after adopting an amendment in the nature of the substitute. H.R. 85 is substantially the same as Section 13 of H.R. 5656 from the 109th Congress which was introduced by Congresswoman Biggert and seven cosponsors and reported by the Committee on Science on July 28, 2006 (H. Rept. 109–611).

VI. Summary of Major Provisions of the Bill

The bill amends the Section 917 of the Energy Policy Act of 2005 (42 U.S.C. 16197). It requires the establishment of Advanced Energy Technology Transfer Centers, authorizes funding for them, and establishes their scope of work including grant criteria and selection criteria.

VII. Section-by-Section Analysis

Section 1. Short Title.

Permits the bill to be cited as the "Energy Technology Transfer Act".

Section 2. Energy Technology Transfer. This section is a complete substitute for Section 917 of the Energy Policy Act.

Subsection (a) of the new Section 917 requires that the grant program established under this section as amended make its first awards within 18 months of the date of enactment. The grants are to be made to nonprofit institutions, State and local governments, cooperative extension services, universities, or consortia of universities. The goal is to establish a geographically dispersed network of Advanced Energy Technology Centers, to be located where the Secretary of Energy determines there is the greatest need. The Secretary is 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. The Secretary shall also consider the special needs and opportunities for increased energy efficiency for manufactured and site-built housing including construction, renovation, and retrofit.

Subsection (b) of the new Section 917 provides details about the activities the Centers are to carry out. They are to encourage demonstration and commercial application of advanced energy methods and technology through education and outreach to building and industrial professionals and other individuals as appropriate. Permissible activities under this subsection 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.

Subsection (c) provides information on the application process. The Department is free to design the application and ask for whatever information it finds to be necessary. Applicants are 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.

Subsection (d) sets out selection criteria. These include the ability of the applicant to carry out the activities it proposes, the extent to which the applicant will coordinate the activities with other entities, and the likelihood that the proposed activities can be expanded or used as a model for other areas.

Subsection (e) explains that the EPACT cost-sharing requirements apply to this program.

Subsection (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.

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

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

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

VIII. Committee Views

The Committee is concerned that the Federal government does not sufficiently assist in helping to transfer and provide education on energy efficiency and distributed clean energy technologies, developed by DOE and at the National Laboratories, to energy end-users. This section is not intended to create a new entity or bureaucracy within DOE but to encourage DOE to partner with existing community outreach networks, including, but not limited to, cooperative extension services and State Energy Offices that have a history of transferring knowledge and technologies through educational activities, to achieve the aforementioned objective. The Committee intends that DOE not fund the creation of entirely new outreach networks under this Act, although the Committee does recognize that existing networks may need to be expanded to bring in appropriate energy expertise and partners. Grantees are encouraged, for example, to work with, and through, utilities to carry out informational activities for energy end-users.

With respect to new subsection 917(g), the Committee intends that the construction prohibition apply only to the construction of buildings for the purpose of hous-

ing the Centers. Nothing in this subsection should be construed to prohibit leasing of facilities for Centers, nor the interior build-out, renovation, or adaptation of leased space to meet the needs of a Center. For example, the Committee intends that it would be permissible to build a wall for an educational exhibit showing high energy efficiency windows.

IX. Congressional Budget Office Cost Estimate

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 on energy-efficient technologies. H.R. 85 would make changes to that provision, particularly to specify additional criteria for DOE to consider in awarding such grants and to 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 amount of grants awarded under the bill 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.

The CBO staff contact for this estimate is Megan Carroll. This estimate was approved by Robert A. Sunshine, Assistant Director for Budget Analysis.

X. Compliance With Public Law 104–4

H.R. 85 contains no unfunded mandates.

XI. Committee Oversight Findings and Recommendations

The Committee on Science and Technology's oversight findings and recommendations are reflected in the body of this report.

XII. Statement on General Performance Goals and Objectives

Pursuant to clause (3)(c) of House rule XIII, the goal of H.R. 85 is improve Section 917 of the Energy Policy Act of 2005 which authorized the establishment of a geographically dispersed network of Advanced Energy Technology Centers.

XIII. Constitutional Authority Statement

Article I, section 8 of the Constitution of the United States grants Congress the authority to enact H.R. 85.

XIV. Federal Advisory Committee Statement

H.R. 85 does not establish nor authorize the establishment of any advisory committee.

XV. Congressional Accountability Act

The Committee finds that H.R. 85 does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act (Public Law 104–1).

XVI. Statement on Preemption of State, Local, or Tribal Law

This bill is not intended to preempt any state, local, or tribal law.

XVII. Earmark Identification

H.R. 85 does not contain any congressional earmarks, limited tax benefits, or limited tariff benefits as defined in clause 9(d), 9(e), or 9(f) of Rule XXI.

XVIII. Changes in Existing Law Made by the Bill, as Reported

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as 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):

SECTION 917 OF THE ENERGY POLICY ACT OF 2005

[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.

XIX. COMMITTEE RECOMMENDATIONS

On February 28, 2007, the Committee on Science and Technology reported H.R. 85, to provide for the establishment of centers to encourage demonstration and commercial application of advanced energy methods and technologies, by a voice vote, and recommended its enactment.

XX. PROCEEDINGS OF THE FULL COMMITTEE MARKUP ON H.R. 85, ENERGY TECHNOLOGY TRANSFER ACT

WEDNESDAY, FEBRUARY 28, 2007

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE AND TECHNOLOGY,
Washington, DC.

The Committee met, pursuant to call, at 10:05 a.m., in Room 2318 of the Rayburn House Office Building, Hon. Bart Gordon [Chairman of the Committee] presiding.

Chairman GORDON. Good morning. The Committee on Science and Technology will come to order. Pursuant to notice, the Committee on Science and Technology meets to consider the following measures: H.R. 363, Sowing the Seeds Through Science and Engineering Research Act; H.R. 1068, To amend the High-Performance Computing Act of 1991; H.R. 1126, To reauthorize the Steel and Aluminum Energy Conservation and Technology Competitiveness Act of 1988; and H.R. 85, the Energy Technology Transfer.

Today, we are here to mark up these four bipartisan bills. They are all good bills and I am happy to support them all. I want to note that all of these bills have extensive legislative histories in prior Congress. It is not my intention for this committee to regularly markup legislation that has not gone through the Subcommittee hearing process; however, as I noted before, these bills were fully vetted in the last Congress and they are ready to go.

I have said it before and I will say it again. I want this committee to be a Committee of good ideas. Here, we have four good ideas and I hope four bills everybody on this committee can get behind and support.

Now I recognize Mr. Hall to present his opening remarks.

Mr. HALL. Mr. Chairman, I thank you for calling the markup today. We have before us today, as you say, four bills that were passed by this Committee in the 109th Congress, and I look forward to their easy passage again today. The continued bipartisan support for these bills reflects their broad appeal and the fact that they are good bills and they are good for this country.

The National Academy of Science's Rising Above the Gathering Storm and the President's American Competitiveness Initiative have emphasized the importance of supporting high-risk research, young researchers, and research infrastructure in the U.S. to ensure that the next generation of high tech industries and products are developed in the United States.

H.R. 363 is a step in the right direction. I thank the Chairman for his willingness to work with us on improving this legislation, and recommend a yes vote for the manager's amendment and for the underlying measure.

As the Chairman has already mentioned, Mrs. Biggert has been instrumental in getting a high-performance computing bill through the Committee and the full House, for that matter, in two previous Congresses, and I certainly applaud her and Mr. Baird for their persistence. I recommend a yes vote on H.R. 1068 and trust the Senate will follow suit when it is sent to them once again.

I am happy to see Mr. Lipinski and Mr. Ehlers continuing former Representative Hart's lead in their continuing effort to reauthorize the Steel and Aluminum Energy Conservation and Technology Competitiveness Act of 1988. This is another bill that has been passed twice by our committee in the full House, and I also recommend a yes vote for H.R. 1126.

I would also recommend a yes vote for Representative Biggert and Representative Miller's bill, H.R. 85, that will provide for the establishment of centers to encourage demonstration and commercial applications of advanced energy methods and technology. As I understand, they will be offering an amendment in the nature of a substitute that makes technical corrections, which I support as well.

Mr. Chairman, I look forward to these bills moving to the Floor. With that, I yield back the balance of my time.

[The prepared statement of Mr. Hall follows:]

PREPARED STATEMENT OF REPRESENTATIVE RALPH M. HALL

Mr. Chairman, thank you for calling this markup today. We have before us today four bills that were passed by this committee in the 109th Congress, and I look forward to their easy passage again today. The continued bipartisan support for these bills reflects their broad appeal and the fact that they are good bills that are good for the country.

The National Academy of Science's *Rising above the Gathering Storm* and the President's American Competitiveness Initiative (ACI) have emphasized the importance of supporting high-risk research, young researchers, and research infrastructure in the United States to ensure that the next generation of high-tech industries and products are developed in the United States. H.R. 363 is a step in the right direction. This bill authorizes programs at the National Science Foundation (NSF) and the Department of Energy (DOE) Office of Science to provide grants to researchers just starting their careers to conduct high-risk, high-return research at the cutting edge of new scientific fields. In addition, it requires NIST to report to

us on their efforts to recruit and retain young scientists and engineers, and it includes our recognition that NASA should be at the table for any interagency efforts to promote innovation and economic competitiveness. I thank the Chairman for his willingness to work with us on improving this legislation and recommend a "yes" vote for the managers' amendment and for the underlying measure.

As the Chairman has already mentioned, Mrs. Biggert has been instrumental in getting this bill through the Committee, and the full House for that matter, in two previous Congresses, and I applaud her and Mr. Baird for their persistence. I recommend a "yes" vote on H.R. 1068 and trust the Senate will follow suit when it is sent to them once again.

I am happy to see Mr. Lipinski and Mr. Ehlers continuing former Representative Hart's lead in their continuing effort to reauthorize the *Steel and Aluminum Energy Conservation and Technology Competitiveness Act of 1988.* This is another bill that has been passed twice by our committee, and the full House and I also recommend a "yes" vote for H.R. 1126.

I would also recommend a "yes" vote for Rep. Biggert and Rep. Miller's bill, H.R. 85 that will provide for the establishment of centers to encourage demonstration and commercial application of advanced energy methods and technologies. I understand they will be offering an amendment in the nature of a substitute that makes technical corrections which I will support as well.

Mr. Chairman, I look forward to these bills moving to the Floor and being passed. With that I yield back the balance of my time.

Chairman GORDON. Thank you, Mr. Hall.

Without objection, Members may place statements in the record.

[The prepared statement of Mr. Mitchell follows:]

PREPARED STATEMENT OF REPRESENTATIVE HARRY MITCHELL

Thank you, Mr. Chairman.

America needs innovators and leaders if it wants to remain competitive in the global economy. This is especially true when it comes to science and engineering.

Retaining scientists and engineers, however, is often difficult, because they receive such low pay early-on in their careers.

If we don't invest early in our future innovators, we will fall behind.

Spreading technological innovation across existing industry is another indispensable part of maintaining our competitiveness.

In my view, we should help businesses access both the technology and the research they need to modernize and improve their efficiency.

Industry standards can also play a role.

Today, we are considering four bills to address these issues and I look forward to working on them.

I yield back the balance of my time.

Chairman GORDON. We will now consider H.R. 85, the *Energy Technology Transfer Act.*

I recognize Ms. Biggert to present any remarks on the bill.

Ms. BIGGERT. Thank you very much, Mr. Chairman.

This bill should be familiar to many of my colleagues who have served on this committee in the 109th Congress. To the new Members of the Committee, you will be interested to know that this bill was Section 13 of H.R. 5656, which was approved by voice vote by the Science Committee in June of last year, and ultimately these provisions were included in a very similar bill that passed the House by voice vote in September, but again, was never considered by the Senate.

So what does the bill do? Quite simply, it improves Section 917 of the *Energy Policy Act of 2005.* As enacted, that section directed the Department of Energy to create a geographically dispersed network of energy efficiency technology transfer centers to transfer and provide education on energy efficiency and distributed clean energy technologies developed by the DOE and at the national laboratories to energy and users.

But instead of creating from scratch this network of centers, H.R. 85 would authorize the DOE to provide grants to and partner with

existing community outreach centers. These existing networks could include cooperative extension systems offices, kind of like the agriculture centers do. The state energy offices, local governments, institutions of higher education, and nonprofit organizations with expertise on energy technologies are outreach. The Cooperating Extension Service and similar community outreach networks have a long and successful history of transferring knowledge about new technologies and techniques to farmers and other constituencies; however, few have the resources to focus on energy efficiency outside of the agriculture sector. So H.R. 85 would change that and would build on the successful model of the AG extension service without creating any new entity or bureaucracy.

But H.R. 85 still demands the same requirements of these centers. They must be geographically dispersed, they must coordinate regional research, engineering, and business expertise, and they must help apply energy technologies and methods suitable to the local climate. But instead of limiting these centers to the transfer of energy efficiency technologies, H.R. 85 would expand the mission to include all advanced energy technologies.

In addition to requiring grant recipients to demonstrate results or risk losing their grant, H.R. 85 would require grantees to provide feedback to DOE on their research needs related to the production, storage, or use of energy identified by energy end users. It also would encourage grant recipients to work with utilities to carry out informational activities for energy end users.

H.R. 85 prohibits grant recipients from using grant funding to construct facilities to house the center. It doesn't authorize any funding that isn't already authorized in EPAC. In other words, this bill contains no new funding; instead, it simply gives guidance and direction to the Secretary about how to bolster the Department's technology transfer capacity.

I want to thank the bill's chief cosponsor, my friend and colleague from North Carolina, Mr. Miller, for his strong interest in tech transfer and this legislation in particular. As we have worked with the majority to improve this legislation, his input has been invaluable.

I also want to thank Chairman Gordon for his support of this provision last year, and for recognizing the value of this legislation and including it in this markup today.

I also want to thank the National Association of State Universities and Land Grant Colleges, and a long list of its members for their strong support of this bill.

The Federal Government spends billions of dollars on energy-related R&D. This bill represents just a small investment in the tech transfer capabilities we need to help our universities and labs move advanced energy technologies from the labs into the market so Americans can enjoy the tangible benefits of our federal investment in R&D.

I urge my colleagues to support the bill, and again, I thank Mr. Miller for his input.

I yield back the balance of my time.

[The prepared statement of Ms. Biggert follows:]

PREPARED STATEMENT OF REPRESENTATIVE JUDY BIGGERT

Thank you, Ranking Member Hall, for yielding me time to discuss H.R. 85, the *Energy Technology Transfer Act.*

This bill should be familiar to many of my colleagues who served on this committee in the 109th Congress. To the new Members of the Committee, you will be interested to know that this bill was Section 13 of H.R. 5656, which was approved by voice vote by the Science Committee in June of last year. Ultimately, these provisions were included in a very similar bill that passed the House by voice vote in September, but was never considered by the Senate.

So, what does this bill do? Quite simply, it improves Section 917 of the *Energy Policy Act of 2005.* As enacted, Section 917 directed the Department of Energy to create a geographically disperse network of energy efficiency technology transfer centers to transfer and provide education on energy efficiency and distributed clean energy technologies, developed by DOE and at the National Laboratories, to energy end-users.

But instead of creating from scratch this network of centers, H.R. 85 would authorize the DOE to provide grants to and partner with *existing* community outreach networks. These existing networks could include Cooperative Extension System offices, State Energy Offices, local governments, institutions of higher education, and non-profit organizations with expertise in energy technologies or outreach.

The Cooperative Extension Service and similar community outreach networks have a long and successful history of transferring knowledge about new technologies and techniques to farmers and other constituencies. However, few have the resources to focus on energy efficiency outside of the agriculture sector. H.R. 85 would change that, and build on the successful model of the Ag Extension Service without creating any new entity or bureaucracy.

H.R. 85 still demands the same requirements of these centers:

- They must be geographically dispersed;
- They must coordinate regional research, engineering and business expertise; and
- They must help apply energy technologies and methods suitable to the local climate.

But instead of limiting these centers to the transfer of energy efficiency technologies, H.R. 85 would expand their mission to include all advanced energy technologies.

In addition to requiring grant recipients to demonstrate results or risk losing their grant, H.R. 85 would require grantees to provide feedback to DOE on the research needs—related to the production, storage, or use of energy—identified by energy end-users. It also would encourage grant recipients to work with utilities to carry out informational activities for energy end-users.

H.R. 85 prohibits grant recipients from using grant funding to construct facilities to house the tech transfer center. It doesn't authorize any funding that isn't already authorized in EPACT; in other words, this bill contains **no new funding.** Instead, it simply gives new guidance and direction to the Secretary about how to bolster the Department's technology transfer capacity.

I want to conclude by thanking the bill's chief co-sponsor, my friend and colleague from North Carolina, Mr. Miller, for his strong interest in tech transfer and this legislation in particular. As we have worked with the majority to improve this legislation, his input has been invaluable. I also want to thank Chairman Gordon for his support of this provision last year, and for recognizing the value of this legislation and including it in this markup today. I also want to thank the National Association of State Universities and Land-Grant Colleges and a long list of its members for their strong support for this bill.

The Federal Government spends billions of dollars on energy-related R&D. This bill represents just a small investment in the tech transfer capabilities we need to help our universities and labs move advanced energy technologies from labs into the market so Americans can enjoy the tangible benefits of our federal investment in R&D.

I urge my colleagues to support the bill, and I yield back the balance of my time.

Chairman GORDON. I yield myself five minutes to speak on the bill, and I want to limit myself simply to say thanks to Ms. Biggert for bringing this good bill before us. I expect it to be on the Floor very soon. Thanks to Mr. Brad Miller for his value added.

I yield the balance of my time to Mr. Miller.

Mr. MILLER. Thank you, Mr. Chairman, and I want to thank Ms. Biggert as well. I hope we will continue to play well with others

in this committee as we have on this bill. Ms. Biggert worked very will with my office and with me in the last Congress as well when she was in the Majority on this issue, so it is—I guess it would be easy for her to work well with me now, but she also worked well with us, with me and with my office, when they were in the Majority on this.

This proposal of a geographically dispersed network of advanced energy technology transfer centers, it is kind of a mouthful to say, but it began its humble existence four years ago in this committee as an amendment that I introduced to the Energy Bill that year that never became the Energy Act. But two years later, Chairman Boehlert, who had accepted the amendment and supported it, included that amendment, that proposal in the Energy Bill that year that did become the Energy Act. It is now 917 of that Act.

These are improving changes that Ms. Biggert has brought forward that would make those proposals, more effective, and more comprehensive of a program, and we hope we will inspire the Department of Energy and the appropriators to provide the funding for this program.

As Ms. Biggert has already said, we have developed many energy efficient technologies, often with federal funding, the Department of Education—excuse me, of Energy, that have sat unused on the shelf, and we do not need state of the shelf technology. We have immediate energy needs. These proposals will help get some of those technologies into practical use right away. I know we need to do a great more deal research, but the fact is, we are not using the research we have already done, and we need to do it and we need to do it quickly. It helps meet our energy needs, it helps address our dependency. It is the most important thing we can do about climate change is actually to use less energy through energy efficient technologies. It does build on the model of cooperative extension services that have worked very well for a variety—in a variety of ways, certainly, agriculture extension, manufacturing extension partnership, et cetera, to work and try to get these programs into—these technologies into use.

So I want to thank Ms. Biggert. I do support—I am a co-sponsor of this bill. It does make improving changes. It makes a good idea better.

Thank you.

Chairman GORDON. Once again, thank you, Mr. Miller, for your value added here.

Mr. Bilbray is recognized.

Mr. BILBRAY. Mr. Chairman, if I can, I would like to start off and compliment both authors on this bill. Also, I would like to sort of echo the colleague about the practical use. It is a critical point. And if I can be sort of the voice in the wilderness of this committee, that one of the things——

Chairman GORDON. I am sorry, that is reserved for Mr. Rohrabacher.

Mr. BILBRAY. Okay. Well, the other half of the surfing caucus, I will take up this mantle vice in his absence.

I just ask that we always remember—in the previous bill we probably should have discussed this, too, that one of the greatest, if not, barriers to the application of appropriate technology on environmental stuff lies with the obstructionism within our own struc-

ture and government. I don't know how many of you know—can realize that to permit so many of these projects, it takes longer to get through the government regulatory guidelines than it is to actually build the project or to even conceive the project.

I will give you an example. When I was in county government and city government, cogeneration in the late '80s and early '90s, and I think we all agree, cogeneration is one of the great breakthroughs we had of why waste the energy just on one project if you can get two, but the biggest problem you had is you had—the unified building code didn't know how to handle it, the air pollution control districts didn't know how to handle it, and there were so many—so much obstruction that wasn't meant to be there but is there. Any time you try new innovative ways of approaching a problem, and as somebody who comes from that local government background, let me just say we need to get the Federal Government, the State governments, and the building inspectors and the local government understanding that we need to change the reality of today, and that reality is if something is new, it is not legal until the regulations are changed to accommodate it. It is the burden of proof. Unified building code across the board will stop us from using any new technology until the building inspectors get together, the bureaucrats get together and agree to allow it some time in the future.

So as we do these things, I would ask that we start including this; that the first thing we do is take a look at what is in our regulatory guidelines that may be obstructing the practical application, and that is what it gets back down to, is all the theory in the world and all the abilities in the world to do something really doesn't mean anything if it is not legal to be able to get it though the regulatory guidelines. I would ask that we always consider that down the line, and almost a footnote should be in these kinds of technology developments, is looking at those regulatory structures that may bar the application.

I will just give you one—a real simple application. The City of Delmar in my district, the most environmentally green community you ever saw, you know, went against power generation of fossil fuels back in the late '70s, but they were the first city to outlaw wind generators in the county, because it was just easier to do that than block the application of it.

And so I just ask that we always include that. I think this should do no harm, that it should lead to example and example is we should have our government flexibility to make sure we are not standing in the way of good technology. We are actually trying to push it, and that means changing our regs.

I yield back, Mr.——

Chairman GORDON. Would the gentleman yield?

Mr. BILBRAY. Yes.

Chairman GORDON. I want to thank you for that, and I know your background of overcoming those types of impediments at the municipal level. You were very successful. You set the stage for it in California, and it is a good stage for us to follow. You give us good advice. Thank you.

Mr. BILBRAY. I appreciate it. I just wish we could figure out how to build a power plant in California now. Basically it is outlawed.

Thank you very much. I yield back.

Chairman GORDON. Thank you, Mr. Bilbray.

Mr. Lampson is recognized for five minutes.

Mr. LAMPSON. Thank you, Mr. Chairman. I thought that I could weigh in with one of those practical situations that occurred in Texas that I had the opportunity of visiting on Saturday, where the little bitty town of Oakridge North in Texas has begun to generate its electricity with biomass.

Two small companies—and we think this is the only situation in North America where this is happening, and they flipped the switch on it last Wednesday—are generating about five megawatts of electricity and powering all of the needs of this community. But a company that generates biodiesel out of chicken fat right now, out of soy and other materials, called Safe Renewables, and another company called Biofuels Power Corporation, is joining Entergy, Reliant, and TXU utility companies in east Texas as a backup facility and generating electricity. It is exactly the same practical kinds of things that we are talking about within this legislation. It can happen. Yes, there are some impediments to slowing it down, but it is the kind of thing I think that all of us are working toward. I would invite any of you who would like to and visit that facility to let me know, and I will certainly arrange it.

But I intend to support this and other legislation that will make it possible. I would yield the balance of my time to Mr. Miller.

Mr. MILLER. Thank you, Mr. Lampson.

Well, the spirit of Chairman Boehlert lives on, and I find myself using a baseball analogy.

This bill is not really about swinging for the fences in dealing with energy problems, it really is about getting singles. It is about finding small ways that add up, the key effects which add up in saving energy and being more efficient in our use of energy. It is more efficient windows. It is more efficient motors that—you know, a small motor used at a plant every day of the year might—a slightly more efficient or a more efficient motor might save $30,000 in electrical costs in the course of a year. It is a lot of the small ways that a manufacturer or anyone else whose business it is not to understand every efficient—energy efficient technology available to them, small changes they can make that will add up to saving a lot of energy. That is what the bill really tries to do.

Chairman GORDON. Thank you, Mr. Miller. You will be pleased to know that we are meeting this afternoon—the Science Committee is meeting with the architect of the Capitol to hopefully put the final touches on making the Science Committee an example for the Capitol campus of an energy efficient office.

Anyone else would like to—Mr. Ehlers is recognized.

Mr. EHLERS. Thank you, Mr. Chairman. First, my apologies for missing the first part. I was in the House Administration Committee which is considering Committee budgets, including this committee.

Chairman GORDON. We will be seeing you soon.

Mr. EHLERS. I will see you this afternoon, and I will be fighting for adequate budget for the Science Committee.

But the—I just wanted to follow up on Mr. Miller's comments. He is exactly right and I have been trying to convey that to the citizens of this country for years. They are all looking for the magic ball, the home run that is going to solve our energy problem.

The actual solution consists of millions of decisions made by hundreds of millions of people every day about energy use, because the only solution is in baby steps.

Everyone takes solar energy as wonderful, but it is very diffuse and those who try to build mammoth electrical production plants using solar energy I think are destined to fail. The solution is to get every house in this country shingled with solar shingles, photovoltaic cells which can provide a substantial amount of the energy for the—for that particular house. And that, again, involves millions of decisions by very many people. So that is the path we have to follow.

I appreciate very much the comments of Mr. Miller on this score, and just wanted to reinforce that.

Ms. BIGGERT. Will the gentleman yield?

Mr. EHLERS. I would be happy to yield.

Ms. BIGGERT. Thank you.

You mentioned everybody looking for the home run. I would just like to give you something that happened—an example of what happened in my district. There was a pizza company named "Home Run Pizza," which went to the University of Illinois—or the University of Illinois went to help them to look at their operations and to help them to become more energy efficient so number one, they could save costs and save energy, and this worked out and they saved a lot on their bottom line and they saved a lot of energy.

This is the kind of thing that we are looking for.

Mr. EHLERS. I stand corrected. One home run worked.

I yield back.

Chairman GORDON. Thank you, Dr. Ehlers.

Does anyone else wish to be recognized?

Mr. LIPINSKI. I just want to———

Chairman GORDON. Mr. Lipinski is recognized for five minutes.

Mr. LIPINSKI. I just want to add quickly that Home Run Inn Pizza, I just want to make sure you got that right. They are the best pizza there is in Chicago, so———

Mr. BAIRD. Mr. Chairman, are they getting a cut for this?

Chairman GORDON. No, but I think we have got to the point where everything has been said, so I think we need to move forward.

Mr. BAIRD. And everyone has said it.

Chairman GORDON. Yeah.

I ask unanimous consent that the bill is considered as read and open to amendment at any point, and that the Members proceed with the amendments in the order on the roster. Without objection, so ordered.

The first amendment on the roster is an amendment offered by—in the nature of a substitute offered by Ms. Biggert. I ask unanimous consent that the amendment in the nature of a substitute be treated as original text for the purposes of amendment under the five minute rule. Without objection, so ordered.

Chairman GORDON. Ms. Biggert, you are ready to proceed with your amendment.

Ms. BIGGERT. Thank you.

Mr. Chairman, this amendment is offered by Mr. Miller and me in the nature of a substitute, making a number of minor technical changes to the bill.

First, the bill is introduced using the term "universities" in a number of places. The manager's amendment would replace this term with "institutions of higher education," which is more clearly defined in existing law.

Secondly, the manager's amendment would clear up some confusion as to the purpose of the bill. It does so by relocating language in the bill that encourages the Department of Energy to consider the special needs of manufactured and site built housing, while still encouraging the transfer of technologies related to buildings and housing, which currently consumes 70 percent of the electricity generated in the United States. This change makes clear that the bill is about the transfer of all advanced energy and energy efficiency technologies.

Finally, the manager's amendment clarifies the bill's definition of distributed generation to include those technologies that provide electricity not just to energy consumers on the site of production, but to those who are near it as well.

These improvements were the result of bipartisan discussions by majority and minority committee staff, Mr. Miller's staff and my staff. I would urge my colleagues to support the Biggert/Miller amendment, and yield back the balance of my time.

[The prepared statement of Ms. Biggert follows:]

PREPARED STATEMENT OF REPRESENTATIVE JUDY BIGGERT

This amendment in the nature of a substitute makes a number of minor, technical changes to the bill.

First, the bill as introduced uses the term "universities" in a number of places. The manager's amendment would replace this term with "institutions of higher education," which is more clearly defined in existing law.

Secondly, the manager's amendment would clear up some confusion as to the purpose of the bill. It does so by relocating language in the bill that encourages the DOE to consider the special needs of manufactured and site-built housing. While still encouraging the transfer of technologies related to buildings and housing, which currently consume 70 percent of the electricity generated in the U.S., this change makes clear that the bill is about the transfer of all advanced energy and energy efficiency technologies.

Finally, the manager's amendment clarifies the bill's definition of "distributed generation" to include those technologies that provide electricity not just to energy consumers on the site of production, but to those who are near it as well.

These improvements were the result of bipartisan discussions by majority and minority committee staff, Mr. Miller's staff, and my staff.

I urge my colleagues to support the Biggert-Miller amendment, and I yield back the balance of my time.

Chairman GORDON. Thank you, Ms. Biggert.

As I ask unanimous consent that we dispense with the reading of that bill, and I want to thank Ms. Biggert for all of her work on the bill. The Chair supports the amendment.

Is there any further discussion on the amendment?

Are there any amendments to the amendment in the nature of a substitute?

If not, the vote occurs on the amendment in the nature of a substitute. All in favor, say aye. Those opposed, nay. The ayes have it. Amendment is agreed to.

The vote is on the bill H.R. 85 as amended. All those in favor, say aye. All those opposed, no. In the opinion of the Chair, the ayes have it.

I recognize Mr. Hall to offer a motion.

Mr. HALL. Mr. Chairman, I move that the Committee favorably report H.R. 85, as amended, to the House with the recommendation that the bill do pass.

Furthermore, I move that the staff be instructed to prepare the legislative report and make necessary technical and conforming changes, and that the Chairman take all necessary steps to bring the bill before the House for consideration.

I yield back my time.

Chairman GORDON. The question is on the motion to report the bill favorably. Those in favor of the motion will signify by saying aye. Opposed, no. The ayes appear to have it. The bill is favorably reported.

Without objection, the motion to reconsider is laid upon the table. I move the Members have two subsequent calendar days in which to submit supplemental minority or additional views on the measure. I move, pursuant to Clause I of Rule 22 of the Rules of the House of Representatives that the Committee authorize the Chairman to offer such motions as may be necessary in the House to adopt and pass H.R. 85, the *Energy Technology Transfer Act* as amended. Without objection, so ordered.

Let me finally say that these amendments—and I thank all of you for a smooth hearing, smooth markup. We went fairly quick today, but the reason is there was a lot of staff work put in before this, and I thank the staff for that. I thank the Members for their patience, and this is the conclusion of our Committee markup.

[Whereupon, at 11:08 a.m., the Committee was adjourned.]

Appendix:

H.R. 85, Amendment Roster, Summary of H.R. 85

I

110TH CONGRESS
1ST SESSION

H. R. 85

To provide for the establishment of centers to encourage demonstration and commercial application of advanced energy methods and technologies.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 4, 2007

Mrs. BIGGERT introduced the following bill; which was referred to the Committee on Science and Technology

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A BILL

To provide for the establishment of centers to encourage demonstration and commercial application of advanced energy methods and technologies.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Energy Technology Transfer Act''.

SEC. 2. ENERGY TECHNOLOGY TRANSFER.

Section 917 of the Energy Policy Act of 2005 (42 U.S.C. 16197) is amended to read as follows:

"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 universities (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 establishing the network, the Secretary shall consider the special needs and opportunities for increased energy efficiency for manufactured and site-built housing, including construction, renovation, and retrofit. 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; and

1 "(3) give preference to applicants that would
2 significantly expand on or fill a gap in existing pro-
3 grams in a geographical region.
4 "(b) ACTIVITIES.—Each Center shall operate a pro-
5 gram to encourage demonstration and commercial applica-
6 tion of advanced energy methods and technologies through
7 education and outreach to building and industrial profes-
8 sionals, and to other individuals and organizations with
9 an interest in efficient energy use. Funds awarded under
10 this section may be used for the following activities:
11 "(1) Developing and distributing informational
12 materials on technologies that could use energy more
13 efficiently.
14 "(2) Carrying out demonstrations of advanced
15 energy methods and technologies.
16 "(3) Developing and conducting seminars,
17 workshops, long-distance learning sessions, and
18 other activities to aid in the dissemination of knowl-
19 edge and information on technologies that could use
20 energy more efficiently.
21 "(4) Providing or coordinating onsite energy
22 evaluations, including instruction on the commis-
23 sioning of building heating and cooling systems, for
24 a wide range of energy end-users.

1 "(5) Examining the energy efficiency needs of
2 energy end-users to develop recommended research
3 projects for the Department.
4 "(6) Hiring experts in energy efficient tech-
5 nologies to carry out activities described in para-
6 graphs (1) through (5).
7 "(c) APPLICATION.—A person seeking a grant under
8 this section shall submit to the Secretary an application
9 in such form and containing such information as the Sec-
10 retary may require. The Secretary may award a grant
11 under this section to an entity already in existence if the
12 entity is otherwise eligible under this section. The applica-
13 tion shall include, at a minimum—
14 "(1) a description of the applicant's outreach
15 program, and the geographic region it would serve,
16 and of why the program would be capable of trans-
17 ferring knowledge and information about advanced
18 energy technologies that increase efficiency of energy
19 use;
20 "(2) a description of the activities the applicant
21 would carry out, of the technologies that would be
22 transferred, and of any other organizations that will
23 help facilitate a regional approach to carrying out
24 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, universities, 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.

1 "(e) COST-SHARING.—In carrying out this section,
2 the Secretary shall require cost-sharing in accordance with
3 the requirements of section 988 for commercial application
4 activities.
5 "(f) DURATION.—
6 "(1) INITIAL GRANT PERIOD.—A grant awarded
7 under this section shall be for a period of 5 years.
8 "(2) INITIAL EVALUATION.—Each grantee
9 under this section shall be evaluated during its third
10 year of operation under procedures established by
11 the Secretary to determine if the grantee is accom-
12 plishing the purposes of this section described in
13 subsection (a). The Secretary shall terminate any
14 grant that does not receive a positive evaluation. If
15 an evaluation is positive, the Secretary may extend
16 the grant for 3 additional years beyond the original
17 term of the grant.
18 "(3) ADDITIONAL EXTENSION.—If a grantee re-
19 ceives an extension under paragraph (2), the grantee
20 shall be evaluated again during the second year of
21 the extension. The Secretary shall terminate any
22 grant that does not receive a positive evaluation. If
23 an evaluation is positive, the Secretary may extend
24 the grant for a final additional period of 3 additional
25 years beyond the original extension.

1 "(4) LIMITATION.—No grantee may receive
2 more than 11 years of support under this section
3 without reapplying for support and competing
4 against all other applicants seeking a grant at that
5 time.
6 "(g) PROHIBITION.—None of the funds awarded
7 under this section may be used for the construction of fa-
8 cilities.
9 "(h) DEFINITIONS.—For purposes of this section:
10 "(1) ADVANCED ENERGY METHODS AND TECH-
11 NOLOGIES.—The term 'advanced energy methods
12 and technologies' means all methods and tech-
13 nologies that promote energy efficiency and con-
14 servation, including distributed generation tech-
15 nologies, and life-cycle analysis of energy use.
16 "(2) CENTER.—The term 'Center' means an
17 Advanced Energy Technology Transfer Center estab-
18 lished pursuant to this section.
19 "(3) DISTRIBUTED GENERATION.—The term
20 'distributed generation' means an electric power gen-
21 eration technology, including photovoltaic, small
22 wind and micro-combined heat and power, that is
23 designed to serve retail electric consumers on-site.
24 "(4) COOPERATIVE EXTENSION.—The term
25 'Cooperative Extension' means the extension services

1 established at the land-grant colleges and univer-
2 sities under the Smith-Lever Act of May 8, 1914.
3 "(5) LAND-GRANT COLLEGES AND UNIVER-
4 SITIES.—The term 'land-grant colleges and univer-
5 sities' means—
6 "(A) 1862 Institutions (as defined in sec-
7 tion 2 of the Agricultural Research, Extension,
8 and Education Reform Act of 1998 (7 U.S.C.
9 7601));
10 "(B) 1890 Institutions (as defined in sec-
11 tion 2 of that Act); and
12 "(C) 1994 Institutions (as defined in sec-
13 tion 2 of that Act).
14 "(i) AUTHORIZATION OF APPROPRIATIONS.—In addi-
15 tion to amounts otherwise authorized to be appropriated
16 in section 911, there are authorized to be appropriated
17 for the program under this section such sums as may be
18 appropriated.".

○

COMMITTEE ON SCIENCE AND TECHNOLOGY
FULL COMMITTEE MARKUP
FEBRUARY 28, 2007

AMENDMENT ROSTER

H.R. 85, Energy Technology Transfer Act

No.	Sponsor	Description	Results
1.	Ms. Biggert	Amendment in the Nature of a Substitute to H.R. 85	

AMENDMENT IN THE NATURE OF A SUBSTITUTE TO H.R. 85 OFFERED BY MRS. BIGGERT OF ILLINOIS AND MR. MILLER OF NORTH CAROLINA

Strike all after the enacting clause and insert the following:

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the ''Energy Technology
3 Transfer Act''.

4 **SEC. 2. ENERGY TECHNOLOGY TRANSFER.**

5 Section 917 of the Energy Policy Act of 2005 (42
6 U.S.C. 16197) is amended to read as follows:

7 **''SEC. 917. ADVANCED ENERGY TECHNOLOGY TRANSFER**
8 **CENTERS.**

9 ''(a) GRANTS.—Not later than 18 months after the
10 date of enactment of the Energy Technology Transfer Act,
11 the Secretary shall make grants to nonprofit institutions,
12 State and local governments, cooperative extension serv-
13 ices, or institutions of higher education (or consortia
14 thereof), to establish a geographically dispersed network
15 of Advanced Energy Technology Transfer Centers, to be
16 located in areas the Secretary determines have the great-

1 est need of the services of such Centers. In making awards
2 under this section, the Secretary shall—
3 "(1) give priority to applicants already oper-
4 ating or partnered with an outreach program capa-
5 ble of transferring knowledge and information about
6 advanced energy efficiency methods and tech-
7 nologies;
8 "(2) ensure that, to the extent practicable, the
9 program enables the transfer of knowledge and in-
10 formation—
11 "(A) about a variety of technologies and
12 "(B) in a variety of geographic areas;
13 "(3) give preference to applicants that would
14 significantly expand on or fill a gap in existing pro-
15 grams in a geographical region; and
16 "(4) consider the special needs and opportuni-
17 ties for increased energy efficiency for manufactured
18 and site-built housing, including construction, ren-
19 ovation, and retrofit.
20 "(b) ACTIVITIES.—Each Center shall operate a pro-
21 gram to encourage demonstration and commercial applica-
22 tion of advanced energy methods and technologies through
23 education and outreach to building and industrial profes-
24 sionals, and to other individuals and organizations with

1 an interest in efficient energy use. Funds awarded under
2 this section may be used for the following activities:
3 "(1) Developing and distributing informational
4 materials on technologies that could use energy more
5 efficiently.
6 "(2) Carrying out demonstrations of advanced
7 energy methods and technologies.
8 "(3) Developing and conducting seminars,
9 workshops, long-distance learning sessions, and
10 other activities to aid in the dissemination of knowl-
11 edge and information on technologies that could use
12 energy more efficiently.
13 "(4) Providing or coordinating onsite energy
14 evaluations, including instruction on the commis-
15 sioning of building heating and cooling systems, for
16 a wide range of energy end-users.
17 "(5) Examining the energy efficiency needs of
18 energy end-users to develop recommended research
19 projects for the Department.
20 "(6) Hiring experts in energy efficient tech-
21 nologies to carry out activities described in para-
22 graphs (1) through (5).
23 "(c) APPLICATION.—A person seeking a grant under
24 this section shall submit to the Secretary an application
25 in such form and containing such information as the Sec-

1 retary may require. The Secretary may award a grant
2 under this section to an entity already in existence if the
3 entity is otherwise eligible under this section. The applica-
4 tion shall include, at a minimum—
5 "(1) a description of the applicant's outreach
6 program, and the geographic region it would serve,
7 and of why the program would be capable of trans-
8 ferring knowledge and information about advanced
9 energy technologies that increase efficiency of energy
10 use;
11 "(2) a description of the activities the applicant
12 would carry out, of the technologies that would be
13 transferred, and of any other organizations that will
14 help facilitate a regional approach to carrying out
15 those activities;
16 "(3) a description of how the proposed activities
17 would be appropriate to the specific energy needs of
18 the geographic region to be served;
19 "(4) an estimate of the number and types of
20 energy end-users expected to be reached through
21 such activities; and
22 "(5) a description of how the applicant will as-
23 sess the success of the program.

1 "(d) SELECTION CRITERIA.—The Secretary shall
2 award grants under this section on the basis of the fol-
3 lowing criteria, at a minimum:
4 "(1) The ability of the applicant to carry out
5 the proposed activities.
6 "(2) The extent to which the applicant will co-
7 ordinate the activities of the Center with other enti-
8 ties as appropriate, such as State and local govern-
9 ments, utilities, institutions of higher education, and
10 National Laboratories.
11 "(3) The appropriateness of the applicant's out-
12 reach program for carrying out the program de-
13 scribed in this section.
14 "(4) The likelihood that proposed activities
15 could be expanded or used as a model for other
16 areas.
17 "(e) COST-SHARING.—In carrying out this section,
18 the Secretary shall require cost-sharing in accordance with
19 the requirements of section 988 for commercial application
20 activities.
21 "(f) DURATION.—
22 "(1) INITIAL GRANT PERIOD.—A grant awarded
23 under this section shall be for a period of 5 years.
24 "(2) INITIAL EVALUATION.—Each grantee
25 under this section shall be evaluated during its third

1 year of operation under procedures established by
2 the Secretary to determine if the grantee is accom-
3 plishing the purposes of this section described in
4 subsection (a). The Secretary shall terminate any
5 grant that does not receive a positive evaluation. If
6 an evaluation is positive, the Secretary may extend
7 the grant for 3 additional years beyond the original
8 term of the grant.

9 "(3) ADDITIONAL EXTENSION.—If a grantee re-
10 ceives an extension under paragraph (2), the grantee
11 shall be evaluated again during the second year of
12 the extension. The Secretary shall terminate any
13 grant that does not receive a positive evaluation. If
14 an evaluation is positive, the Secretary may extend
15 the grant for a final additional period of 3 additional
16 years beyond the original extension.

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

22 "(g) PROHIBITION.—None of the funds awarded
23 under this section may be used for the construction of fa-
24 cilities.

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

1 "(1) ADVANCED ENERGY METHODS AND TECH-
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3 and technologies' means all methods and tech-
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6 nologies, and life-cycle analysis of energy use.
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9 lished pursuant to this section.
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12 eration technology, including photovoltaic, small
13 wind, and micro-combined heat and power, that
14 serves electric consumers at or near the site of pro-
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16 "(4) COOPERATIVE EXTENSION.—The term
17 'Cooperative Extension' means the extension services
18 established at the land-grant colleges and univer-
19 sities under the Smith-Lever Act of May 8, 1914.
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5 "(C) 1994 Institutions (as defined in sec-
6 tion 2 of that Act).
7 "(i) AUTHORIZATION OF APPROPRIATIONS.—In addi-
8 tion to amounts otherwise authorized to be appropriated
9 in section 911, there are authorized to be appropriated
10 for the program under this section such sums as may be
11 appropriated.".

SUMMARY OF H.R. 85, THE ENERGY TECHNOLOGY TRANSFER ACT

The Need. . .

- The Department of Energy (DOE) and the National Labs have developed countless low-cost energy efficiency technologies; however, there are few mechanisms for transferring these technologies into the marketplace. The cooperative extension services and similar community outreach networks have a long and successful history of transferring knowledge about new technologies and techniques to farmers and other constituencies, but have few resources to focus on energy efficiency outside of the agriculture sector. There is a particular need for such technology transfer in the buildings sector, where 70 percent of U.S. electricity is consumed.

The Response. . .

- This bill would authorize funds for DOE to engage existing community outreach networks, through a competitive grant process, in order to transfer knowledge and information about advanced energy technologies that increase efficiency of energy use, especially those developed at the National Labs and by DOE, to a wide range of energy end-users, including individuals, businesses, building professionals, nonprofit entities and public entities, such as local governments and school districts.

The Bill Would. . .

- Amend the Energy Policy Act of 2005 to revise the guidelines for a geographically dispersed network of Advanced Energy Technology Transfer Centers by authorizing a DOE program to award grants to cooperative extension services; States, local governments, institutions of higher education and non-profit institutions with expertise in energy research or extension to conduct activities to transfer knowledge and information about energy efficiency technologies and methods to a wide range of energy end-users.
- Allow funds to be used for outreach, demonstration and commercial application activities and for hiring experts in energy efficiency technologies.
- Provide a mechanism for research questions identified by energy end-users, related to the production, storage or use of energy, to be brought to the attention of DOE.
- Provide a mechanism for coordinating regional research, engineering and business expertise to help apply energy technologies and methods suitable to the local climate.
- Authorize grants to be funded for a maximum of 11 years, including extensions from an initial five-year period, with requirements for periodic evaluations.

History. . .

- H.R. 85 was first introduced in the 109th Congress as H.R. 5643 by Rep. Biggert. It was then included in H.R. 5656, the *Energy Research, Development, Demonstration, and Commercial Application Act of 2006* and the subsequent H.R. 6203, *Alternative Energy Research and Development Act* which passed the House by voice vote, under suspension of the rules on September 9, 2006.

Section-by-Section

Sec. 1—States the short title of the bill.

Sec. 2—Establishes the grant for the Energy Technology Transfer Centers, and sets guidelines for how funds may be used, sets minimum information that an application must include, and sets guidelines for awarding the grants. This section also sets the duration of the grant, defines terms used in the bill, and authorizes, "such sums as may be appropriated."