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107TH CONGRESS
1ST SESSION

H. R. 1045

To lower energy costs to consumers, increase electric system reliability and provide environmental improvements, through the rapid deployment of distributed energy resources, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MARCH 15, 2001

Mrs. WILSON (for herself, Mr. HUNTER, and Mr. ISSA) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Ways and Means, and Science, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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A BILL

To lower energy costs to consumers, increase electric system reliability and provide environmental improvements, through the rapid deployment of distributed energy resources, and for other purposes.

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 Self-Sufficiency Act for the 21st Century''.

SEC. 2. FINDINGS AND PURPOSES.

(a) FINDINGS.—The Congress finds that:

(1) The greater deployment of distributed energy resources can help alleviate bottlenecks and deficiencies in the nation's energy production and delivery system, and improve power quality and reliability, while bringing more efficient and environmentally responsible energy resources into the mainstream.

(2) The United States needs to ensure the rapid deployment of new power generation technologies in order to meet the growing demand for electricity in the 'new economy,' while at the same time paying careful attention to improving energy efficiency and reducing pollution from energy production.

(3) The United States is poised to be a world leader in the design and manufacture of distributed energy resources technology.

(4) The current regulatory environment serves as a disincentive to the deployment of distributed energy resources in many parts of the country, due to the lack of consistent policies and procedures for the interconnection of distributed energy resources to the local electric grid.

(5) Existing tax treatment of distributed energy resources also creates difficulties for the installation of these technologies.

(6) The Federal Government needs a more coordinated program for research, development and demonstration of distributed energy resources.

(b) PURPOSES.—The purposes of this Act are to lower energy costs to consumers, increase electric system reliability, create a more diverse and robust energy network, and provide energy efficiency and environmental improvements, through the rapid development and deployment of distributed energy resources.

TITLE I—INTERCONNECTION OF LOCAL DISTRIBUTION FACILITIES

SEC. 101. INTERCONNECTION OF LOCAL DISTRIBUTION FACILITIES.

Section 210 of the Federal Power Act is amended by adding the following at the end thereof:

''(f) SPECIAL RULE FOR DISTRIBUTED GENERATION.—

''(1) DEFINITIONS.—As used in this subsection:

''(A) UTILITY DISTRIBUTION COMPANY.—The term 'utility distribution company' means

any entity which owns, controls, or operates, for public use, local utility distribution facilities.

''(B) LOCAL UTILITY DISTRIBUTION FACILITIES.—The term 'local utility distribution facilities' means any facilities used for the local distribution of electric energy. Such term does not include any facilities determined by the Commission to be transmission facilities subject to the jurisdiction of the Commission under section 201.

''(C) DISTRIBUTED GENERATION FACILITY.—The term 'distributed generation facility' means an electric power generation facility that is designed to serve retail electric consumers at or near the facility site and interconnect with local utility distribution facilities.

''(2) INTERCONNECTION.—A utility distribution company shall interconnect its local utility distribution facilities with, and provide service to, a distributed generation facility, if the distributed generation facility owner or operator complies with the final rule promulgated under paragraph (3) and pays the costs directly related to such interconnection and service, as determined by the Commission. The costs, terms and conditions of such interconnection

and subsequent service shall be just, reasonable and non-discriminatory, as determined by the Commission.

''(3) RULES.—Within one year after the date of enactment of this subsection, the Commission shall promulgate a final rule to establish safety, reliability, and power quality standards relating to distributed generation facilities. To the extent feasible, the Commission shall develop the standards through a process involving interested parties. For purposes of developing such standards, the Commission shall establish an advisory committee composed of qualified experts to make recommendations to the Commission.''.

TITLE II—TAX INCENTIVES FOR DISTRIBUTED ENERGY RESOURCES

SEC. 201. TAX INCENTIVES FOR DISTRIBUTED ENERGY RESOURCES.

(a) AMENDMENT OF 1986 CODE.—Except as otherwise expressly provided, whenever in this title an amendment or repeal is expressed in terms of an amendment to, or repeal of, a section or other provision, the reference shall be considered to be made to a section or other provision of Internal Revenue Code of 1986.

(b) IN GENERAL.—Section 48(a)(3) of the Internal Revenue Code of 1986 (defining energy property) is amended by inserting before the last sentence the following: ''The term 'energy property' includes distributed power property or combined heat and power system property, but only if the requirements of subparagraphs (B) and (C) are met with respect to the property.''.

(c) DEFINITIONS.—Subsection (a) of section 48 of the Internal Revenue Code of 1986 (related to the energy credit) is amended by adding at the end the following new paragraphs:

''(6) DISTRIBUTED POWER PROPERTY.—The term 'distributed power property' means property—

''(A) which is used in the generation of electricity for primary use—

''(i) in nonresidential real or residential rental property used in the taxpayer's trade or business;

''(ii) in the taxpayer's industrial manufacturing process or plant activity,

''(B) which may also produce usable thermal energy or mechanical power for use in heating or cooling application, but only if at least 40 percent of the total useful energy produced consists of—

"(i) with respect to assets described in subparagraph (A)(i), electrical power (whether sold or used by the taxpayer), or

"(ii) with respect to assets described in subparagraph (A)(ii), electrical power (whether sold or used by the taxpayer) and thermal or mechanical energy used in the taxpayer's industrial manufacturing process or plant activity,

"(C) which is not used to transport primary fuel to the generating facility or to distribute energy within or outside of the facility, and

"(D) if it is reasonably expected that not more than 50 percent of the produced electricity will be sold to, or used by, unrelated persons.

"(7) COMBINED HEAT AND POWER SYSTEM PROPERTY.—For purposes of this subsection—

"(A) COMBINED HEAT AND POWER SYSTEM PROPERTY.—The term 'combined heat and power system property' means property comprising a system—

"(i) which uses the same energy source for the simultaneous or sequential

generation of electrical power, mechanical shaft power, or both, in combination with the generation of steam or other forms of useful thermal energy (including heating and cooling applications),

''(ii) which has an electrical capacity of more than 50 kilowatts or a mechanical energy capacity of more than 67 horsepower or an equivalent combination of electrical and mechanical energy capacities,

''(iii) which produces—

''(I) at least 20 percent of its total useful energy in the form of thermal energy, and

''(II) at least 20 percent of its total useful energy in the form of electrical or mechanical power (or combination thereof), and

''(iv) the energy efficiency percentage of which exceeds 60 percent (70 percent in the case of a system with an electrical capacity in excess of 50 megawatts or a mechanical energy capacity in excess of 67,000 horsepower, or an equivalent com-

bination of electrical and mechanical energy capacities).

''(B) SPECIAL RULES.—

''(i) ENERGY EFFICIENCY PERCENTAGE.—For purposes of subparagraph (A)(iv), the energy efficiency percentage of a system is the fraction—

''(I) the numerator of which is the total useful electrical, thermal, and mechanical power produced by the system at normal operating rates, and

''(II) the denominator of which is the lower heating value of the primary fuel source for the system.

''(ii) DETERMINATIONS MADE ON BTU BASIS.—The energy efficiency percentage and the percentages under subparagraph (A)(iii) shall be determined on a Btu basis.

''(iii) INPUT AND OUTPUT PROPERTY NOT INCLUDED.—The term 'combined heat and power system property' does not include property used to transport the energy source to the facility or to distribute energy produced by the facility.

''(iv) PUBLIC UTILITY PROPERTY.—

''(I) ACCOUNTING RULE FOR PUBLIC UTILITY PROPERTY.—If the combined heat and power system property is public utility property (as defined in section 46(f)(5) as in effect on the day before the date of enactment of the Revenue Reconciliation Act of 1990), the taxpayer may only claim the credit under the subsection if, with respect to such property, the taxpayer uses a normalization method of accounting.

''(II) CERTAIN EXCEPTION NOT TO APPLY.—The matter in paragraph (3) which follows subparagraph (D) shall not apply to combined heat and power system property.''.

(d) NO CARRYBACK OF ENERGY CREDIT BEFORE EFFECTIVE DATE.—Subsection (d) of section 39 is amended by adding at the end the following new paragraph:

''(10) NO CARRYBACK OF ENERGY CREDIT BEFORE EFFECTIVE DATE.—No portion of the unused business credit for any taxable year which is attrib-

utable to the portion of the energy credit described in paragraph (6) or (7) of section 48(a) may be carried back to a taxable year ending before the date of the enactment of this paragraph.''.

(e) DEPRECIATION.—Subparagraph (C) of section 168(e)(3) (relating to classification of certain property as 7-year property) is amended by redesignating clause (ii) as clause (iii) and by inserting after clause (i) the following new clause:

''(ii) any distributed power property (as defined in section 48(a)) or combined heat and power system property (as defined in such section), and''.

(f) EFFECTIVE DATE.—The amendments made by this title shall apply to property placed in service after December 31, 2000.

TITLE III—RESEARCH AND DEVELOPMENT OF NEW DISTRIBUTED ENERGY RESOURCE TECHNOLOGIES

SEC. 301. RESEARCH AND DEVELOPMENT OF NEW DISTRIBUTED ENERGY RESOURCE TECHNOLOGIES.

(a) IN GENERAL.—The Secretary of Energy shall develop and implement an accelerated comprehensive and cooperative program of research and development to ensure

the reliability, efficiency and environmental responsibility of Distributed Energy Resources (hereafter in this section referred to as ''DER''). This research and development program shall include Advanced Energy Technologies Development, Advanced Energy Systems Development, Advanced Grid Reliability Technologies development and Technology Transfer and Education.

(b) PURPOSES.—The cooperative research program shall promote and accelerate research and development for the following purposes:

(1) Ensure long-term safety, reliability, and service for DER.

(2) Expand the capability of DER to be safely, reliably, and with integrity connected to the distribution electric grid.

(3) Improve the non-renewable technologies ability to reduce fossil fuel consumption.

(4) Minimize the environmental impact of DER technologies.

(5) Provide highly secure interface systems for command, control, and communication of DER technologies with the electrical grid.

(6) Develop technologies that advance and enhance the electrical transmission and distribution grid.

(7) Develop integration techniques and methodologies that enhance the electric grid's performance.

(c) AREAS.—(1) In carrying out this act, the Secretary of Energy shall consider research and development on DER, Advanced Systems Development, and Advanced Electrical Grid reliability for each of the following:

(A) Significant advancement in efficiency for Distributed Power Prime Movers.

(B) Significant advancement in efficiency for thermally activated technologies.

(C) Significant advancement in reduction of environmental impact deploying pollution prevention enabling technologies

(2) The program should include the following areas:

(A) Interconnection standards, protocols, and equipment.

(B) Microturbines.

(C) Fuel cells.

(D) Combined heat and power systems.

(E) Advanced internal combustion engine generators.

(F) Advanced natural gas turbines.

(G) Energy storage devices.

(H) Ancillary equipment for dispatch and control.

(d) POINTS OF CONTACT.—

(1) IN GENERAL.—To coordinate and implement the research and development programs and activities authorized under this Act—

(A) the Secretary of Energy shall designate, as the point of contact for the Department of Energy, an officer of the Department of Energy who has been appointed by the President and confirmed by the Senate; and

(B) the Administrator of the Environmental Protection Agency shall designate, as the point of contact for the Environmental Protection Agency, an officer of the Environmental Protection Agency.

(2) DUTIES.—The point of contact for the Department of Energy shall have the primary responsibility for coordinating and overseeing the implementation of the research, development, and field evaluation program plan. The point of contact for the Environment Protection Agency shall have the responsibility for coordinating the Environmental Protection Agency's input to the research, development and field evaluation of those elements of the pro-

gram that impact the directive of the Agency under the Clean Air Act. The primary point of contact shall be responsible in arranging cooperative agreements for research, development and Field evaluation involving respective departments, national laboratories, universities, industry research organizations and industry.

(3) RESEARCH AND DEVELOPMENT PROGRAM PLAN.—Within 120 days after the date of enactment of this Act, the Secretary of Energy shall prepare and submit to Congress a 6-year program plan to guide activities under this Act. In preparing the program plan, the Secretary shall consult with appropriate representatives of the DER industry to select and prioritize appropriate project proposals. The Secretary may also seek the advice of utilities, energy services providers, manufacturers, institutions of higher learning, Federal agencies, national laboratories, State energy officials, State regulatory officials, environmental organizations, and professional and technical societies. In order to ensure that technologies are readily adopted by private entities, the Secretary shall create cost-sharing programs with private entities.

(e) IMPLEMENTATION.—

(1) REPORT TO CONGRESS.—Two years after the enactment of this Act and at two year intervals thereafter, the Secretary, jointly with the Administrator of the Environmental Protection Agency, shall submit a report to Congress describing the progress made to achieve the purposes of this Act and identifying any additional resources needed to continue the rapid development and deployment of DER.

(2) AUTHORIZATION OF APPROPRIATIONS.—

(A) There are authorized to be appropriated to the Secretary of Energy for carrying out this Act $236,000,000, for each of the fiscal years 2002 through 2007.

(B) There are authorized to be appropriated to the Administrator of the Environmental Protection Agency for carrying out this Act such sums as may be necessary for each of the fiscal years 2002 through 2007.

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