114TH CONGRESS
1ST SESSION

S. _____

To require the Secretary of Energy to establish a distributed energy loan program and technical assistance and grant program, and for other purposes.

IN THE SENATE OF THE UNITED STATES

_____

_____ introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To require the Secretary of Energy to establish a distributed energy loan program and technical assistance and grant program, 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 ''Local Energy Supply and Resiliency Act of 2015''.

SEC. 2. DEFINITIONS.

In this Act:

(1) COMBINED HEAT AND POWER SYSTEM.—The term ''combined heat and power system'' means generation of electric energy and heat in a single, in-

tegrated system that meets the efficiency criteria in clauses (ii) and (iii) of section 48(c)(3)(A) of the Internal Revenue Code of 1986, under which heat that is conventionally rejected is recovered and used to meet thermal energy requirements.

(2) DEMAND RESPONSE.—The term ''demand response'' means changes in electric usage by electric utility customers from the normal consumption patterns of the customers in response to—

(A) changes in the price of electricity over time; or

(B) incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized.

(3) DISTRIBUTED ENERGY.—The term ''distributed energy'' means energy sources and systems that—

(A) produce electric or thermal energy close to the point of use using renewable energy resources or waste thermal energy;

(B) generate electricity using a combined heat and power system;

(C) distribute electricity in microgrids;

(D) store electric or thermal energy; or

(E) distribute thermal energy or transfer thermal energy to building heating and cooling systems through a district energy system.

(4) DISTRICT ENERGY SYSTEM.—The term ''district energy system'' means a system that provides thermal energy to buildings and other energy consumers from 1 or more plants to individual buildings to provide space heating, air conditioning, domestic hot water, industrial process energy, and other end uses.

(5) ISLANDING.—The term ''islanding'' means a distributed generator or energy storage device continuing to power a location in the absence of electric power from the primary source.

(6) LOAN.—The term ''loan'' has the meaning given the term ''direct loan'' in section 502 of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a).

(7) MICROGRID.—The term ''microgrid'' means an integrated energy system consisting of interconnected loads and distributed energy resources, including generators and energy storage devices, within clearly defined electrical boundaries that—

(A) acts as a single controllable entity with respect to the grid; and

(B) can connect and disconnect from the grid to operate in both grid-connected mode and island mode.

(8) RENEWABLE ENERGY SOURCE.—The term ''renewable energy source'' includes—

(A) biomass;

(B) geothermal energy;

(C) hydropower;

(D) landfill gas;

(E) municipal solid waste;

(F) ocean (including tidal, wave, current, and thermal) energy;

(G) organic waste;

(H) photosynthetic processes;

(I) photovoltaic energy;

(J) solar energy; and

(K) wind.

(9) RENEWABLE THERMAL ENERGY.—The term ''renewable thermal energy'' means heating or cooling energy derived from a renewable energy resource.

(10) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

(11) THERMAL ENERGY.—The term ''thermal energy'' means—

(A) heating energy in the form of hot water or steam that is used to provide space heating, domestic hot water, or process heat; or

(B) cooling energy in the form of chilled water, ice, or other media that is used to provide air conditioning, or process cooling.

(12) WASTE THERMAL ENERGY.—The term ''waste thermal energy'' means energy that—

(A) is contained in—

(i) exhaust gases, exhaust steam, condenser water, jacket cooling heat, or lubricating oil in power generation systems;

(ii) exhaust heat, hot liquids, or flared gas from any industrial process;

(iii) waste gas or industrial tail gas that would otherwise be flared, incinerated, or vented;

(iv) a pressure drop in any gas, excluding any pressure drop to a condenser that subsequently vents the resulting heat;

(v) condenser water from chilled water or refrigeration plants; or

(vi) any other form of waste energy, as determined by the Secretary; and

(B)(i) in the case of an existing facility, is not being used; or

(ii) in the case of a new facility, is not conventionally used in comparable systems.

SEC. 3. DISTRIBUTED ENERGY LOAN PROGRAM.

(a) LOAN PROGRAM.—

(1) IN GENERAL.—Subject to the provisions of this subsection and subsections (b) and (c), the Secretary shall establish a program to provide to eligible entities—

(A) loans for the deployment of distributed energy systems in a specific project; and

(B) loans to provide funding for programs to finance the deployment of multiple distributed energy systems through a revolving loan fund, credit enhancement program, or other financial assistance program.

(2) ELIGIBILITY.—Entities eligible to receive a loan under paragraph (1) include—

(A) a State, territory, or possession of the United States;

(B) a State energy office;

(C) a tribal organization (as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b));

(D) an institution of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)); and

(E) an electric utility, including—

(i) a rural electric cooperative;

(ii) a municipally-owned electric utility; and

(iii) an investor-owned utility.

(3) SELECTION REQUIREMENTS.—In selecting eligible entities to receive loans under this section, the Secretary shall, to the maximum extent practicable, ensure—

(A) regional diversity among eligible entities to receive loans under this section, including participation by rural States and small States; and

(B) that specific projects selected for loans—

(i) expand on the existing technology deployment program of the Department of Energy; and

(ii) are designed to achieve 1 or more of the objectives described in paragraph (4).

(4) OBJECTIVES.—Each deployment selected for a loan under paragraph (1) shall include 1 or more of the following objectives:

(A) Improved security and resiliency of energy supply in the event of disruptions caused by extreme weather events, grid equipment or software failure, or terrorist acts.

(B) Implementation of distributed energy in order to increase use of local renewable energy resources and waste thermal energy sources.

(C) Enhanced feasibility of microgrids, demand response, or islanding;

(D) Enhanced management of peak loads for consumers and the grid.

(E) Enhanced reliability in rural areas, including high energy cost rural areas.

(5) RESTRICTION ON USE OF FUNDS.—Any eligible entity that receives a loan under paragraph (1) may only use the loan to fund programs relating to the deployment of distributed energy systems.

(b) LOAN TERMS AND CONDITIONS.—

(1) TERMS AND CONDITIONS.—Notwithstanding any other provision of law, in providing a loan under this section, the Secretary shall provide the loan on

such terms and conditions as the Secretary determines, after consultation with the Secretary of the Treasury, in accordance with this section.

(2) SPECIFIC APPROPRIATION.—No loan shall be made unless an appropriation for the full amount of the loan has been specifically provided for that purpose.

(3) REPAYMENT.—No loan shall be made unless the Secretary determines that there is reasonable prospect of repayment of the principal and interest by the borrower of the loan.

(4) INTEREST RATE.—A loan provided under this section shall bear interest at a fixed rate that is equal or approximately equal, in the determination of the Secretary, to the interest rate for Treasury securities of comparable maturity.

(5) TERM.—The term of the loan shall require full repayment over a period not to exceed the lesser of—

(A) 20 years; or

(B) 90 percent of the projected useful life of the physical asset to be financed by the loan (as determined by the Secretary).

(6) USE OF PAYMENTS.—Payments of principal and interest on the loan shall—

(A) be retained by the Secretary to support energy research and development activities; and

(B) remain available until expended, subject to such conditions as are contained in annual appropriations Acts.

(7) NO PENALTY ON EARLY REPAYMENT.—The Secretary may not assess any penalty for early repayment of a loan provided under this section.

(8) RETURN OF UNUSED PORTION.—In order to receive a loan under this section, an eligible entity shall agree to return to the general fund of the Treasury any portion of the loan amount that is unused by the eligible entity within a reasonable period of time after the date of the disbursement of the loan, as determined by the Secretary.

(9) COMPARABLE WAGE RATES.—Each laborer and mechanic employed by a contractor or subcontractor in performance of construction work financed, in whole or in part, by the loan shall be paid wages at rates not less than the rates prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code.

(c) RULES AND PROCEDURES; DISBURSEMENT OF LOANS.—

(1) RULES AND PROCEDURES.—Not later than 180 days after the date of enactment of this Act, the Secretary shall adopt rules and procedures for carrying out the loan program under subsection (a).

(2) DISBURSEMENT OF LOANS.—Not later than 1 year after the date on which the rules and procedures under paragraph (1) are established, the Secretary shall disburse the initial loans provided under this section.

(d) REPORTS.—Not later than 2 years after the date of receipt of the loan, and annually thereafter for the term of the loan, an eligible entity that receives a loan under this section shall submit to the Secretary a report describing the performance of each program and activity carried out using the loan, including itemized loan performance data.

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section such sums as are necessary.

SEC. 4. TECHNICAL ASSISTANCE AND GRANT PROGRAM.

(a) ESTABLISHMENT.—

(1) IN GENERAL.—The Secretary shall establish a technical assistance and grant program (referred to in this section as the ''program'')—

(A) to disseminate information and provide technical assistance directly to eligible entities so the eligible entities can identify, evaluate, plan, and design distributed energy systems; and

(B) to make grants to eligible entities so that the eligible entities may contract to obtain technical assistance to identify, evaluate, plan, and design distributed energy systems.

(2) TECHNICAL ASSISTANCE.—The technical assistance described in paragraph (1) shall include assistance with 1 or more of the following activities relating to distributed energy systems:

(A) Identification of opportunities to use distributed energy systems.

(B) Assessment of technical and economic characteristics.

(C) Utility interconnection.

(D) Permitting and siting issues.

(E) Business planning and financial analysis.

(F) Engineering design.

(3) INFORMATION DISSEMINATION.—The information disseminated under paragraph (1)(A) shall include—

(A) information relating to the topics described in paragraph (2), including case studies of successful examples;

(B) computer software and databases for assessment, design, and operation and maintenance of distributed energy systems; and

(C) public databases that track the operation and deployment of existing and planned distributed energy systems.

(b) ELIGIBILITY.—Any nonprofit or for-profit entity shall be eligible to receive technical assistance and grants under the program.

(c) APPLICATIONS.—

(1) IN GENERAL.—An eligible entity desiring technical assistance or grants under the program shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

(2) APPLICATION PROCESS.—The Secretary shall seek applications for technical assistance and grants under the program—

(A) on a competitive basis; and

(B) on a periodic basis, but not less frequently than once every 12 months.

(3) PRIORITIES.—In selecting eligible entities for technical assistance and grants under the program, the Secretary shall give priority to eligible entities with projects that have the greatest potential for—

(A) facilitating the use of renewable energy resources;

(B) strengthening the reliability and resiliency of energy infrastructure to the impact of extreme weather events, power grid failures, and interruptions in supply of fossil fuels;

(C) improving the feasibility of microgrids or islanding, particularly in rural areas, including high energy cost rural areas;

(D) minimizing environmental impact, including regulated air pollutants and greenhouse gas emissions; and

(E) maximizing local job creation.

(d) GRANTS.—On application by an eligible entity, the Secretary may award grants to the eligible entity to provide funds to cover not more than—

(1) 100 percent of the costs of the initial assessment to identify opportunities;

(2) 75 percent of the cost of feasibility studies to assess the potential for the implementation;

(3) 60 percent of the cost of guidance on overcoming barriers to implementation, including financial, contracting, siting, and permitting issues; and

(4) 45 percent of the cost of detailed engineering.

(e) RULES AND PROCEDURES.—

(1) RULES.—Not later than 180 days after the date of enactment of this Act, the Secretary shall adopt rules and procedures for carrying out the program.

(2) GRANTS.—Not later than 120 days after the date of issuance of the rules and procedures for the program, the Secretary shall issue grants under this Act.

(f) REPORTS.—The Secretary shall submit to Congress and make available to the public—

(1) not less frequently than once every 2 years, a report describing the performance of the program under this section, including a synthesis and analysis of the information provided in the reports submitted to the Secretary under section 2(c); and

(2) on termination of the program under this section, an assessment of the success of, and edu-

cation provided by, the measures carried out by eligible entities during the term of the program.

(g) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $250,000,000 for the period of fiscal years 2016 through 2020, to remain available until expended.