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NEW ENERGY EFFICIENCY AND CLEAN ENERGY PROGRAMS

By: Kevin E. McCarthy, Principal Analyst

You asked for information on PA 11-80, which creates the Department of Energy and Environmental Protection (DEEP) and a variety of new energy efficiency and renewable energy programs. You were particularly interested in (1) new efficiency programs that are available for historic buildings, (2) the newly created Connecticut Clean Energy Finance and Investment Authority (CEFIA), and (3) how the act affects the Energy Efficiency Fund.

SUMMARY

PA 11-80 creates DEEP by merging the departments of Environmental Protection (DEP) and Public Utility Control (DPUC) and transferring their powers and duties, and those of the DEP commissioner, to DEEP and its commissioner. The act also transfers the energy-related powers and duties of Office of Policy and Management and its secretary regarding energy to DEEP and its commissioner.

The act requires DEEP to establish several efficiency programs, including one to encourage the replacement of heating equipment with more energy efficient equipment. It transfers, from the Department of Social Services to DEEP, the administration of a weatherization program that serves low-income households. It allows municipalities to create a program to provide loans to local residents and businesses for the installation of energy efficiency measures and renewable energy systems. The loans are paid by an assessment on the affected property.

Sandra Norman-Eady, Director
Phone (860) 240-8400
FAX (860) 240-8881
http://www.cga.ct.gov/olr

Connecticut General Assembly
Office of Legislative Research

Room 5300
Legislative Office Building
Hartford, CT 06106-1591
Olr@cga.ct.gov

The act does not specifically address historic buildings. But it appears that these buildings would be eligible for all of the efficiency and renewable energy programs established by the act that address energy use in buildings. In particular, these buildings may be able to take advantage of programs the act establishes to provide financing and financial incentives for replacement heating systems.

The act (1) creates CEFIA to replace the board that is responsible for developing the plan on how money in the Clean Energy Fund is spent, (2) grants the authority a broad range of powers and duties, (3) places the fund under CEFIA rather than Connecticut Innovations, Inc. (CII) (4) allows CEFIA to receive additional specified revenues, and (5) expands how the fund can be used.

By law, the electric and gas companies must develop plans for spending money in the Energy Efficiency Fund. The act requires DEEP to oversee the programs in the electric company plans and specifies how it must do so. DEEP must implement an independent, comprehensive evaluation, measuring, and verification process regarding these plans.

DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

Responsibilities and Structure

The act requires DEEP, rather than the electric companies, to prepare the integrated resources plan, which seeks to meet electric needs through a mix of efficiency programs and power generation, and modifies the planning process.

By July 1, 2012, and every three years thereafter, the act requires DEEP to prepare a comprehensive energy plan. The plan must include, among other things:

1. an assessment and plan for all energy needs, including electricity, heating, cooling, and transportation;

2. the findings of the existing efficiency, renewable energy, and integrated resources plans;

3. an assessment of energy supplies, demands, and costs and factors likely to affect them;

4. the progress made meeting the goals and milestones of the last comprehensive plan;

5. long-range energy policies that achieve a sound economy with the least-cost mix of energy supply sources and measures that reduce energy demand, while also considering consumer price impacts, public health, and environmental goals, among other things; and

6. recommendations for administrative and legislative action.

Previously, DPUC was headed by five commissioners known as the Public Utility Control Authority. The act replaces the authority with the Public Utility Regulatory Authority (PURA), within DEEP, and makes it responsible for regulating public utility rates and promoting policies that will lead to just and reasonable utility rates.

The act establishes an energy bureau within DEEP and allows for additional bureaus. It creates, within available appropriations, an office of energy efficient businesses within DEEP and requires it to provide in-state businesses (1) a single point of contact for any state business interested in energy efficiency, renewable energy, or conservation projects; (2) information on loans and grants for energy efficiency, renewable energy projects, and conservation; (3) audit and assessment services, including outreach to businesses by qualified entities; and (4) any other service the office considers relevant.

Goals

Under the act, DEEP's energy goals are (1) reducing utility rates and decreasing ratepayer costs, (2) ensuring the reliability and safety of the state's energy supply, (3) increasing the use of clean energy, and (4) creating jobs and developing the state's energy-related economy.

DEEP's environmental goals are (1) conserving, improving and protecting the natural resources and environment of the state and (2) preserving the natural environment while fostering sustainable development.

In addition to the DEEP commissioner's inherited responsibilities, the act also charges him with (1) developing a comprehensive energy plan; (2) transitioning the state to cleaner, more diverse and sustainable energy sources; and (3) creating opportunities for innovation and technological advances in conserving energy and reducing costs.

NEW PROGRAMS

The act creates a number of energy efficiency programs. They do not specifically address historic buildings but these buildings appear to be eligible for the programs.

Replacement Heating Equipment

The act establishes programs to (1) finance the replacement of inefficient residential heating equipment and (2) provide financial incentives for such equipment.

The act requires DEEP, by October 1, 2011, to establish a program to allow residential customers to finance the installation of energy efficient natural gas or heating oil burners, boilers, and furnaces to replace (1) existing inefficient equipment or (2) electric heating systems. The new equipment must replace boilers and furnaces that are at least seven years old with an efficiency rating of not more than 75% and the replacement equipment must meet specified efficiency criteria. To participate in the program, a customer must first have a home energy audit. The cost of the audit can be financed under the program. The program may be funded by the residential financing program supported by the Energy Efficiency Fund or the Clean Energy Fund.

The act also requires DEEP to establish a program providing financial incentives to eligible entities that install energy efficient heating equipment. The entities include (1) any residential, commercial, institutional, or industrial customer of an electric or natural gas company who employs or installs an eligible savings technology, (2) an energy service company that DEEP certifies as a Connecticut electric efficiency partner; or (3) an installer certified by the CEFIA.

By December 31, 2011, DEEP must begin accepting applications for financial incentives for the installation of efficient heating equipment. Financial incentives must provide private financial institutions with loan loss protection or grants to lower borrowing costs and, if DEEP deems it necessary, grants to the lending institution to lower borrowing costs and allow for a 10-year loan. The financial incentive package must ensure that the applicant's annual loan payment is no more than the projected annual energy savings less $100. DEEP must arrange with an electric or gas company to provide for payment of any loan made as financial assistance through the loan recipient’s monthly electric or gas bill, as applicable.

DEEP must develop a prescriptive one-page loan application. It must at least include: (1) detailed information, specifications, and documentation of the eligible energy technology's installed costs and projected energy savings and (2) for loan requests of more than $100,000, certification by a licensed professional engineer, licensed contractor, installer, or tradesman with a state license held in good standing.

Loan applicants must (1) contract with Connecticut-based licensed contractors, installers, or tradesmen; (2) provide evidence of the cost of purchase and installation of the eligible technology; and (3) periodically provide evidence of the operation and functionality of the technology to ensure that it is operating as intended during the term of the loan.

The act has similar provisions regarding the installation of combined heat and power (cogeneration) systems, which are typically used in commercial buildings.

Weatherization

The act requires the DEEP commissioner to administer the federally-funded weatherization assistance program which serves low-income households; under previous practice the Department of Social Service administered this program.

Under the act, the program must provide, within available appropriations, weatherization assistance in accordance with the provisions of the state plan implementing the federal weatherization and fuel assistance programs. DEEP must adopt regulations:

1. establishing priorities for determining which households will receive weatherization assistance,

2. requiring that when assistance is for energy conservation measures other than the retrofitting of heating systems it be provided only for dwellings for which an energy audit has been conducted,

3. requiring that the simple payback period (the time during which the energy savings equal the cost of the conservation measures) calculated for each energy conservation measure recommended in the audit be the only criterion for determining which measures will be implemented under this program,

4. establishing the maximum allowable payback period, and

5. establishing conditions for waiving these requirements in an emergency.

Municipal Program

The act allows any municipality to establish a loan program for financing sustainable energy improvements to qualifying real property located within the municipality. (These are commonly called Property Assessed Clean Energy (PACE) programs.) The municipality must issue a public notice and provide an opportunity for public comment before creating this program. The program can cover all or part of the municipality.

Under the act, the energy improvements are (1) any renovation or retrofitting of qualifying real property to reduce energy consumption or (2) installation of a renewable energy system to serve the property. Qualifying real property are single- or multi-family residential dwellings or other buildings that a municipality determines can benefit from energy improvements.

Any municipality that establishes a loan program may issue bonds to (1) offer loans to the owners of eligible property in the municipality to finance energy improvements, (2) conduct related energy audits, and (3) conduct renewable energy system feasibility studies and verify the installation of any improvements. The bonds and financing must be backed by special contractual assessments on the benefitted property.

Any loan made under the program must be repaid over a term that does not exceed the calculated payback period for the installed improvements (the time in which the energy costs savings equals the cost of the improvements), as determined by the municipality. The municipality must set a fixed interest rate when each loan is made. The interest rate must be sufficient to pay the program's financing costs, including loan delinquencies. The loan cannot have a prepayment penalty.

Loans under the program, interest, and any penalties are a lien against the property. The lien must be levied and collected in the same way as property taxes. In the case of a default or delinquency, the lien is subject to the same penalties and remedies and lien priorities as a delinquent tax payment. However, the lien does not have priority over existing mortgages.

CONNECTICUT ENERGY FINANCE AND INVESTMENT AUTHORITY

The act (1) creates CEFIA to replace the board that is responsible for developing the plan on how money in the Clean Energy Fund is spent, (2) grants the authority a broad range of powers and duties, (3) places the fund under the authority rather than Connecticut Innovations, Inc. (CII) (4) allows the authority to receive additional specified revenues, and (5) expands how the fund can be used.

The act requires the authority to (1) develop separate programs to finance and otherwise support clean energy investment in residential, municipal, small business, and larger commercial projects and other projects as it determines; (2) stimulate demand for clean energy and the deployment of clean energy sources in the state that serve end-use customers here; and (3) support financing or other expenditures that promote investment in clean energy sources in accordance with a comprehensive plan it develops to foster the growth, development, and commercialization of clean energy sources and related enterprises.

Financing Projects

The act allows the authority to provide financing support to clean energy (efficiency or renewable energy) projects if it determines that the amount to be financed by the authority and other non-equity financing sources does not exceed 80% of the cost to develop and deploy a project, or for an energy efficiency project, up to 100% of the cost. The act allows the authority to assess reasonable fees on its financing activities to cover its reasonable costs and expenses, as determined by the board.

Before making any loan or other form of financing or risk management for a project, the authority must develop standards to govern its administration through rules, policies, and procedures that specify borrower eligibility, terms and conditions of support, and other relevant criteria, standards, or procedures.

The act allows the authority to enter into contracts with private funding sources to raise debt or equity from private sources. Its board must set the average rate of return on such capital.

Clean Energy Fund Revenue Sources

By law, the fund is primarily supported by a 0.1 cent per kilowatt-hour charge on electric bills. The act allows CEFIA to receive funds repurposed from existing programs providing financing support for clean energy projects, provided (1) any transfer of funds from such existing programs must be approved by the legislature and (2) the funds are used for financing, grants, and loans.

The act allows CEFIA to raise private capital. It also allows the fund to receive:

1. charitable gifts, grants, and loans;

2. any federal funds that can be used for its purposes;

3. contributions and loans from individuals, corporations, university endowments, and philanthropic foundations;

4. earnings and interest from financing support activities for clean energy projects backed by the authority; and

5. funding from the Community Development Financing Institution Fund administered by the U.S. Treasury Department, as well as loans from and investments by depository institutions.

Uses of the Clean Energy Fund

By law, the fund can support a wide range of renewable energy projects. The act additionally allows it to:

1. finance energy efficiency projects;

2. support projects that seek to deploy electric, electric hybrid, natural gas, or alternative fuel vehicles and associated infrastructure and any related storage, transmission, distribution or manufacturing technologies or facilities; and

3. provide low-cost financing for the above projects and clean energy technologies.

The act allows the fund to be used to provide low-cost financing and credit enhancement mechanisms for clean energy projects and technologies reimbursement.

ENERGY EFFICIENCY FUND

The Energy Efficiency Fund is primarily supported by a charge of 0.3 cents per kilowatt-hour sold by electric companies and competitive electric suppliers. Additional funding comes from proceeds of auctions under the Regional Greenhouse Gas Initiative, contributions from gas company ratepayers, and other sources.

By law, the electric and gas companies must develop plans for spending money in the fund. Under prior law, the plans were subject to DPUC approval. The act transfers this responsibility to DEEP. The act requires that the electric company plans include steps to achieve a goal of weatherizing 80% of the state's housing units by 2030. It also requires Energy Conservation Management Board to periodically review contractors to determine whether they are qualified to conduct work related to the efficiency programs.

The act requires DEEP to oversee the programs in the electric company plans and specifies how it must do so. DEEP must implement an independent, comprehensive evaluation, measuring, and verification process that ensures:

1. the programs are administered appropriately and efficiently and comply with statutory requirements,

2. the programs and measures are cost effective,

3. evaluation reports are accurate and issued in a timely manner,

4. evaluation results are appropriately and accurately considered in program development and implementation, and

5. information needed to meet any third-party evaluation requirements is provided.

Under the act, the evaluations of efficiency programs and individual measures, measurement, and verification must be conducted on a continual basis. The emphasis must be on those impact and process evaluations, programs, or measures that (1) have not been studied and (2) account for a relatively high percentage of program spending. Evaluations must use statistically valid monitoring and data collection techniques appropriate for the programs or measures being evaluated.

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