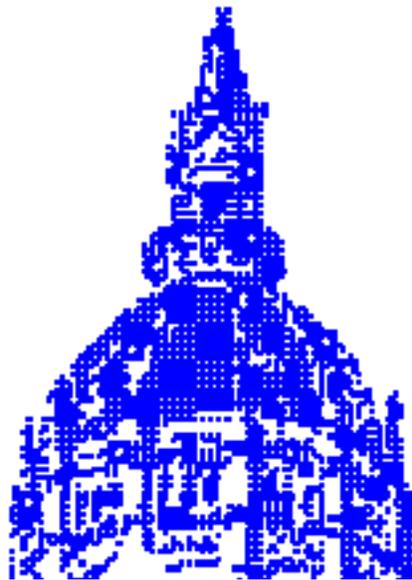


Office of Legislative Research
Connecticut General Assembly



OLR ACTS AFFECTING

Energy



Kevin McCarthy
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To the Reader

This report provides highlights of new laws (public acts) affecting energy enacted during the 2007 regular and special legislative sessions. In each summary we indicate the public act (PA) number. The report does not cover special acts. A substantial proportion of the report summarizes provisions of PA 07-242, which has dozens of energy provisions.

Not all provisions of the acts are included here. Complete summaries of all 2007 public acts passed will be available in the fall when OLR's *Public Act Summary* book is published; some are already on OLR's webpage: <http://www.cga.ct.gov/olr/OLRPASums.asp>.

Readers are encouraged to obtain the full text of acts that interest them from the Connecticut State Library, the House Clerk's Office, or the General Assembly's website: <http://www.cga.state.ct.us/default.asp>.

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ENERGY EFFICIENCY

Energy Conservation

PA 07-242:

1. requires the Office of Policy and Management (OPM) secretary to provide a rebate of up to \$500 to people who buy and install energy efficient replacement home heating equipment, with up to \$5 million in rebates annually;
2. requires the Energy Conservation Management Board (ECMB) to develop and estimate the cost of a comprehensive residential electric and gas conservation program;
3. establishes energy efficiency standards for various commercial products;
4. requires OPM to develop a strategic plan to improve the management of energy use in state facilities; and
5. authorizes up to \$30 million in state bonds for the Department of Public Works to fund the net costs of the resulting energy efficiency projects.

(Various effective dates.)

Electricity Conservation

PA 07-242 requires electric companies to offer an electricity conservation incentive program

to their customers this summer. The program must compare electricity use during the period from June 1, 2007 to August 31, 2007 to use in the same period in 2006 and give customers an incentive to conserve electricity in 2007.

The act also requires ECMB to establish a rebate program for residential customers who replace air conditioners that do not meet the federal Energy Star efficiency standards with ones that do. ECMB must run the program from January 1, 2008 to September 1, 2008. The rebate ranges from \$25 to \$100 for room air conditioners, depending on the cost of the new air conditioner. The act provides a rebate of at least \$500 to residential customers who replace a central air conditioning unit that does not meet the Energy Star standards with one that does.

(Various effective dates)

Oil and Natural Gas Conservation

By law, natural gas companies must develop annual conservation plans, but prior law did not provide a funding mechanism. PA 07-242 requires that the plans be funded by the growth in the utilities gross receipts tax in each fiscal year over the amount contained in the revenue estimate in the adopted

state budget for that year, subject to a \$10 million per year cap.

The act establishes a parallel fuel oil conservation program and funds it with the excess in revenue from the petroleum products gross receipts tax above the 2006 revenue, subject to a \$10 million annual cap.

(Effective July 1, 2007)

Energy Conservation Loan Program

PA 07-64 increases the income threshold for receiving lower interest rates on loans from the Energy Conservation Loan Fund (ECLF). It also eliminates one of two largely duplicative statutes governing the ECLF program, thereby resolving conflicts between the two laws and clarifying loan terms and administrative procedures. It incorporates the higher loan limits for multifamily residences with more than four units and the stricter electric heating conversion loan requirements of the repealed statute into the one it retains. Finally, it eliminates the duplicative energy conservation revolving loan account.

(Effective date October 1, 2007)

PA 07-242 reinstates, until June 30, 2008, provisions of a prior law that lowered the interest rate for the ECLF. It increases, from \$15,000 to \$25,000, the maximum loan that can be provided to owners of

residential properties under this program.

(Effective upon passage)

Energy Efficiency in Motor Vehicles

PA 07-242 establishes a local option property tax exemption for hybrid vehicles and those with fuel efficiencies of at least 40 miles per gallon. (PA 07-4, June Special Session, expands the exemption to apply to all motor vehicles that get this mileage). It creates a sales tax exemption from January 1, 2008 until July 1, 2010, for vehicles with city or highway fuel efficiencies of at least 40 miles per gallon (e.g., certain hybrids).

(Effective January 1, 2008 and applicable to sales on or after that date)

PA 07-242 also modifies fuel efficiency requirements for state fleet vehicles. By law, the average fuel efficiency of cars and light duty trucks must be at least 40 miles per gallon. The act additionally requires that, starting January 1, 2008, each car or light duty truck have an efficiency rating that is in the top third of the vehicles in its class. The act also and increases the proportion of state vehicles that must be alternatively fueled.

(Effective upon passage)

Tax Incentives for Energy Efficiency

PA 07-242 (1) makes permanent the sales tax exemption for residential energy efficiency goods such as insulation, programmable thermostats, and gas furnaces that meet Energy Star standards; (2) permanently exempts from the tax compact fluorescent light bulbs; and (3) exempts from the tax, until June 30, 2008, household appliances that meet federal Energy Star standards. (The budget act terminates the appliance exemption on September 30, 2007).

(Effective upon passage for the Energy Star appliance exemption; effective June 1, 2007 for the exemption for energy efficiency goods and compact fluorescent lamps.)

Prior law provided a credit against business taxes of up to 60% of a firm's investments in energy conservation projects in low-income housing developments or properties occupied by charitable organizations. PA 07-242 (1) increases the maximum credit to 100% and (2) establishes a 100% credit for energy conservation investments in properties owned, but not occupied by, these organizations.

(Effective July 1, 2007)

(PA 07-5, September Special Session, makes conforming changes.)

Energy Efficiency Partnership Program

PA 07-242 allows energy management services companies and electric company customers to apply to Department of Public Utility Control (DPUC) for funding for supply and demand side measures (e.g., renewable generation and conservation measures, respectively) that reduce electric demand. The measures must have at least a two-to-one payback ratio. Up to \$60 million in ratepayer funds can go to the program each year. The act also requires DPUC to develop a low-interest loan program to finance the cost of the technologies.

(Effective upon passage)

GREEN BUILDINGS

State-Funded Buildings

The act broadens and increases the state's "green building" requirements. Under prior law, state facilities costing \$5 million or more, funded on or after January 1, 2007 (with limited exceptions), had to meet specified energy and environmental standards. Starting January 1, 2008, PA 07-242 modifies the requirements by eliminating the exceptions and limiting the green building requirements to those state facilities where at least \$2 million of the funding comes from the state. The act also extends the requirements to the following

types of projects with at least \$2 million or more in state funding: (1) renovations to state facilities approved and funded on or after January 1, 2008, (2) new school construction projects authorized by the legislature on or after January 1, 2009 that cost \$5 million or more, and (3) school renovation projects authorized by the legislature on or after this date costing at least \$2 million. The act also requires all of these facilities to exceed current building code energy efficiency standards by at least 20%.

The act increases, by two percentage points, but not more than 100%, the reimbursement rate under the school construction grant program for those projects subject to the green building requirements. The school district must certify to the Education Department that the school will meet the standards.

PA 07-249 eliminates the funding provision for school buildings. PA 07-213 specifies that the standards apply only to state projects for which all budgeted bond funds are allocated by the State Bond Commission on or after January 1, 2007.

(Effective October 1, 2007 for the increase in school construction grants, and January 1, 2008 for the remaining provisions)

Green Building Standards in the State Building Code

PA 07-242 requires the state building inspector and the Codes and Standards Committee to amend the State Building Code to require (1) buildings costing \$5 million or more built after January 1, 2009 and (2) renovations costing \$2 million or more starting January 1, 2010 to meet the Leadership in Energy and Environmental Design (LEED) silver standard or its equivalent. The requirements apply to private and public sector projects, other than residential buildings with up to four units. The act requires the inspector and the committee to waive these requirements if the Institute for Sustainable Energy finds that the cost of compliance significantly outweighs the benefits.

By law, the State Building Code requires that buildings and building elements be designed to provide optimum cost-effective energy efficiency over a building's life. The act requires the state building inspector and the committee to revise the code starting January 1, 2008, and specifically includes residential buildings in this mandate.

(Effective October 1, 2007)

RENEWABLE ENERGY

Clean Energy Fund

In recent years, the legislature has diverted to the General Fund part of the revenue that would have otherwise gone into the state's Clean Energy Fund (which supports solar and other renewable energy technologies) and the electric companies' conservation funds. To reduce the impact of this transfer on the funds, the legislature authorized the issuance of bonds backed by future revenue from the renewable energy and conservation charges on electric bills.

PA 07-242 appropriates \$95 million from the FY 07 budget to defease or buy back the bonds that mature after December 30, 2007, or a combination of these measures. Seventy-five percent of the revenue freed up as a result of this measure (net of the state's administrative costs) would go back into the conservation funds and 25% would go back into the Clean Energy Fund. The governor vetoed these provisions, but the budget reinstated them, with an \$85 million appropriation.

PA 07-5, September Special Session, makes conforming changes to those provisions.

PA 07-242 specifically allows the Clean Energy Fund to (1) invest in solar thermal and solar photovoltaic energy and (2) be used for demonstration projects for advanced technologies that

reduce energy use from traditional sources. It also allows the fund to invest in (1) alternative fuel used for electric generation, including ethanol, biodiesel, or other fuel, produced in Connecticut and derived from agricultural produce, food waste, or waste vegetable oil, if the Department of Environmental Protection (DEP) determines that these fuels reduce greenhouse gas emissions and fossil fuel consumption, (2) geothermal energy and (3) hydropower that will meet the low-impact standards of the Low-Impact Hydropower Institute.

(Various effective dates)

PA 07-152 creates the Renewable Energy Investments Board within Connecticut Innovations, Inc. (CII) for administrative purposes only and allows CII to spend money in the Clean Energy Fund only as authorized by the board. It specifies the board's membership and establishes its responsibilities. It eliminates the advisory committee that previously assisted CII in developing a comprehensive plan, among other things.

By law, the Energy Conservation Management Board (ECMB) helps the electric companies develop a plan to implement cost-effective conservation programs, which is subject to DPUC approval. The act requires DPUC to approve, modify, or reject the plan in an uncontested proceeding. It allows

DPUC to hold a public hearing as part of this proceeding.

(Effective October 1, 2007, except that the provision explicitly allowing CII to administer the fund in accordance with the act is effective upon passage)

PA 07-240 requires the Clean Energy Fund advisory committee to study (1) the cost-effectiveness and efficiency of geothermal and other advanced heat pump systems; (2) appropriate geothermal applications for industrial, commercial, and municipal purposes; and (3) financial and other barriers to greater applications and ways to promote more applications. The committee must consult with DPUC and ECMB in conducting the study. ECMB must report its findings and recommendations to the Energy and Technology Committee by February 1, 2008.

(Effective upon passage)

Renewable Portfolio Standard

Under prior law, electric companies and suppliers had to obtain at least 3.5% of their power from solar energy and other class I renewable resources such as solar or wind power in 2007, 5% in 2008, 6% in 2009, and 7% in 2010 and subsequent years under the state's renewable portfolio standard (RPS). PA 07-242 increases the RPS for class I resources to 8% starting in 2011. It increases the class I RPS to 20% in 2020 in nine steps.

The act allows companies and suppliers to meet the standard by buying power from net-metering customers (customers who generate power from class I resources, as described below) as an alternative to the current options. It allows the companies, starting January 1, 2008, to meet the RPS by procuring renewable energy certificates under long-term contracts. These credits are bought and sold on the New England market as one way of complying with renewable portfolio standards in Connecticut and other states. The credits can be sold separately from the power produced by renewable resources.

(Effective October 1, 2007)

PA 07-5, September Special Session, temporarily broadens the types of power plants where construction and demolition waste and certain other biomass can be used as a fuel and the resulting power be considered a class I renewable resource.

(Effective upon passage)

Net Metering

By law, electric companies and competitive suppliers must give a credit to their residential customers who generate electricity using class I resources or hydropower. PA 07-242 expands these provisions to cover all customers with generation capacity up to two megawatts. It provides for credits to customers who generate more power than

they use in a given billing period, with annual reconciliation in which the customer would be paid for any excess production at the avoided wholesale cost, and makes related changes.

(Effective October 1, 2007)

Tax Exemptions

Under prior law municipalities could exempt residential solar energy heating and cooling systems from property taxes for 15 years after they were installed. Such exemptions were formerly allowed only for systems installed before October 1, 2006. The act eliminates the expiration date, thus allowing more recently installed systems to be eligible for exemptions. The exemption applies to the difference between what the assessed valuation of the property would be with a conventional heating and cooling system and what it is when equipped with a solar system.

(Effective July 1, 2007)

PA 07-242 requires, rather than allows, municipalities to exempt these systems from the property tax. It also requires municipalities to exempt any passive or active solar water or space heating system or geothermal energy resource in any type of building.

The act also exempts from the sales tax (1) solar electric and space and water heating systems and related equipment and installation services, (2) geothermal systems and related equipment and installation

services, and (3) ice storage systems used for cooling, and related equipment and installation services for utility customers billed on time-of-use rates.

PA 07-240 allows a municipality to adopt an ordinance exempting from the property tax electric generating facilities used on a farm that use class I renewable energy sources, such as solar and wind power and certain hydropower facilities. The law already permitted municipalities to exempt such facilities installed for private residential use.

(Effective October 1, 2007 and applicable to assessment years starting on or after that date)

New Programs

Municipal Grant Program.

PA 07-242 requires CII to establish a municipal renewable energy and efficient energy generation grant program. CII must make grants under the program to municipalities to purchase and operate, for municipal buildings, (1) renewable energy sources, including solar energy, geothermal energy, and fuel cells or other energy-efficient hydrogen-fueled energy or (2) energy-efficient generation sources, including cogeneration units that are at least 65% efficient. CII must give priority to applications for disaster relief centers and high schools. Each grant must make the cost of

purchasing and operating the generation source competitive with the municipality's current electricity expenses.

The act authorizes up to \$50 million in bonding for the program, with the proceeds going into a separate account in the Clean Energy Fund.

Bonding for Renewable Energy in State Buildings. PA 07-242 authorizes \$30 million in bonds for CII to fund the net project costs of renewable energy and cogeneration projects in state buildings. To be eligible, the building must be certified in the LEED program or in the process of being certified.

Electric Efficiency Partnership Program. PA 07-242 requires the ECMB to evaluate and approve technologies that can be deployed by electric company customers, energy management companies, and others to reduce electric demand. These technologies can include demand side measures such as conservation, and supply side measures such as renewable generation and emergency generators that can be centrally dispatched. ECMB must file its evaluation with DPUC, which must approve or modify it by October 15, 2007. Also by this date ECMB must file with DPUC an analysis of growth in overall and peak demand. The analysis must evaluate the costs and benefits of these technologies and set funding levels for the

partnership program described below.

Starting April 1, 2008, anyone can seek DPUC approval and funding as a partner by showing that it has adequate financial resources, managerial ability, and technical competence. The application must describe the services and DPUC-approved technologies that the partner will buy or provide and the amount of funding it is seeking. In evaluating the application, DPUC must consider the applicant's potential to reduce overall and peak demand. DPUC must determine how much of the cost of an approved application the customer will bear and how much will be funded by ratepayers. DPUC must ensure that approved applications achieve a two-to-one payback ratio. At least 75% of the investment must be spent on the technologies themselves. Starting February 1, 2010, partners can only receive funding if chosen in a request for proposals conducted by DPUC, subject to the same cost-benefit test. No more than \$60 million in ratepayer funds can go to this program each year.

Project 100

The law requires the electric companies to enter into long-term contracts with renewable resource generators. PA 07-242 requires the companies to enter into contracts for 125, rather than 100, megawatts for the

period October 1, 2007 to October 1, 2008. It increases this amount to 150 megawatts starting October 1, 2008.

(Various effective dates)

POWER PLANTS AND OTHER FORMS OF GENERATION

Peaking Generation

PA 07-242 requires the electric companies, singly or jointly, to submit a plan to DPUC between January 1 and February 1, 2008, to build peaking generation plants. Other entities can submit such plans during this period. DPUC must review each plan in a contested case and can retain a consultant to help it determine whether the plan's costs are good faith estimates. DPUC must approve the plan within 120 days of receiving it unless DPUC determines that it is not in customers' interests. Any approved plan must include a requirement that the applicant be compensated at the plant's cost of service plus a reasonable rate of return. The applicant must also agree to run the plant at such times and at such capacity needed to reduce overall rates.

(Effective January 1, 2008)

Utility Purchase of Generating Plants

Under PA 07-242, if any power plant in the state is offered for sale, DPUC must authorize

any electric company to buy and operate the plant if it, through a contested case proceeding, determines that the purchase and operation is in the public interest. An acquisition plan must provide for (1) payment of property taxes on the value of the purchased plant and (2) employee protections consistent with the requirements that applied when the restructuring law required the companies to put their plants up for auction. An electric company purchasing such plants is entitled to recover the costs of the purchase in an annual retail generation rate determined in a case, consistent with rate regulatory principles.

(Effective upon passage)

Funding for Distributed Resources

Previous law established incentives for new distributed generation (e.g., small power plants using technology such as microturbines and fuel cells). One of the incentives for such generation is a one-time capital award of between \$200 and \$500 per kilowatt of capacity. PA 07-242 extends the incentives to distributed generation, developed in the state before January 1, 2007 if the generation underwent upgrades that increased its thermal efficiency, increased its electrical output by at least ten percentage points; operates at a thermal efficiency level of at least 50%; and added electric capacity

in the state on or after January 1, 2007.

(Effective July 1, 2007)

Distributed Generation Grant Program

PA 07-242 requires DPUC, in consultation with OPM and the Clean Energy Fund advisory committee, to establish a grant program for distributed generation projects in business and state buildings that are powered by class I renewable resources such as solar energy and fuel cells. It requires DPUC to award grants of up to \$25 million each for fuel cell projects and other projects. The act authorizes \$50 million in bonding for this program.

(Effective July 1, 2007)

DEP Permitting of Distributed Generation/Pilot Program for Expanded Use of Emergency Generators

PA 07-242 requires DPUC to implement a pilot program that will (1) allow certain electric generation resources to run more frequently for reliability and economic reasons, (2) identify strategies that couple conservation and technologies that shift when power is used into an aggregate resource plan that reduces aggregate emissions, and (3) still meet established reliability standards.

(Effective upon passage)

ENERGY PLANNING

PA 07-242 requires the electric companies to annually assess the energy and capacity requirements of their customers for the next three, five, and 10 years and how best to eliminate or stabilize growth in electric demand.

The act requires the electric companies to (1) review the assessment and (2) develop a comprehensive plan for procuring energy resources. The plan must include a wide range of resources, including energy efficiency, conventional and renewable generating resources, combined heat and power (cogeneration), and emerging energy technologies. The plan's goal is to minimize the cost of these resources and maximize customer benefit consistent with the state's environmental policies. Under the act, resource needs must first be met through all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible.

The companies must submit the plan to the CEAB for its review. CEAB must submit the reviewed plan, together with a statement of any unresolved issues, to DPUC. Within 120 days after CEAB submits the plan, DPUC must approve, or modify and approve it. Starting in 2009, DPUC must approve or modify the plan within 60 days.

The electric companies must implement the plan under DPUC oversight. If the plan specifies that a generating plant should be built, DPUC must issue a request for proposals (RFP). Electric companies can submit proposals under the same conditions as other parties. If DPUC approves an electric company proposal, the company cannot recover more than the costs identified in its proposal. If DPUC selects a proposal from a non-electric company, the affected electric company must negotiate in good faith with the RFP winner and submit a contract to DPUC for its approval within 30 days of DPUC's selection.

(Various effective dates)

ENERGY ASSISTANCE

PA 07-242:

1. extends the winter moratorium period when electric utilities are barred from terminating service to hardship customers,
2. expands funding opportunities for Operation Fuel (a non-profit energy assistance organization),
3. provides funding to help low-income customers pay off their electric arrearages (vetoed by governor), and
4. broadens requirements for the Department of Social Services to buy fuel at discounted prices for energy assistance recipients (modified by PA

07-4, June Special Session).

(Various effective dates)

PA 07-5, September Special Session, requires Operation Fuel, Inc. to establish a one-time grant program in 2007 for low-income people with high utility bill arrearages. The program must provide one-time grants of up to \$1,000 based on the customer's arrearage and income level. The act appropriates \$5 million for this and related measures.

(Effective upon passage)

MISCELLANEOUS PROVISIONS

Advanced Electric Meters

PA 07-242 requires each electric company to submit a plan to DPUC to deploy a system to support advanced metering. The system must be capable of tracking hourly changes in a customer's power use to support innovative rates such as real-time pricing. The plan must allow for deployment of these meters, together with the systems needed to support them, by January 1, 2009. Starting January 1, 2009, the act allows any customer to obtain a meter on demand. The act also requires electric companies, competitive suppliers, and aggregators (entities that gather customers together for suppliers) to provide time-of-use rate options, including hourly and real-time options, to all customer classes. These options must be available

within six months of the act's passage.

(Effective upon passage)

Electric Competition

PA 07-242 requires electric companies to provide information to their residential and small commercial customers, upon request, about introductory offers from competitive suppliers.

(Effective July 1, 2007)

Resources Recovery Facilities

PA 07-228 eliminates a requirement that electric companies enter into long-term contracts with resources recovery facilities in which the company pays the facility owner the company's retail rate for the power the facility produces. The act requires the companies to continue paying the rate set in existing contracts for the remainder of the contract. But for contracts entered into and approved in 1999, the company must pay the rate set by DPUC.

(Effective upon passage)

PA 07-255 allows a municipality to tax certain property owned by the Connecticut Resources Recovery Authority (CRRA) and leased to someone else. It requires the lessee to pay the tax. Under prior law, all CRRA property was exempt from local property taxes.

(Effective July 1, 2007)

Decoupling

PA 07-242 requires DPUC, in rate cases that begin after the act's passage, to order electric and gas companies to decouple their distribution revenues from the volume of sales. It can do this by a sales adjustment clause, rate changes that increase the amount of revenues recovered through fixed distribution charges, a mechanism that adjusts actual distribution revenues to reflect allowed revenues, or a combination of these measures. In making its choice, DPUC must consider the impact of such decoupling and the rate of return the company earns on its equity, and make necessary adjustments.

(Effective upon passage)

Receivers of Rent

By law, a utility can petition the courts to appoint a receiver of rents when the owner of a residential building who is directly billed for utility service fails to pay the bill. If appointed, the receiver receives the rents or other payments the occupants make, pays the current utility bill and certain other expenses, and remits the remainder to the owner. PA 07-228 additionally allows the receiver to receive rents or payments made (1) on behalf of the building's occupants or (2) by people who are residents rather than occupants. It also expands the provisions to include occupants

or residents of facilities, thus
potentially subjecting more
people to these provisions.

(Effective July 1, 2007)

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