



OLR RESEARCH REPORT

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COMPREHENSIVE ENERGY STRATEGY BILL

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You asked for a section-by-section analysis of “An Act Concerning Implementation of Connecticut’s Comprehensive Energy Strategy,” HB 6360.

SEC. 1 – RATE DECOUPLING

The bill restricts how the Public Utilities Regulatory Authority (PURA) can decouple an electric and gas company’s rates from its sales. Under current law, as part of a rate case, PURA must order the company to use one or more of the following: (1) a mechanism that adjusts actual distribution revenues to allowed distribution revenues, (2) rate design changes that increase the amount of revenue recovered through fixed distribution charges, or (3) a sales adjustment clause, rate design changes that increase the amount of revenue recovered through fixed distribution charges, or both. Under the bill, PURA must order the company to use the first approach for rate cases initiated on or after the bill’s passage date.

EFFECTIVE DATE: Upon passage

SECS. 2, 3 – ELECTRIC AND GAS CONSERVATION PLANS

Combined Conservation Plan

The bill requires the electric and gas companies to develop a combined conservation plan, as is current practice, rather than requiring each company to develop a separate plan. The combined plan must be developed by October 1, 2014 and every three years thereafter. Current law requires the companies to develop annual plans (implicitly in the case of electric companies). Current law requires the Energy Conservation Management Board (ECMB) to help the companies develop and implement their individual plans; the bill requires ECMB to help them to do this for the combined plan. It requires all of the companies to review the programs in the plan jointly, rather than each company reviewing its own plan.

The bill requires that the combined plan contain all of the information currently contained in the electric companies' conservation plans. It extends to proposed gas conservation programs, the evaluation, measurement, and verification measures that currently only apply to electric programs. In addition, the combined plan must include a detailed budget sufficient to fund all energy efficiency that is cost-effective or cheaper than acquiring an equivalent amount of supply. It allows the plan to include water, as well as energy, conservation programs.

The bill has conflicting provisions on how the plan is reviewed and approved. Under current law, ECMB accepts, modifies, or rejects the individual programs in gas plans before submitting them to PURA, which then approves each company's plan. In the case of the electric company plans, ECMB approves or rejects the individual programs before submitting the plans to DEEP for its approval. The bill requires ECMB to approve the plan as a whole (in addition to its programs) before submitting it to the DEEP commissioner for his approval. But it also requires PURA to approve, modify, or reject the plan. The bill does not specify which review goes first or what happens if PURA and DEEP disagree.

The bill allows DEEP to hold a public meeting, rather than a hearing when acting on the plan. Under current law, PURA can hold a hearing when acting on the gas plans. The bill extends this provision to PURA's review of the combined plan.

By law, the cost-effectiveness of the programs must be reviewed annually, or otherwise as practicable. The bill specifies that this review

must compare all energy savings to program costs. Under current law, PURA conducts this review for gas programs; the law is silent on who conducts the review of electric programs. The bill requires both PURA and DEEP to review the cost-effectiveness of the programs in the combined plan.

To the extent that the budget in the DEEP-approved plan exceeds the revenues provided by the 0.3 cent per kilowatt-hour conservation charge on electric bills, PURA must ensure that the balance is provided by a fully reconciling adjustment mechanism. The bill does not specify whether this mechanism would apply to electric or gas bills or both. Under current practice, revenues beyond the 0.3 cent charge are used to fund the electric and gas conservation programs. The bill does not address what happens with these revenues, which are ultimately paid by ratepayers.

The bill requires that, if implementing the DEEP-approved plan requires funding through new or amended rates or charges, PURA must open a proceeding to review this provision, in accordance with existing rate-making principles, to ensure that rates remain just and reasonable. PURA must complete this proceeding within 60 days after the plan is finalized.

The bill requires the ECMB to periodically review efficiency program contractors to ensure that a fair and equitable process is used to select them.

Energy Conservation Management Board

By law, ECMB must report annually to the Energy and Technology and Environment committees on the Energy Efficiency Fund. The bill eliminates the requirement that the report describe activities done jointly or in collaboration with the Clean Energy Fund.

Under current law, ECMB must report every five years to the Energy and Technology Committee on the program and activities of the Energy Efficiency Fund. The bill instead specifies that this report must cover the programs and activities contained in the combined electric and gas conservation plan.

Under current law, the DEEP commissioner chairs the ECMB. The bill instead requires ECMB to elect its chairperson from among its voting members (its utility members are non-voting).

By law, there is a joint committee of ECMB and the board of the Clean Energy Finance and Investment Authority. The bill renames that latter as the Connecticut Clean Energy Finance and Investment Authority (CCEFIA). It requires the joint committee to examine opportunities to provide financing to increase the benefits of the combined conservation plan. It requires ECMB to collaborate with CCEFIA to further the goals of the plan.

EFFECTIVE DATE: Upon passage

SEC. 4 – POWER PLANT EMISSION STANDARDS

Current law required DEEP to adopt regulations setting performance standards for emissions of carbon dioxide (CO₂) and other air pollutants from North American Electric Generation that serves Connecticut customers, but only if PURA determined these regulations had no negative impact on reliability and rates. The bill instead allows DEEP to adopt regulations establishing performance standards or other requirements that apply only to CO₂ emissions. The bill requires that the performance standards or other requirements be designed, to the greatest extent possible, to further the goals of the Regional Greenhouse Gas Initiative, which administers a cap and trade program for CO₂ emissions from power plants, rather than to attain federal air quality standards.

The bill allows, rather than requires, the standards or other requirements to:

1. apply to emissions coming from any generation located in North America that provides power to Connecticut electric customers,
2. limit emissions to levels consistent with those permitted by similar generators in Connecticut, and
3. limit the amount of CO₂ emitted per megawatt-hour of electricity generated.

EFFECTIVE DATE: Upon passage

SEC. 5 – VIRTUAL NET METERING

The bill broadens eligibility for “virtual net metering,” expands the maximum size of the generating unit that can take advantage of virtual net metering, and potentially increases the value of the electric bill credit that participating customers receive.

By law, an electric company customer who owns a class I renewable resource (e.g., a photovoltaic system) receives a net metering credit on his or her electric bill when the resource produces more power than the customer uses in a billing period. In effect, the customer's meter runs backwards when the resource generates surplus power. The credit, which is tied to the electric company's retail rate, rolls over from month to month. At the end of each 12 months, if the customer still has a credit, he or she is paid for it at the company's wholesale rate.

Under current law, municipalities are eligible for virtual net metering, which allows them to share the billing credit among their electric accounts. For example, a town could install a photovoltaic system on the roof of a school and share the billing credits the system produces with a fire station. This increases the likelihood that the customer will fully utilize its credits (paid at the retail rate) during a year, and therefore not have any remaining credits at the end of the year, for which it would be paid at the wholesale rate.

The bill expands eligibility for virtual net metering in several ways. It opens the option to state agencies and agricultural customers and increases the maximum size of the renewable resource from two to three megawatts. It allows virtual net metering for class III resources such as cogeneration, as well as class I resources. It allows municipal and state agency customers to lease the renewable resource or enter into a long-term contract for it.

Under current law, municipalities can share the billing credit with no more than five other municipal accounts. The bill instead allows municipal or state accounts connected to a microgrid to share the credits with up to five additional non-state or municipal critical facilities (e.g., hospitals, police and fire stations, and municipal centers). It allows agricultural customers to share their credits with up to ten agricultural accounts that use electricity for agriculture.

Under current law, the credit for virtual net metering customers goes against the customer's Generation Service Charge (GSC), i.e., the part of the electric bill that covers the cost of power, as distinct from such things as distribution and transmission charges. (For other net metering customers, the credit goes against the customer's entire bill.) The bill applies the virtual net metering credit against the GSC and 80% of the distribution and other service charges, thereby potentially increasing its value. It also requires the end of the year payment to cover 80% of the distribution and other service charges. It is not clear how this provision would work, since such charges are not imposed on an annual basis.

The bill requires each electric company to report annually by January 1 to PURA, rather than DEEP, on the cost of the program's costs.

Current law required DEEP, by February 1, 2012, to develop administrative processes and specifications for the program, including a statewide cap of \$1 million per year on the cost of the virtual net metering. The bill seeks to transfer this responsibility to PURA and raise the cap to \$10 million per year. But since it does not change the deadline, it appears this provision has no effect.

EFFECTIVE DATE: July 1, 2013

SEC. 6 – SUBMETERING

The bill broadens the circumstances where electric submeters can be installed. Under current law, electric companies must permit submeters at (1) campgrounds, (2) slips at marinas, and (3) other locations approved by PURA, other than nonresidential facilities. The bill additionally requires the companies to permit submetering at commercial, industrial, multi-family residential, or multiuse buildings where the electric power or thermal energy is provided by a Class I renewable energy source (e.g., photovoltaic systems or fuel cells) or a combined heat and power (cogeneration) system. It allows PURA to permit submetering at other locations only when this promotes the state's energy goals, as described in the comprehensive energy strategy, while protecting consumers against termination of residential utility or propane service or other related issues.

The bill requires PURA to develop an application and approval process that allows for the reasonable implementation of submetering at allowed facilities, while protecting consumers against termination of residential utility or propane service or other related issues. Each entity PURA approves to submeter must provide electricity to an allowed facility at a rate no greater than the rate charged to that customer class for the service territory where the facility is located. It repeals a provision that prohibits electric companies from charging campgrounds more than their residential rates. Such entities may not charge a submetered account for usage for general outdoor lighting marina operations, repair facilities, restaurants, other retail recreational facilities, or any common areas of a commercial, industrial, or multi-family residential building. It is not clear whether restaurants in multiuse buildings could be submetered.

EFFECTIVE DATE: July 1, 2013

SEC. 7 – AGGREGATION OF ELECTRIC METERS

The bill allows any electric customer to aggregate all electric meters that are billable to the customer. It appears that this provision applies to customers of municipal utilities as well as electric companies.

EFFECTIVE DATE: July 1, 2013

SEC. 8 – MUNICIPAL MICROGRIDS

Under current law, with limited exceptions, any entity that distributes electricity on wires that run along or across a highway or street is considered an electric company subject to PURA jurisdiction. (The exceptions include such things as municipal electric utilities and power generators.) The bill requires PURA to authorize any municipality, state, or federal governmental entity that owns, leases or operates any Class I or III renewable resource (e.g., a combined heat and power system) to independently distribute electricity generated from any such resource, or any other generation resource under five megawatts that is connected to a municipal microgrid, across a public highway or street for the sole purpose of serving critical facilities. A microgrid is a group of interconnected electricity users and generators that (1) is within clearly defined electrical boundaries that acts as a single controllable entity in respect to the larger electrical grid and (2) can operate as either a part of the larger grid or independent of it, in “island mode.” Critical facilities are hospitals, police and fire stations, water and sewage treatment plants, public shelters, correctional facilities, municipal commercial areas, municipal centers identified by a municipality’s chief elected official, or other facilities identified by DEEP.

The bill’s apparent intent is to allow such connections without the governmental entity being considered an electric company. It is not clear whether this provision applies to class I or III resources that are not connected to a microgrid.

EFFECTIVE DATE: July 1, 2013

SEC. 9 – ENERGY IMPROVEMENT DISTRICTS AND MICROGRIDS

The bill allows energy improvement district boards to own, lease, or finance microgrids. By law, a municipality may, by a vote of its legislative body, establish such districts which are governed by boards. Among other things, districts can develop and operate small power plants and certain conservation programs and issue revenue bonds.

EFFECTIVE DATE: July 1, 2013

SECS. 10, 15 – BENCHMARKING ENERGY CONSUMPTION IN COMMERCIAL BUILDINGS

The bill requires the DEEP commissioner, by January 1, 2014 and in consultation with the Office of Policy and Management and the Department of Consumer Protection (DCP), to (1) adopt a set of criteria for evaluating and rating the energy consumption of commercial buildings, and (2) develop a method for labeling or disclosing such information before the buildings are sold or leased. It allows the commissioner to adopt the U.S. Environmental Protection Agency's Energy Star portfolio manager to do this.

The bill requires any owner of commercial property located in the state that has a gross floor area of 10,000 square feet or more to have its energy consumption evaluated using the rating system, prior to the sale or lease of all or any subunit within the property. An evaluation conducted within five years before the sale or lease of the property complies with these requirements. The requirement applies starting:

1. January 1, 2014 for buildings with a gross floor area of one 100,000 square feet or more;
2. July 1, 2014, for buildings with a gross floor area of 50,000 square feet or more but less than 100,000 square feet; and
3. January 1, 2015, for buildings with a gross floor area of 10,000 square feet or more but less than 50,000 square feet.

The results of the evaluation must be disclosed to potential purchasers and lessees. This provision does not apply to a sale or lease between co-owners, spouses, persons related by consanguinity within the third degree (e.g., between a person and his great grandchildren or a closer relationship), or a transfer through inheritance.

On January first of the year following the benchmarking of a building pursuant to the above schedule, its owner or operator must provide its energy use data and ratings for the most recent 12-month period to the DEEP commissioner. Upon receipt of the second annual benchmarking data for each building, and annually thereafter, the commissioner must, in consultation with the DCP commissioner, make the data accessible to the public through an Internet database.

EFFECTIVE DATE: October 1, 2013

SEC. 11 – RESIDENTIAL ENERGY CONSUMPTION BENCHMARKING PROGRAM

The bill requires the DEEP commissioner, by January 1, 2014 and within available appropriations, to develop a voluntary pilot program to (1) rate the energy use of residential buildings and (2) use that information to promote efficiency improvements when a property is sold or leased. The commissioner may use the U.S. Department of Energy's Home Energy Solutions scorecard rating tool, or components of it, to establish the system. The commissioner must report the results of the pilot to the Energy and Technology and Commerce committees.

EFFECTIVE DATE: October 1, 2013

SEC. 12 – ENERGY CONSUMPTION DISCLOSURES TO TENANTS

The bill requires, starting after January 1, 2014, any landlord who requires a tenant to pay for heat as part of the lease to provide a potential tenant with a statement of prior usage for the unit's heat expenses for at least the preceding year before entering into the lease. Starting January 1, 2015, the landlord must provide this information for the preceding two years. The landlord must provide this statement at a potential tenant's request. The statement must include a report from the supplier of the heating fuel, including an electric or gas company, if available. Elsewise, it must be based on (1) records of the heating fuel supplier, or (2) a good faith estimate by the landlord.

EFFECTIVE DATE: October 1, 2013

SEC. 13 – ENERGY CONSUMPTION OF TYPICAL BUILDINGS

By law, electric and gas companies must make available to the public, free of charge, records of the energy consumption data of all typical nonresidential buildings they serve. This data must be maintained in a format compatible for uploading to the U.S. Environmental Protection Agency's Energy Star portfolio manager or similar system, for at least the most recent 36 months.

The bill additionally requires, by October 1, 2013, the company to upload all of the energy consumption data for a specific building account to the portfolio manager, upon the written authorization or secure electronic authorization of a nonresidential building owner or operator.

SEC. 14 – BENCHMARKING STATE BUILDINGS’ ENERGY USE

The bill requires DEEP, by July 1, 2013, to benchmark all nonresidential buildings owned or operated by the state or any state agency with a gross floor area of 10,000 square feet or more. By October 1, 2013, DEEP must make public the portfolio manager benchmarking information for all such buildings.

By October 1, 2013, DEEP must benchmark all residential buildings owned or operated by the state or any state agency with a gross floor area of 10,000 square feet or more. By January 1, 2014, DEEP must make public the portfolio manager benchmarking information for all such buildings.

EFFECTIVE DATE: Upon passage

SEC. 16 – ENERGY CONSUMPTION IN NEW BUILDINGS

The bill requires, starting October 1, 2013, that any application for a building permit for (1) new construction of a building with a gross floor area of more than 10,000 square feet or (2) an improvement to such a building costing at least 25% of its assessed value include an estimate of the finished building’s energy performance using the U.S. Environmental Protection Agency’s Energy Star target finder tool. The building must subsequently be benchmarked annually using the Energy Star portfolio manager benchmarking tool. The portfolio manager and target finder ratings and data for each building must be made available to the DEEP commissioner within 60 days of being generated. The commissioner, in consultation with the DCP commissioner, must make the data accessible to the public through an Internet database.

EFFECTIVE DATE: July 1, 2013

SEC. 17 – STATE BUILDING CODE

By law, the state building code must promote and ensure that buildings and structures are designed and constructed in a way that conserves energy and, wherever practicable, facilitates the use of renewable energy. The bill additionally requires that any code adopted after the bill’s effective date (upon passage for this provision) include provisions for new transportation technologies.

EFFECTIVE DATE: Upon passage

SEC. 18 – SULFUR CONTENT OF HEATING OIL

The bill reduces the maximum sulfur content of heating oil. Under current law, the maximum is 0.3% (3,000 parts per million or ppm) by weight, with the maximum going down to 50 ppm for the period between July 1, 2011 and June 30, 2014 and 15 ppm thereafter. The latter two standards only apply if Massachusetts, New York, and Rhode Island adopt comparable standards.

The bill advances the effective date of the 15 ppm standard to July 1, 2013 and eliminates the requirement that the neighboring states adopt the same standard.

EFFECTIVE DATE: Upon passage

SEC. 19 – GAS SYSTEM EXPANSIONS

Under current practice, when a gas company seeks to expand its distribution system, it determines whether the projected new distribution revenues will equal or exceed the cost of the expansion over a specified period (15 years for Yankee Gas Services and 20 years for Connecticut Natural Gas and Southern Connecticut Gas). If the expansion will pay for itself in this period, all gas ratepayers pay for it in rates. If it does not, the benefitted customers must pay for the shortfall.

The bill requires that, starting July 1, 2013, the gas companies use a 25-year payback period to compare (1) the revenues produced from an additional gas customer to (2) the revenue requirement of connecting the customer to the distribution system, in order to determine the level of new business capital expenditures that will be recoverable through rates. PURA must develop a methodology that reasonably accounts for revenues that would be collected from additional customers from the same extension.

EFFECTIVE DATE: Upon passage

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