



OLR RESEARCH REPORT

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SUMMARY OF SB 1, AN ACT CONCERNING CONNECTICUT'S ENERGY FUTURE

By: Kevin McCarthy, Principal Analyst

You asked for a section-by-section summary of the major provisions of SB 1, An Act Concerning Connecticut's Energy Future. The bill includes a number of provisions not discussed in this report, such as reporting requirements and requirements to adopt implementing regulations. The bill is effective July 1, 2011, except as indicated below.

SECTION 1 — DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION STRUCTURE AND RESPONSIBILITIES

The bill creates the Department of Energy and Environment Protection (DEEP) by merging the departments of Environmental Protection (DEP) and Public Utility Control (DPUC) and transferring the powers and duties of the existing agencies and the DEP commissioner to DEEP and its commissioner. It also transfers the powers and duties of the Office of Policy and Management (OPM) and its secretary regarding energy to DEEP and its commissioner. Among other things, these include planning for and responding to energy emergencies, registering fuel oil dealers, monitoring oil prices, and managing energy use in state-owned buildings.

Under the bill, DEEP has three bureaus: Energy, Environmental Protection, and Public Utility Control. It specifies the roles of the bureaus and the qualifications required of the Energy Bureau chief. Under the bill, DEEP includes the Office of the Ombudsman, who is responsible for programmatic oversight and communications with policymakers, stakeholders, and individuals affected by DEEP's implementation of energy policy. DEEP also includes the Connecticut Siting Council (currently part of DPUC).

The bill establishes DEEP's goals, which 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.

SECTIONS 2-7 — MINOR AND CONFORMING CHANGES

SECTION 8 — DEFINITION OF RENEWABLE RESOURCES

By law, electric companies and competitive suppliers must meet part of their customers' demand by procuring class I, II, and III clean energy resources. The bill includes all hydropower facilities as class I resources, rather than just small scale facilities that began operations after July 1, 2003. It also modifies the definition of class III resources.

SECTION 9 — DPUC COMMISSIONERS

Under current law, the DPUC is headed by five commissioners who are known as the Public Utilities Control Authority. The bill places the commissioners in DEEP. It largely retains their current duties, but transfers some to the DEEP commissioner.

The bill eliminates the ability of the authority's chairperson, with the consent of at least two other commissioners, to appoint an executive director to serve as DPUC's chief administrative officer. The bill eliminates the executive director's powers and responsibilities, which include the power to hire staff and consultants and to enter into contracts.

SECTIONS 10-12 — MINOR AND CONFORMING CHANGES

SECTION 13 — CONNECTICUT ENERGY ADVISORY BOARD (CEAB)

The bill modifies CEAB's membership, among other things eliminating the governor's appointments and eliminating several agency heads as members. It requires CEAB to conduct programmatic reviews and to receive complaints from the public and businesses about matters in

DEEP's Energy Bureau's jurisdiction, in addition to its current responsibilities. It also places the board in DEEP, rather than OPM, for administrative purposes only.

SECTIONS 14-22 — MINOR AND CONFORMING CHANGES

SECTION 23 — ENERGY CONSERVATION LOAN FUND

The bill transfers responsibility for administering the Energy Conservation Loan Fund from the Department of Economic and Community Development to DEEP.

SECTIONS 24-30 — MINOR AND CONFORMING CHANGES

SECTIONS 31, 32 — DEEP JURISDICTION

The bill gives DEEP jurisdiction over matters related to the equitable distribution and conservation of energy, utility regulation, and state energy policy in addition to those areas currently under DEP's jurisdiction. It gives the DEEP commissioner a variety of energy and utility regulation responsibilities.

SECTION 33 — COUNCIL ON ENVIRONMENTAL QUALITY

The bill eliminates the Council on Environmental Quality's authority to employ staff and places it in DEEP.

SECTIONS 34-44 — MINOR AND CONFORMING CHANGES

SECTION 45 — ENERGY EFFICIENCY STANDARDS FOR CONSUMER PRODUCTS

The bill establishes energy efficiency standards for compact audio players, televisions, DVD players, and DVD recorders, which go into effect January 1, 2014. It requires DEEP to adopt efficiency standards for other products under specified circumstances.

SECTION 46 — MINOR AND CONFORMING CHANGES

SECTION 47 — CLEAN ENERGY FUND ADMINISTRATION

The bill requires DEEP, rather than Connecticut Innovations, Inc. to administer the Clean Energy Fund.

SECTIONS 48, 49 — INTEGRATED RESOURCES PLAN

The bill requires DEEP, rather than the electric companies, to (1) assess future electric demand and how best to meet it and (2) develop a comprehensive plan to meet the demand through procuring a mix of generating facilities and efficiency programs. DEEP must consult with CEAB and the companies in conducting the assessment and with CEAB, the companies, and ISO-New England in developing the procurement plan. The bill eliminates CEAB's review of the procurement plan. It requires (1) DEEP's Bureau of Energy to hold a hearing and make recommendations to the DEEP commissioner on the plan and (2) DEEP's commissioner to accept, reject, or modify the plan.

The bill requires the 2012 plan to, among other things (1) indicate specific options to reduce the price of electricity and (2) assess and compare the cost of transmission line projects, new power sources, renewable electricity sources, conservation, and distributed generation projects to ensure the state pursues only the least-cost alternative projects (this provision is effective upon passage).

SECTION 50 — RATE DISCOUNTS FOR LOW INCOME CUSTOMERS

The bill requires DEEP to conduct a proceeding to develop discounted rates for electric company customers whose household income is up to 60% of the state median. The discounts must be funded by transferring money from existing programs that serve low-income customers and from other resources.

By July 1, 2013, DPUC must report to the Energy and Technology Committee on the benefits and costs of the discounted rates and any recommended modifications. If the low-income rate is not at least 10% below the standard service rate, DEEP must include steps to reach this goal in the report.

SECTION 51 — MUNICIPAL LOAN PROGRAM FOR ENERGY IMPROVEMENTS

The bill allows municipalities to establish loan programs for residents and local businesses to make energy efficiency and renewable energy improvements to their property. It allows participating municipalities to issue bonds for these programs that are backed by an assessment on the participant's property that is treated like a property tax, except that the lien of the benefitted property does not have priority over prior mortgages.

SECTION 52 — STANDARD SERVICE AND PROJECT 150 CONTRACTS

By law, electric companies must provide standard service to small and medium size electric customers who do not choose a competitive supplier. Currently, the electric companies procure the power to provide this service. The bill modifies the process by which the companies procure power for the service, among other things eliminating a requirement that the companies buy overlapping contracts in order to reduce rate volatility (commonly called laddering). It permits the companies to procure short-term contracts under a broader range of circumstances (see also SECTION 66).

Current law requires electric companies to enter into long-term power purchase contracts with renewable generators for up to a total of 150 megawatts (MW) of generating capacity. The bill requires DEEP to solicit new bids for this program and allows the 150 MW cap to be exceeded under specified conditions. It increases the price that would be paid to generators under the new contracts.

SECTION 53 — ELECTRIC BILLING AND COLLECTION SERVICES

Under current law, competitive suppliers can provide billing and collection services for their customers that have at least 100 kilowatts of demand. The bill requires suppliers, starting October 1, 2011, to provide these services or obtain these services from the electric company, paying their pro rata share of these costs. The bill modifies the billing information a supplier that chooses to provide billing and collection services to its customers must provide.

SECTION 54 — ELECTRIC SUPPLIER CODE OF CONDUCT

The bill establishes a code of conduct for competitive suppliers and related entities. Among other things, the code regulates when and how they can conduct door-to-door sales. It also limits the fee suppliers can charge a residential customer for termination or early cancellation of a contract.

SECTION 55 — TIME OF USE RATES

The bill requires suppliers, as a condition of maintaining their licenses, to offer a time of use rate that reduces rates for nonpeak use and charges at least five times the non-peak rate for peak use. The peak period must be no more than four hours per day. The supplier can offer other time of use rates.

SECTION 56 — FUNDING CAP FOR SOLAR ENERGY PROGRAMS

The bill establishes a funding cap for the solar programs described below (see SECTION 57 to 63). From January 1, 2012 to June 30, 2014, the aggregate net annual cost recovered from electric ratepayers cannot exceed 0.5% of total retail electricity sales revenues of each electric company. Between July 1, 2014 and June 30, 2016, the cap is 0.75% of these revenues, and for each 12-month period starting July 1, 2016 and July 1 thereafter for the duration of the programs established under the bill, the cap is 1% of these revenues.

If DEEP projects that the annual cost cap is within 20% of being exceeded, it must report to the Energy and Technology Committee and take specified steps to ensure that the cap is not exceeded.

SECTION 57-63 — SOLAR ENERGY PROGRAMS

Under the bill, the Clean Energy Fund must offer financial incentives to buy or lease photovoltaic (PV) systems for 1- to 4-unit residential buildings. The incentive can be paid out on either a per kilowatt-hour basis or as a one-time upfront incentive based on expected system performance. Funding for these incentives must come from the renewable energy surcharge on electric bills but this funding may not use more than one-third of this revenue, plus any federal funding that becomes available.

Starting January 1, 2012, each electric company must solicit and file with DEEP, for its approval, one or more long-term (at least 15 years) power purchase contracts with owners or developers of PV generation projects located in the state of less than 2,000 kilowatts (2 MW) capacity. Developers cannot participate in both this program and the feed-in tariff program described below. Electric companies are not required to enter into a contract that provides a payment of more than \$350 per MW-hour (35 cents per kilowatt-hour) in its initial year. The costs of the electric companies and DEEP in implementing these provisions are recovered in electric rates.

The bill requires each electric company, by July 1, 2012, to file with DEEP for its approval, a tariff for production-based payments to owners or operators of in-state, grid-connected solar projects that are one MW or larger. The tariffs must provide production-based payments for at least 15 years from the project's in-service date.

The tariffs must include an aggregate eligibility cap of 50 MWs, apportioned among each electric company in proportion to its distribution load. The costs of the tariff can be included in any subsequent rates, so long as they are for projects that begin operating on or after July 1, 2011.

Starting July 1, 2012, electric companies may build, own, and operate solar electric generating facilities up to one-third of their proportional share of the 50 MW cap. These projects must be located on brownfields or other locations in municipalities with enterprise zones. DEEP must authorize the electric company to recover in rates its costs to construct, own, and operate the facilities, including a return on its investment capped at 8%.

The bill requires DEEP, by July 1, 2012, to complete, or have private vendors complete, a comprehensive solar feasibility survey of facilities owned or operated by the state with a load of 50 kilowatts or more. DEEP must issue one or more requests for proposals (RFP) for deploying PV systems at state facilities. In the RFPs, DPUC may seek the services of an entity to finance, design, construct, own, or maintain PV systems under a long-term solar services agreement.

The bill requires DEEP in consultation with the Clean Energy and Energy Efficiency funds to develop coordinated programs to create a self-sustaining market for solar thermal systems (e.g., solar hot water systems) for electricity, natural gas, and fuel oil customers.

The bill requires DEEP to increase the incentive provided under the residential solar and solar thermal programs by up to 5% if the solar system uses major components that are manufactured or assembled in Connecticut and another 5% if they are manufactured or assembled in a distressed municipality in the state or a municipality with an enterprise zone.

SECTION 64 — TIME OF USE METERS

DEEP must order each electric company to notify its customers on an on-going basis on the availability of time-of-use meters, if applicable.

SECTION 65 — CONDOMINIUM RENEWABLE ENERGY PROGRAM

The bill allows the Clean Energy Fund Board to establish a program within available funds to provide grants to residential condominium associations and owners to buy renewable energy sources, including solar energy, geothermal, fuel cell, and other hydrogen-fueled systems.

EFFECTIVE DATE: October 1, 2011

SECTION 66 — STANDARD SERVICE POWER PROCUREMENT

As noted above, the electric companies currently procure the power to needed to provide standard service to their residential and small business customers. The bill requires the procurement officer at DEEP, in consultation with the electric companies, to develop a plan for procuring power and related products that will enable each electric company to manage a portfolio of contracts to reduce the average cost of standard service while maintaining cost volatility within reasonable levels. The plan must provide for the use of a variety of procurement approaches and can be amended by the DEEP commissioner. The bill establishes procedures for DEEP to approve contracts entered into pursuant to the plan that vary by the length of the contract.

SECTION 67 — STANDARD SERVICE CONTRACT BUYDOWN

The bill requires DEEP to (1) initiate a docket to consider the buying down of an electric company's current standard service supply contract to reduce ratepayer bills and (2) conduct a cost benefit analysis. If the department determines a buy down is in ratepayers' best interest, DEEP must proceed with the buy down.

SECTION 68 — FUNDING FOR GAS CONSERVATION PROGRAM

By law, gas companies must develop conservation plans that are funded by any growth in the utility company gross receipts tax from the time that the revenue estimate is adopted for a fiscal year until the end of that fiscal year. The maximum amount of tax revenue that can be used to fund the plans in any fiscal year is \$ 10 million. The bill requires, for FYs 12, 13, and 14, that half of the growth in revenue be used to fund the loan program established by section 90 for gas projects.

SECTION 69 — FUNDING FOR CONSERVATION PROGRAM

By law, the Electric Efficiency Partners Program provides electric ratepayer funding of up to \$60 million per year for various efficiency projects. The bill reduces, from 2 to 1 to 1.5 to 1, the minimum payback ratio that a project must achieve to be eligible for funding under the program. It requires, for FYs 11, 12, and 13, that \$5 million of the funding for the program be used for cogeneration projects and \$5 million be used for the fuel oil efficiency projects funded under the loan program in section 90.

SECTION 70 — ENERGY EFFICIENCY IN POOR MUNICIPALITIES

The bill establishes a program for energy conservation and load management projects for customers in municipalities with enterprise zones. The program must provide funding at a level equal to at least 3% of the total collected for the (1) Energy Conservation and Load Management Fund and (2) Clean Energy Fund. The money must (1) be used for programs directly benefiting residential or small business electric customers in municipalities with enterprise zones and (2) include a job training component for existing or potential minority business enterprises.

SECTION 71 — BILATERAL SUPPLY CONTRACTS

By September 1, 2011, DEEP must issue an RFP to award bilateral purchasing contracts for electricity from existing or new generators, i.e., contracts directly with the generator rather than through a third party. The contracts must be for five to 15 years and reduce electricity rates by pricing the purchased power on a cost-of-service basis or using a power purchase agreement or other financing mechanism DEEP determines to be in the best interest of customers.

SECTION 72 — REVIEWING TRANSMISSION LINE PROPOSALS

By September 1, 2011, DEEP must review any proposed commercial transmission line project (1) in which a Connecticut electric company may have a financial interest, or (2) that may be constructed in whole or in part in this state to determine whether to obtain electricity from such transmission lines at a rate that will lower electricity rates for Connecticut consumers.

SECTION 73 — STUDY OF THE ELECTRIC WHOLESALE MARKET

By August 1, 2011, DEEP must initiate a study to identify the impact on Connecticut ratepayers and the New England and state wholesale electric power market of (1) the operation of ISO-New England and (2) Market Rule 1, which it uses to set wholesale electricity prices.

EFFECTIVE DATE: Upon passage

SECTION 74 — MUNICIPAL ENERGY PERFORMANCE CONTRACTS

The bill allows municipalities to enter into energy performance contracts, which typically involve a private party financing energy efficiency projects in exchange for part of the energy cost savings.

SECTION 75 — CONVERTING ELECTRIC HEATING SYSTEMS TO GAS

The bill requires DEEP, by October 1, 2011 to establish a program to allow a gas company to finance the conversion of residential electric heating systems to gas.

SECTION 76 — STUDY OF REPOWERING POWER PLANTS

The bill requires DEEP to study the costs and benefits of repowering some or all of the state coal and oil-fired power plants that were built before 1990.

EFFECTIVE DATE: Upon passage

SECTION 77 — STATE AGENCY PLANS TO REDUCE ENERGY USE

The bill requires each state agency to develop a plan to reduce its energy consumption by at least 10% and submit it to OPM by October 1, 2011.

EFFECTIVE DATE: Upon passage

SECTIONS 78, 79 — MUNICIPAL GRANT PROGRAM ADMINISTRATION

The bill transfers, from Connecticut Innovations, Inc. to DEEP, responsibility for a program (which has not been funded to date) for providing grants to municipalities for renewable energy and cogeneration projects.

SECTION 80 — CLEAN ENERGY FUND ADMINISTRATION

The bill eliminates Connecticut Innovations, Inc. responsibility to administer the Clean Energy Fund.

SECTION 81 — CONFORMING CHANGES

SECTION 82 — CONSERVATION AND RENEWABLE ENERGY FINANCING STUDY

By January 1, 2012, the bill requires DEEP to review available state and national energy financing programs and recommend how best to establish a state program to finance renewable energy and conservation. It must consider various sources of financing, including, mortgages, bonds, and the establishment of loan loss reserves to leverage private capital, provided the financing may not include any ratepayer contribution.

SECTION 83 — DEEP PILOT PROGRAMS

The bill requires DEEP to establish a pilot program to promote the use of agricultural waste in anaerobic digestion facilities to generate electricity and heat, supported through loans, grants, or power purchase agreement.

DEEP must also establish a virtual net metering pilot program. In net metering, the electric company in effect “runs the meter backwards” when a customer generates more power from a renewable energy facility located on the customer’s premises. The pilot program must be open to 30 electric company customers, each with (1) more than one account with the company and (2) account meters within one mile of each other.

SECTIONS 84, 85 — WEATHERIZATION AND FUEL ASSISTANCE PROGRAM ADMINISTRATION

The bill transfers, from the Department of Social Services to DEEP, responsibility for state appropriated fuel assistance and weatherization assistance programs (the former has not been funded for many years).

SECTION 86 — OFFICE OF ENERGY EFFICIENT BUSINESSES

The bill creates the Office of Energy Efficient Business within DEEP and specifies its responsibilities, which include serving as a single point of contract for businesses interested in energy efficiency and renewable energy programs.

SECTION 87 — NOTICE OF RELIABILITY CONCERNS

The bill requires an electric company to notify DEEP and the Energy and Technology Committee of any concerns it has regarding system reliability before it contacts ISO-New England.

SECTION 88 — STUDY ON FINANCING CLASS III RENEWABLE ENERGY PROJECTS

By January 1, 2012, DEEP must conduct a cost-effectiveness analysis to compare the use of Class III electricity credits with long-term contracts for developing cogeneration or efficiency resources.

SECTION 89 — FEED-IN TARIFF FOR RENEWABLE RESOURCES

By January 1, 2012, DEEP must initiate a proceeding to establish a feed-in tariff that declines over time for wind, fuel cells, biomass, and geothermal resources and energy efficiency projects. A feed-in tariff specifies the amount a customer who has generating resources on its premises will be paid for the power it sells to an electric company.

SECTION 90 — FINANCIAL ASSISTANCE FOR COGENERATION AND HEATING EQUIPMENT

The bill requires DEEP to begin accepting applications, starting October 1, 2011, for financial assistance for cogeneration systems with a capacity of up to one MW. The approved projects are also eligible for other benefits, such as a waiver of charges for back-up power.

The bill requires DEEP to begin accepting applications, starting December 31, 2011, for financial assistance for replacement oil and natural gas heating equipment. The incentives must ensure that the recipient's energy savings exceed the loan repayment by at least \$100 per year and the loans must be payable on the borrower's electric or gas bill.

SECTION 91 — PROMOTING COGENERATION

The bill requires DEEP to establish, by January 1, 2012, a program to promote new cogeneration projects through low-interest loans, grants or power purchase agreements. DEEP must determine the amount of the financial assistance on an individualized basis for each proposed project with the goal of minimizing ratepayer costs, ensuring that the project developer has a significant share of the financial burden and risk, while ensuring the development of projects that benefit Connecticut's economy, ratepayers or environment. DEEP must determine if the project's benefits to ratepayers, the economy, or the environment are sufficient to justify ratepayer investment. The program may not exceed 250 MW. DEEP must review the program annually and if the program's net cost to ratepayers exceeds \$25 million, DEEP cannot approve any more projects that receive ratepayer subsidies.

The bill requires DEEP to establish, by March 1, 2012, a program to promote new cogeneration projects that are three MW or smaller through grants, loans, and power purchase agreements. The amount of capacity funded under this program cannot exceed 50 MW and DEEP must review the program annually. If the program's net cost to ratepayers exceeds \$15 million, DEEP cannot approve any more projects that receive ratepayer subsidies.

SECTION 92 — CMEEC AND STANDARD SERVICE

The bill allows the Connecticut Municipal Electric Energy Cooperative (CMEEC) to submit bids to supply power for the electric companies' standard service.

SECTION 93 — INNOVATION HUBS

The bill requires DEEP to develop a set of “innovation hubs” addressing such things as electric vehicle infrastructure and electricity storage. It must do so in conjunction with research and academic institutions.

SECTION 94 — REPEALERS

The bill repeals a provision of [PA 10-179](#) that required any unobligated surplus in FY 10 be used to reduce the amount funded through the securitization bonds authorized by the act to address the budget shortfall in FY 11. It repeals a related provision of that act (CGS § [16-19uu](#)) and an obsolete statute (CGS § [16-261a](#)), and makes a conforming change.

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