



PA 11-80—SB 1243
Emergency Certification

**AN ACT CONCERNING THE ESTABLISHMENT OF THE
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
AND PLANNING FOR CONNECTICUT'S ENERGY FUTURE**

SUMMARY: This act creates the Department of Energy and Environmental Protection (DEEP) by merging the departments of Environmental Protection (DEP) and Public Utility Control (DPUC). In addition to the duties and powers inherited from those departments, the act transfers various energy-related responsibilities and powers from the Office of Policy and Management (OPM) to DEEP and also creates new energy-related planning and oversight responsibilities.

Among other provisions, the act:

1. renames the Public Utility Control Authority (the commissioners who run DPUC) the Public Utilities Regulatory Authority (PURA);
2. reduces the number of commissioners from five to three and renames them directors;
3. requires DEEP to develop a comprehensive plan integrating current efficiency and renewable energy plans;
4. requires DEEP, rather than the electric companies, to prepare the integrated resources plan (IRP), which seeks to meet electric needs through a mix of efficiency programs and power generation, and modifies the planning process;
5. requires DEEP to employ an electric power procurement manager and requires the manager, rather than the electric companies, to develop the plan for procuring power for the standard service the companies must provide to small customers who do not choose a competitive supplier;
6. modifies how this power is procured, eliminating a requirement for laddering, allowing for short term contracts, and making other changes;
7. requires electric companies and generators to notify DEEP of any prospective reliability concerns and DEEP to conduct a request for proposals (RFP) for efficiency and generation measures to avoid such problems;
8. expands the resources that can go into the Clean Energy Fund to include private capital and revenues reallocated to the fund by the legislature;
9. expands the types of projects the fund can support to include electric and natural gas vehicle infrastructure, electricity storage, and the financing of energy efficiency;
10. creates a quasi-public authority (the Clean Energy Finance and Investment Authority) to administer the fund, rather than Connecticut Innovations, Inc.;
11. allows municipalities to establish a loan program to finance energy

OLR PUBLIC ACT SUMMARY

- efficiency and renewable energy projects, and to recover costs by an assessment on the benefitted property;
12. requires the energy efficiency and renewable energy plans developed under existing law to provide equitable funding for low-income neighborhoods;
 13. establishes energy efficiency standards for televisions, DVD players, and similar products and broadens circumstances when efficiency standards would be implemented for other consumer products;
 14. establishes three-year pilot programs to develop combined heat and power and anaerobic digester projects and provides \$2 million annually for each of the programs;
 15. requires the Clean Energy Finance and Investment Authority to establish a program to promote residential photovoltaic systems under which participants can choose to receive an up-front payment or a payment tied to the power the systems produce;
 16. establishes a program that requires electric companies to enter into long-term contracts to buy renewable energy credits (RECs) from zero-emission generators (e.g., solar, wind, hydro);
 17. establishes a similar program for low-emission technologies;
 18. requires PURA to study the feasibility of establishing discounted electric and gas rates for low-income customers by reallocating existing supports for these customers;
 19. establishes a code of conduct for competitive electric suppliers, that regulates door-to-door sales, limits early termination fees, bars unfair trade practices, makes related changes, and establishes civil and administrative penalties for violations;
 20. requires DEEP to establish programs to finance replacement residential heating equipment that is more energy efficient than the customer's current equipment and to provide financial incentives for such equipment and combined heat and power systems;
 21. requires DEEP to develop a plan to reduce energy use in state buildings by at least 10% by 2013 and another 10% by 2018;
 22. bars electric and gas utilities from terminating service at any time to hardship customers with children under 24 months old who are hospitalized if the attending physician determines that utility service is needed for the child's well-being;
 23. allows municipal customers of electric companies to share net metering credits among buildings the municipality owns (virtual net metering);
 24. explicitly authorizes state agencies and municipalities to enter into energy saving performance contracts;
 25. requires the Energy Conservation Management Board to develop standardized performance contracting procedures, and authorizes municipalities to use these procedures or ones they develop themselves;
 26. modifies the Green Connecticut Loan Guaranty Fund program, requires program measures to meet cost-effectiveness standards, and transfers its administration to the new authority;

OLR PUBLIC ACT SUMMARY

27. expands evaluation requirements for efficiency programs;
28. allows electric companies to each own up to 10 megawatts of renewable energy generating capacity; and
29. requires DEEP to conduct a number of studies.

The act makes many minor changes to energy related statutes (§§ 2, 8, 23, 27, 41-43, 45, 50, and 80) and numerous conforming and technical changes (§§ 3-7, 9-13, 16, 18, 19, 21, 24-26, 28, 29, 31, 32, 34, 36, 38-40, 48, 54, 57-79, and 81-87), and repeals obsolete provisions of the energy statutes.

EFFECTIVE DATE: July 1, 2011, except as indicated.

§§ 1, 55, 56, & 88 — DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

The act creates DEEP by merging DEP and DPUC and transferring their powers and duties, and those of the DEP commissioner, to DEEP and its commissioner. It reconstitutes DPUC as PURA, and places PURA and several existing energy-related entities, such as the Connecticut Siting Council, within the new department. It also transfers the energy-related powers and duties of OPM and its secretary regarding energy to DEEP and its commissioner.

The act requires DEEP, by January 2, 2012, to report on the merger to the legislature's Appropriations, Energy and Technology, and Environment committees.

Goals

The act establishes DEEP's energy 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. 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.

DEEP Organization

The act establishes an energy bureau within DEEP and allows for additional bureaus within the department. It creates PURA as the successor to the DPUC and also makes changes to the Connecticut Energy Advisory Board (CEAB), both of which are placed within the department. Under the act, CEAB, the Office of Consumer Counsel (OCC), and the Connecticut Siting Council are all within DEEP for administrative purposes only.

The act also moves DPUC's Adjudication Division into DEEP and requires it to advise both the DEEP commissioner and PURA. It also changes the title of the

OLR PUBLIC ACT SUMMARY

division's hearing "examiners" to hearing "officers," and gives the DEEP commissioner power to appoint them and assign division staff to advise PURA (§ 17).

§§ 14, 15, & 22 — Public Utilities Regulatory Authority

Previously, DPUC was headed by five commissioners known as the Public Utility Control Authority. The act replaces the authority with PURA, within DEEP, and makes it responsible for regulating public utility rates and promoting policies that will lead to just and reasonable utility rates. It also creates a procurement manager position within PURA, whose duties must at least include overseeing the procurement of electricity for standard service. The manager must have experience in energy markets and procuring energy on a commercial scale.

The act reduces the five commissioners who headed the DPUC to three PURA "directors." It prohibits all three from belonging to the same political party. The act ends the term of any serving commissioner on June 30, 2011, and requires the governor to appoint the new directors by July 1, 2011. It staggers their initial terms: the two directors from the governor's political party serve initial five and four-year terms, respectively, while the director from another political party serves an initial three-year term. Following these initial terms, all directors serve four-year terms and are appointed in the same manner as the previous DPUC commissioners.

The act requires that PURA decisions be guided by (1) DEEP goals, (2) the goals of the comprehensive energy plan, and (3) the integrated resources plan, and based on evidence in the record of each proceeding (§51). It also specifies that any final decision, order, or authorization of PURA in a contested case constitutes a final decision for the purposes of the Uniform Administrative Procedure Act and thus can be appealed to the courts.

The act eliminates the DPUC executive director position and authorizes the PURA chairperson, with approval from the DEEP commissioner, to assume the executive director's powers and responsibilities. It subjects the PURA directors to the conflict of interest prohibitions that applied to DPUC commissioners and also extends them to any DEEP employees working with PURA.

§ 20 — REGULATIONS

The act divides the former DPUC's authority to adopt regulations between PURA and DEEP. It allows PURA, in consultation with DEEP, to adopt regulations on utility companies. It allows DEEP, in consultation with PURA, to adopt regulations on electric suppliers.

§ 30 — AGENCY FUNDING

In the past, DPUC and OCC were primarily funded by an assessment on the companies DPUC regulated. The act applies this assessment (CGS § 16-49) to cover DEEP's bureau of energy, OCC, and PURA. It also expands the companies that are assessed to fund DEEP by adding certified competitive video service providers with a certificate of video franchise authority that annually gross over

\$100,000 in the state. Video service providers who do not provide retail service in the state are exempt.

§ 33 — COST EFFECTIVENESS OF ENERGY EFFICIENCY PROGRAMS

The act makes the DEEP commissioner chair of the Energy Conservation Management Board (ECMB) and makes the utility company representatives non-voting members (under prior law, they could only vote on matters related to their respective fields). The law requires electric companies and ECMB to develop a comprehensive plan to implement energy conservation programs and initiatives. The act requires that this plan include steps to achieve a goal of weatherizing 80% of the state's housing units by 2030. It also requires ECMB to periodically review contractors to determine whether they are qualified to conduct work related to the efficiency programs.

Program Evaluation Requirement

The act requires DEEP to oversee the programs in the ECMB plan 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.

Information Sources

Prior law required cost-effectiveness testing to use available information obtained from real-time monitoring systems. The act instead requires that impact evaluations use information obtained from a sampling of program participants as compared to a control group using either such systems or billing analyses, whichever is most appropriate for the measure or program being studied. If neither method is applicable, the requirement does not apply. By law, the testing is done to ensure accurate validation and verification of energy use and the effects on the state's load factor. The act specifies that the testing must also be used for resource planning purposes.

OLR PUBLIC ACT SUMMARY

Schedule and Budget

The act requires ECMB to include an annual schedule and budget for evaluations, as determined by the board, in the plan filed with DEEP. It precludes the ECMB members who represent the electric and gas companies and the municipal electric energy cooperative from voting on board plans, budgets, recommendations, actions, or decisions regarding the evaluation process or its program evaluations and their implementation.

Administration

The act requires ECMB to contract with one or more consultants not affiliated with ECMB board members to act as an evaluation administrator. The administrator must advise ECMB on the development of a schedule and plans for evaluations and oversee the program evaluation, measurement, and verification process on behalf of the ECMB.

Consistent with ECMB processes and approvals and DEEP decisions regarding evaluation, the administrator must implement the evaluation process by (1) preparing requests for proposals and selecting evaluation contractors to perform program and measure evaluations and (2) facilitating communications between evaluation contractors and program administrators to ensure accurate and independent evaluations. In the evaluation administrator's discretion, the electric and gas companies must communicate with him or her for data collection, vendor contract administration, and providing necessary factual information during the evaluations.

Evaluation Problems

Under the act, all evaluations must describe any problems encountered in the evaluation process, including data collection issues, and recommendations on how to address these problems in future evaluations.

The administrator must bring unresolved administrative issues or problems that arise during an evaluation to ECMB for resolution, but the administrator has sole authority regarding substantive and implementation decisions regarding any evaluation. Board members, including those representing the electric and gas companies, may not communicate with an evaluation contractor about an ongoing evaluation without the express permission of the evaluation administrator. The administrator can only grant this permission if he or she believes the communication will not compromise the independence of the evaluation.

Filing Reports

The administrator must file evaluation reports with ECMB and DEEP in its most recent plan approval proceeding and ECMB must post a copy of each report on its website. ECMB and its members, including the electric and gas company representatives, may file written comments regarding an evaluation with DEEP or for posting on the board's website.

Within 14 days of the filing of any evaluation report, DEEP, the ECMB members, or other interested parties may request in writing that a transcribed

OLR PUBLIC ACT SUMMARY

technical meeting be held. (The meetings are an informal process for addressing questions in departmental proceedings.) DEEP must hold the meeting to review the methodology, results, and recommendations of any evaluation. Meeting participants must include the evaluation administrator, the evaluation contractor, and OCC at its discretion.

Legislative Report

By November 1, 2011, and annually thereafter, ECMB must report to the Energy and Technology Committee with the results and recommendations of completed program evaluations.

§ 35 — WHOLESALE MARKET STUDY

The act requires DEEP, by August 1, 2011, to begin studying the impact of ISO New England’s Market Rule 1 on the state’s ratepayers and the New England wholesale electric power market. The study must include:

1. a review of the ISO’s accountability to Connecticut ratepayers and policy makers;
2. strategies and ways to reduce the rule’s adverse affects on the state and New England, including long-term contracts;
3. an analysis of the pros and cons of participating in either the ISO New England, another ISO, or operating outside the ISO system;
4. a study of the Federal Energy Regulatory Commission’s framework and its contribution to the state’s high rates; and
5. methods to promote greater transparency in the system.

DEEP must report the study’s results to the Energy Committee by January 1, 2012.

EFFECTIVE DATE: Upon passage

§ 37 — CONNECTICUT ENERGY ADVISORY BOARD

The act makes several changes to CEAB’s composition and responsibilities. It reduces the board’s membership from 15 to 9 by removing 9 members (representatives from DEP, DPUC, the transportation department, the agriculture department, OPM, the chamber of commerce, state-wide manufacturing association, an electricity expert from the public, and a state resident energy expert) and adding 3 members (a municipal representative, an academic energy expert, and a second energy expert from the public). It also changes who appoints the various board members. Table 1 shows the board’s previous composition and appointing powers and those under the act.

Table 1: Composition of CEAB Previously and Under the Act

<i>Previous CEAB</i>	<i>CEAB Under the Act</i>
1. Consumer Counsel	1. Consumer Counsel

OLR PUBLIC ACT SUMMARY

<i>Previous CEAB</i>	<i>CEAB Under the Act</i>
2. Environmental representative appointed by governor	2. Environmental representative appointed by Senate president pro tempore
3. Consumer advocacy representative appointed by governor	3. Consumer advocacy representative appointed by Senate president pro tempore
4. State-wide business association representative appointed by governor	4. State-wide business association representative appointed by Senate president pro tempore
5. Low-income rate payer representative appointed by House speaker	5. Low-income rate payer representative appointed by House speaker
6. Public representative with expertise in electricity appointed by House speaker	6. Public representative with expertise in electricity, renewable energy, procurement, or conservation appointed by House speaker
7. Public expert in electricity appointed by Senate president pro tempore	7. Public representative with expertise in electricity, renewable energy, procurement, or conservation appointed by House minority leader
8. State resident with energy expertise appointed by House speaker	8. Academic energy expert appointed by House speaker
9. Transportation Commissioner	9. Municipal representative appointed by Senate minority leader
10. Chamber of Commerce representative appointed by Senate president pro tempore	
11. State-wide manufacturing association representative appointed by Senate president pro tempore	
12. Agriculture Commissioner	
13. DPUC Chair	
14. OPM Secretary	
15. DEP Commissioner	

The act eliminates several of the board’s current responsibilities, including (1) representing the state at ISO New England planning processes, (2) participating in electric company forecast and life-cycle proceedings, and (3) reviewing the IRP. The board’s new responsibilities under the act include reporting on the status of DEEP programs, consulting on the IRP with the DEEP commissioner, and within available resources, reviewing requests from the General Assembly.

OLR PUBLIC ACT SUMMARY

The act also caps CEAB's expenditures at \$1.5 million per fiscal year.

§§ 44, 46, 47, 52, & 53 — POWERS & RESPONSIBILITIES TRANSFERRED FROM OPM TO DEEP

The act transfers numerous energy and utility related powers and responsibilities from OPM to DEEP, including:

1. regulating the fuel oil industry,
2. updating green building standards in consultation with the commissioners of public works and public safety,
3. consulting with the Department of Public Works on lighting standards for public buildings, and
4. consulting with the Department of Consumer Protection on plumbing fixture efficiency standards and tests.

§49 — FUEL OIL CONSERVATION BOARD

The act re-creates a 13-member Fuel Oil Conservation Board and places it within DEEP for administrative purposes only. The board consists of six members of the public, all with energy-related experience, who are appointed by the governor and represent (1) an environmental organization knowledgeable in energy efficiency programs, (2) in-state biodiesel distributors, (3) a consumer advocacy group, (4) the business community, (5) low-income ratepayers, and (6) state residents in general. Legislative leaders also appoint six members who represent (1) retail heating oil dealers with sales of over 15 million gallons in the state, (2) retail heating oil dealers with sales under 15 million gallons in the state, (3) the heating, ventilation, and air-conditioning trades, (4) wholesale heating distributors, (5) a state-wide environmental advocacy group, and (6) a state-wide oil dealer trade association. The chairperson of the Heating, Piping, Cooling and Sheet Metal Work Board is the board's thirteenth member.

§ 51 — COMPREHENSIVE ENERGY PLAN

By July 1, 2012, and every three years thereafter, the act requires DEEP, in consultation with CEAB, to prepare a comprehensive energy plan. The plan must reflect the statutory energy policy (CGS § 16a-35k). The plan must include:

1. an assessment and plan for all energy needs, including electricity, heating, cooling, and transportation;
2. the IRP's findings;
3. the energy efficiency plan's findings;
4. the renewable energy plan's findings;
5. an assessment of energy supplies, demands, and costs, and factors likely to affect them;
6. the progress made meeting the goals and milestones of the last comprehensive plan;
7. long-range energy policies to achieve a sound economy and the least-cost mix of energy supply sources and measures that reduce energy demand,

OLR PUBLIC ACT SUMMARY

- while also considering such factors as consumer price impacts, public health, and environmental goals, among other things;
8. recommendations for administrative and legislative action;
 9. an assessment of the potential costs savings and benefits to ratepayers, including carbon dioxide emissions, and repowering coal and oil-fired generation facilities built before 1990; and
 10. the benefits, costs, obstacles, and solutions related to expanding the use of natural gas for transportation purposes.

If the department finds that expanding the use of natural gas is in the public interest it must also develop a plan to increase natural gas's availability and use for transportation.

Procedurally, the act requires the plan to be developed in an uncontested proceeding, as long as there is a public hearing of which people are notified at least 15 days in advance. PURA must provide input on the proposed plan's impact on ratepayers, and the public may comment on it during a 45-day comment period. Once the plan is finalized, the commissioner must publish it electronically and summarize all public comments and any changes that resulted from them.

The commissioner (1) must submit the plan to the General Assembly's committees on energy and the environment and (2) can modify the plan in consultation with CEAB under the same procedures the act requires for the initial plan.

The act allows the utility companies to recover from ratepayers any expenses they incur assessing their resources for the plan's development.

§§ 89 & 90 — INTEGRATED RESOURCES PLAN

Changes in Plan Responsibilities

The act requires DEEP, rather than electric companies, to (1) assess future electric demands and how best to meet them and (2) develop a plan to meet the demands through procuring a mix of generating facilities and efficiency programs. (The act refers to this as the integrated resources plan, as it has been called in practice.) DEEP must consult with CEAB and the companies in conducting the assessment and the procurement manager must consult with them and the entity that administers the regional transmission grid in developing the procurement plan.

By law, the resource needs identified in the plan must first be met through all available and cost-effective efficiency and demand reduction measures. DEEP must determine how efficiency and related measures can cost-effectively meet consumer needs. The act requires that this be done in a way that ensures equity in benefits and cost reductions to all classes and subclasses of consumers. The act requires DEEP, in developing the plan, to consider the effects on participants and nonparticipants.

Plan Review and Approval

The act eliminates CEAB's review of the plan. It requires PURA to give at

OLR PUBLIC ACT SUMMARY

least 15 days notice of the proceeding in which DEEP approves the proposed plan by electronic publication on DEEP's web site. DEEP must hold a hearing on the plan, which is not a contested case. The notice of the hearing on the plan may also be published in one or more newspapers if the commissioner considers this necessary. The notice must include the date, time, and place of the meeting, its subject matter, the statutory authority for the proposed plan, and the location where a copy of the proposed plan may be obtained or examined. DEEP must also post the plan on its web site.

PURA must comment on the plan's impact on ratepayers and anyone may comment on the proposed plan. The commissioner must provide at least 45 days from the date the notice is published on DEEP's web site for public review and comment.

The commissioner must consider fully, after all public meetings, all written and oral comments concerning the proposed plan. He apparently must post the proposed plan on the department's web site and notify by e-mail each person who requests such notice.

The commissioner must make available the electronic text of the final plan or a web site where the final plan is posted, and a report summarizing (1) all public comments, and (2) the changes made to the final plan in response to such comments and the reasons for doing so. The commissioner must approve or reject the plan with comments.

Submission and Report

The commissioner must submit the final plan electronically to the Energy and Technology and Environment committees. By law, the department must report to the Energy and Technology and Environment committees every two years on the implementation of the plan and its recommendations regarding the process. The act delays the next report from September 30, 2011 to March 1, 2012.

Cost Recovery

Under prior law, the electric company's costs in developing the IRP were recovered on the systems benefits charge on electric bills. The act instead recovers all costs associated with the IRP and the procurement plan (apparently the plan for procuring resources for standard service) from the assessment on utility companies that covers the department's costs.

Effect of the Plans

PURA's decisions must be guided by DEEP's goals as established by the act and by the goals of the comprehensive plan described above and the IRP. DEEP's decisions must be based on the evidence in the record of each proceeding.

2012 and Subsequent IRPs

The act requires the 2012 and subsequent plans to, among other things (1) examine other states' best practices to determine why electric rates are lower elsewhere in the region; (2) indicate specific options to reduce the price of

electricity; and (3) 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. The plan must also identify the least costly option to address any reliability concerns before an electric company submits a proposal to build a transmission line to the entity that administers the regional grid. However, this does not bar an electric company from making filings required by law or regulation.

If the 2012 or subsequent plan contains an option to procure new sources of generation, DEEP must pursue the most cost-effective approach. If it seeks new sources of generation, DEEP must issue a notice of interest for generation without any financial assistance, such as long-term contract financing or ratepayer guarantees. If the DEEP does not receive any responsive proposal, it must issue a request for proposals that may include such assistance.

By February 1, 2012, DEEP must report to the Energy and Technology Committee regarding state policy and legislative changes DEEP feels would most likely lower the state's electricity rates.

§§ 91 & 92 — STANDARD SERVICE AND RELATED PROVISIONS

Procuring Power for Standard Service

By law, the electric companies must provide standard service to small and medium size electric customers who do not choose a competitive supplier.

The act eliminates specific rules governing how the companies procure power for this service. Among other things, prior law generally required that the purchased power contracts be for at least six months and overlap in time (the latter requirement is sometimes called laddering). The act also eliminates a requirement that if a generation affiliate of an electric company submits a bid, it do so one day before the other bidders (there are currently no such affiliates).

Under prior law, DPUC, in consultation with OCC, could retain a consultant with expertise in energy procurement to oversee the electric companies' procurement of contracts for standard service. The act instead allows the procurement manager of PURA to retain consultants as it sees fit to help with the procurement.

Under prior law, DPUC had to review and approve bids to provide power for standard service. The act requires that DEEP perform these duties and do so in an uncontested proceeding that includes a public hearing in which OCC and the Attorney General can participate.

By January 1, 2012 and every year thereafter, DEEP's procurement manager must develop a plan for procuring power and related wholesale electricity market 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 manager must consult with the electric companies in developing the plan. It can consult with other entities including the Connecticut Municipal Electric Energy Cooperative, and individuals (except those potentially involved in bidding to supply power for the service).

OLR PUBLIC ACT SUMMARY

Each procurement plan must provide for the competitive solicitation for load-following electric service (i.e., supply that goes up or down depending on demand). The plan can also (1) include a provision for the use of other contracts, such as contracts for generation or other electricity market products and financial contracts, and (2) provide for the use of contracts of varying lengths. If such plan includes the purchase of full requirements contracts, it must explain why these purchases are in the best interests of standard service customers. DEEP must conduct an uncontested proceeding to approve the plan, with any amendments it considers necessary.

The procurement manager must meet with the DEEP commissioner at least quarterly and prepare a written report on the plan's implementation. If the procurement manager finds that an interim amendment to the annual plan to address market conditions or to otherwise reduce the costs might substantially reduce the cost of standard service or its volatility, the procurement manager may petition PURA for an interim amendment. PURA must notify OCC and the electric companies of the proposed amendment. PURA must hold an uncontested proceeding and a technical meeting regarding the proposed amendment if requested by OCC or the companies within two business days of their receipt of the notice. PURA may approve, modify, or deny the proposed amendment, following the technical meeting if one is requested. PURA's ruling must occur within three business days after the technical meeting, if one is requested, or the expiration of the time for requesting a technical meeting if one is not requested. PURA may maintain the confidentiality of the technical meeting to the full extent allowed by law.

An electric company is entitled to recover all reasonable and prudent costs it incurs in developing and implementing the approved plan, including costs of contracts entered into under the plan. The procurement costs must be borne solely by standard service customers.

DEEP must report annually to the Energy and Technology Committee on the procurement plan and its implementation.

Project 150

By law, the electric companies must enter into long-term contracts with renewable energy generators that meet certain criteria under a program commonly called Project 150. The act specifies that projects located in Connecticut should receive a preference under the program. The act prohibits PURA from issuing an order that extends any contract made under the program beyond the termination date established based on the in-service date agreed to under the contract. Notice must be provided in accordance with the terms of the contract and to the extent permitted under the contract.

Referral Program

By law, suppliers can participate in a program where electric companies must provide (1) information regarding the suppliers when customers begin service with an electric company and at other times, and (2) other services for suppliers. The act requires PURA to conduct a proceeding to determine the cost of billing,

OLR PUBLIC ACT SUMMARY

collections, and other services provided by the electric companies or DEEP that solely benefit suppliers and aggregators. DEEP must equitably allocate these costs to such suppliers and aggregators. As part of the same proceeding, DEEP must also determine costs that electric companies incur solely for the benefit of customers to whom they sell power and provide for the equitable recovery of these costs from these customers.

§ 93 — BUY DOWN OF STANDARD SERVICE CONTRACTS

The act requires DEEP's Bureau of Public Utility Control, at the request of an electric company, to conduct a proceeding to (1) consider the buy down of the company's current standard service contract to reduce ratepayer bills and (2) conduct a cost benefit analysis of such a buy down. If DEEP determines that a buy down is in ratepayers' best interest, the company must proceed with it.

§ 94 — BILATERAL SUPPLY CONTRACTS

By January 1, 2012, and thereafter as DEEP determines to be in consumers' interest, DEEP must initiate a generation evaluation and procurement process. The evaluation process entails a nonbinding prequalification process to identify potentially eligible new generators. Interested generators must give DEEP information demonstrating how they will reduce electric rates for Connecticut ratepayers while maintaining or improving reliability, improving environmental characteristics of the Connecticut generation fleet, and providing economic benefit to the state. A determination of eligibility must be based on a showing of project attributes, including ratepayer, environmental, and economic benefits. It must also include a demonstration of reasonable certainty of completion of development, construction, and permitting activities.

If DEEP determines that one or more generators are eligible, it must issue an RFP to consider bilateral purchasing contracts from new generators by pricing such electricity on a cost-of-service basis, power purchase agreement, or other mechanism it determines to be in the best interest of Connecticut customers. The contracts must directly or indirectly, or in combination with other initiatives, provide electricity at lower rates for Connecticut consumers. The contracts must be for a term of between five and 20 years. They must provide that the generator bears the development, construction, and operation risks. Generators must be awarded contracts based on certain criteria, including reduction of rates, generator's heat rate, decrease in regulated pollution, and cost-effectiveness.

§ 95 — UTILITY ROAD CUTS

This act requires utilities that cut and permanently patch a public highway in the course of repairs or installations to, one year after the permanent patch is made, (1) inspect the patch, (2) make any additional repairs as may be necessary, and (3) certify to the municipality where it is located that it meets generally accepted standards of repair.

The requirements apply to utility companies; municipal waterworks systems;

OLR PUBLIC ACT SUMMARY

districts authorized by law to supply water (including metropolitan, municipal, and special districts); and any other waterworks system owned, leased, maintained, operated, managed, or controlled by any unit of local government under the statutes or public or special act. A municipality may, by vote of its legislative body, elect not to enforce these requirements.

§ 96 — REVIEWING TRANSMISSION LINE PROPOSALS

The act requires DEEP to review any proposed merchant 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.

§§ 97 & 98 — NOTICE OF RELIABILITY CONCERNS

By law, electric generators and the electric companies must annually file long-term supply and demand projections with the Connecticut Siting Council. The act requires, starting in March 2012, that they include any potential reliability concerns during the forecast period. It requires that this report go to DEEP as well as the Siting Council. Under the act, if DEEP receives such a report, it may issue an RFP for energy efficiency measures or generating capacity. The DEEP commissioner can determine that issuing an RFP is not needed, but in such cases the determination must include his rationale.

§ 99 — NEW CLEAN ENERGY FINANCE AUTHORITY

The act (1) renames the Renewable Energy Investment Fund the Clean Energy Fund (which is what it is already called in practice), (2) creates a quasi-public authority to replace the board that is responsible for developing the plan on how money in the fund is spent, (3) grants the authority a broad range of powers and duties, (4) places the fund under the authority rather than Connecticut Innovations, Inc. (CII), (5) allows the authority to receive additional specified revenues, and (6) expands how the fund can be used. The act specifies that the authority is the successor agency to CII for the purposes of administering the clean energy fund and is in CII for administrative purposes only.

Board of Directors

Under prior law, the Renewable Energy Investments Board was responsible for developing the plan for spending money in the fund and related functions. The act creates the Clean Energy Finance and Investment Authority as the successor to the board. The authority is subject to the ethics and auditing laws, among others, that apply to other quasi-public authorities.

The act establishes a board of directors consisting of 11 voting and two non-voting members to oversee the authority. Table 2 compares the membership of the former board and the authority's board.

OLR PUBLIC ACT SUMMARY

Table 2: Membership of Renewable Energy Investment Board and New Authority Board

Appointing Authority	Former Board	Authority Board (initial term in parentheses)
Governor	Three members: one with expertise regarding renewable energy resources, one representative of organized labor, and one representative of residential customers or low-income customers	Four members: two with experience in financing clean energy projects (2 years), one representing labor organizations (4 years) and one with experience in research and development or manufacturing of clean energy (unspecified term)
Senate president pro tempore	One member representing a state or regional organization primarily concerned with environmental protection	One member representing an environmental organization (4 years)
House Speaker	One member with expertise regarding renewable energy resources	One member representing residential or low-income groups (4 years)
Senate majority leader	One member representing a state or regional organization primarily concerned with environmental protection	No appointment
House majority leader	One member with experience in business or commercial investment	No appointment
Senate minority leader	One member representing a state-wide business association, manufacturing association or chamber of commerce	One member with expertise in the finance and deployment of renewable energy projects (4 years)
House minority leader	One member with experience in business or commercial investments	One member with experience in investment fund management (3 years)
CII board chairperson	Two members with experience in business or commercial investments	One member of the CII board (non-voting)
Ex-officio	Four members: Environmental Protection and Emergency Management and Homeland Security commissioners, Office of Policy and Management secretary, and Consumer Counsel	Four members: DEEP and Economic and Community Development commissioners, State Treasurer, (voting) authority president (non-voting)

OLR PUBLIC ACT SUMMARY

Each ex-officio member, other than the authority president, may designate his deputy or staff member to represent him or her at authority meetings with full power to act and vote on his or her behalf.

The president of the authority and a member of the CII board appointed by the chairperson of the corporation must serve on the board in an ex-officio, nonvoting capacity. The governor must appoint the chairperson of the board. The board must elect a vice chairperson and other officers deemed necessary. The board may establish committees and subcommittees and adopt bylaws and procedures.

Once the initial terms of the governor's and legislative leaders' appointees expire, the terms of their successors run for four years from the July 1st following their appointment.

Authority Responsibilities

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.

Under prior law, the Renewable Energy Investments Board was responsible for developing a comprehensive plan and the expenditure of the money in the fund. The plan was subject to DPUC review and approval. The act transfers these duties to the authority and DEEP, respectively.

Financing Projects

The act allows the authority to provide financing support to clean 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.

Authority Powers

The act grants the authority the privileges, immunities, tax exemptions, and other exemptions that CII has under current law. The authority is subject to suit and liability solely from its assets, revenues, and resources without recourse to

OLR PUBLIC ACT SUMMARY

CII's general funds, revenues, resources or other assets.

The authority may assume or take title to any real property, convey or dispose of its assets, and pledge its revenues to secure any borrowing and to develop, acquire, construct, refinance, rehabilitate, or improve its assets.

Each such borrowing or mortgage, unless otherwise provided by the board or the authority, is a special obligation of the authority. The obligation may be in the form of bonds, bond anticipation notes, or other obligations. The obligations can be used to fund, refinance, and refund the same and provide for the rights of their holders, and to secure the same by pledge of revenues, notes, and mortgages of others. The obligations are payable solely from the authority's assets, revenues, and other resources and may not be secured by a special capital reserve fund which is in any way contributed to by the state.

The authority may seek to qualify as a Community Development Financial Institution under federal law. If approved, the authority must be treated as such for federal tax purposes.

No authority director, officer, employee, or agent is personally liable for exercising or carrying out any of the authority's purposes or powers, so long as he or she is acting within the scope of his or her authority.

Funding Sources

By law, the fund is primarily supported by a 0.1 cent per kilowatt-hour charge on electric bills. The act allows the authority 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 must be used for financing, grants, and loans.

The act allows the authority to raise private capital. It also allows the authority 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. to the extent that it qualifies as a federal Community Development Financing Institution, funding from the Community Development Financing Institution Fund administered by the Treasury Department, as well as loans from and investments by depository institutions.

Uses of the 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, manufacturing technologies or facilities; and

OLR PUBLIC ACT SUMMARY

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.

Under prior law, the fund could be used to reimburse CII for its expenses as administrator of the fund, including a management fee. The act instead allows the fund to pay for operating expenses, including administrative expenses incurred by the authority and CII, and capital costs the authority incurs in connection with the operation of the fund, the implementation of the renewable energy plan, or other permitted activities of the authority.

Audits and Related Provisions

The act requires the fund to be audited annually. The audits must be conducted using generally accepted auditing standards by independent certified public accountants (who can be a CII accountant) certified by the Connecticut Board of Accountancy.

In addition, any entity that receives financing for a project from the fund must provide the board with an annual financial statement of the project. The statement must describe all sources and uses of funds in the detail the authority requires. The recipient's chief financial officer must certify that the statement is correct. The authority must maintain such audits for at least five years. Residential projects for one to four dwelling unit buildings are exempt from all annual auditing requirements, but the projects may be required to grant their utility companies' permission to release their usage data to the authority.

The act requires the authority to make information regarding the rates, terms, and conditions for all of its financing support transactions available to the public for inspection. These must include formal annual reviews by both a private auditor and the comptroller, and providing details to the public on the Internet. But the authority cannot disclose, pursuant to the Freedom of Information Act, patentable ideas, trade secrets, or proprietary or confidential commercial or financial information, when disclosure may cause commercial harm to a nongovernmental recipient of such financing support. In doing this (1) the authority must include formal annual reviews by a private auditor and the comptroller and (2) provide details to the public on the Internet.

The act eliminates requirements that the current Clean Energy Fund board report to the Energy and Technology and Commerce committees every five years. Prior law required the Clean Energy Fund board to report annually to the Energy and Technology and Commerce committees, DPUC, and OCC on the activities of the fund. The act instead requires that this report just go to the committees and DEEP and requires that it review the authority's activities.

§ 100 — MUNICIPAL ENERGY LOAN PROGRAM (PACE)

The act allows any municipality to establish a loan program for financing sustainable energy improvements to qualifying real property located within the

OLR PUBLIC ACT SUMMARY

municipality, if it determines that this is in the public interest. (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 making this determination. The program can cover all or part of the municipality. Before establishing a program, the municipality must notify the electric company that serves 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. The property owner must agree to participate in the program, which includes signing a contractual assessment.

Before entering a contractual assessment, the municipality must provide each property owner the following notice, in at least fourteen-point bold type: **SEEK LEGAL ADVICE BEFORE PARTICIPATING IN THIS LOAN PROGRAM TO ENSURE UNDERSTANDING OF POTENTIAL CONSEQUENCES, INCLUDING A POSSIBLE DEFAULT UNDER YOUR MORTGAGE.**

Any municipality that establishes this program may:

1. partner with another municipality or state agency to (a) maximize the opportunities for accessing public funds and private capital markets for long-term sustainable financing, and (b) secure state or federal funds available for this purpose; and
2. use the services of private, public, or quasi-public third-party administrators to provide support for the program.

Financing

Notwithstanding other limits or conditions on municipal bond issues, any municipality that establishes a loan program may issue bonds, as needed, 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. The municipality can supplement the bonds with other legally available funds at its discretion.

If a qualified property owner requests a loan, the municipality must:

1. require an energy audit or renewable energy system feasibility analysis on the property before approving a loan;
2. enter into a loan agreement with the owner in a principal amount sufficient to pay the costs of energy improvements and any associated costs the municipality determines will benefit the qualifying property;
3. impose requirements to ensure that the loan is consistent with the program's purpose; and
4. impose requirements and conditions on the loan to ensure timely repayment, including placing a lien of the benefitted property.

Any loan made under the program must be repaid over a term that does not

OLR PUBLIC ACT SUMMARY

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, as supplemented with state or federal funding that may become available, 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, including, in a default or delinquency, with respect to any penalties and remedies and lien priorities. However, the lien does not have priority over existing mortgages.

§ 101 — EFFICIENCY IN POORER TOWNS

By law, (1) the electric and gas companies must develop efficiency plans that are subject to review by the ECMB and (2) the Clean Energy Fund Board must develop a renewable energy plan. Under prior law, both plans were subject to DPUC approval; the act transfers this responsibility to DEEP.

Under the act, before approving any plan for energy conservation and load management and renewable energy projects, DEEP must determine that an equitable amount of the funds administered by each entity will be deployed among small and large customers in census tracts in which the median income is not more than 60% of the state median income, for customers whose average maximum demand is 100 kilowatts or less. DEEP must determine such equitable share. Projects may include a mentoring component for such communities. The requirements apply to submissions issued to DEEP by ECMB, the board of directors of the Clean Energy Finance and Investment Authority, or an electric company.

Starting January 1, 2012, DEEP must annually report to the Energy and Technology Committee regarding the distribution of funds to such communities.

§ 102 — PRODUCT ENERGY EFFICIENCY STANDARDS

General Provisions

Under prior law, OPM had to adopt regulations implementing statutory energy efficiency standards. The regulations had to establish energy efficiency standards for products not covered by the statutes if OPM determined that (1) such standards would promote energy conservation in the state, (2) they would be cost-effective for consumers who purchased and used the new products, and (3) multiple products were available that met such standards. These standards could not become effective until one year after OPM adopted them. The act transfers these responsibilities to DEEP.

Standards for Consumer Electronics

The act establishes energy efficiency standards for compact audio players,

OLR PUBLIC ACT SUMMARY

televisions and DVD players and recorders. The standards go into effect January 1, 2014, unless the DEEP commissioner determines that the standards are unwarranted, as described below, in which case he can accept, reject, or modify these standards.

Under the act, starting January 1, 2014, new compact audio players, DVD players, and DVD recorders sold or installed in the state must meet the requirements shown in the November 2009 California Code of Regulations, Table V-1 of Title 20, Division 2, Chapter 4, Article 4. As of the same date, televisions manufactured on or after July 1, 2011 must meet the requirements shown in Table V-2 of the same section of the regulations. In addition, televisions manufactured on or after January 1, 2014, must meet the additional efficiency requirements as specified in these regulations.

Under prior law and the act, energy efficiency standards do not apply to (1) new products manufactured in the state and sold elsewhere, (2) new products manufactured outside the state and sold at wholesale here for final retail sale and installation outside the state, (3) products installed in mobile manufactured homes at the time of construction, or (4) products designed expressly for installation and use in recreational vehicles.

Standards for Additional Products

Under prior law, OPM had to adopt regulations to establish efficiency standards for other products if it found that (1) the standards would (a) promote energy conservation in the state and (b) be cost-effective for consumers who purchased and used these products, and (2) multiple products were available that met such standards. The act eliminates the last criterion and instead requires the DEEP commissioner to find that the standard would not impose an unreasonable burden on Connecticut businesses.

The act also requires DEEP, in consultation with the Multi-State Appliance Standards Collaborative, to identify additional appliance and equipment efficiency standards. The commissioner must review all California standards and may review standards from other states in such collaborative. He (1) must issue notice of the review in the *Law Journal*, (2) allow for public comment, and (3) may hold a public hearing within six months of adoption of an efficiency standard by a cooperative member state regarding a product for which no equivalent Connecticut or federal standard exists. DEEP must adopt regulations adopting the standard unless it makes a specific finding that the standard does not meet the criteria described above and thus is unwarranted.

§ 103 — COMBINED HEAT AND POWER AND ANAEROBIC DIGESTER PROGRAM

The act requires the Clean Energy Finance and Investment Authority it creates to establish a three-year pilot program to provide financial incentives for installing combined heat and power (CHP) systems with a generating capacity of less than 2 megawatts. The authority must set one or more standardized grant amounts, loan amounts, and power purchase agreements for the projects to limit

OLR PUBLIC ACT SUMMARY

the authority's and project proponent's administrative burden. The standardized provisions must seek to minimize costs for the ratepayers, 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, and environment. The authority may decline to support a proposed project if its benefits, including emissions reductions, are insufficient to justify ratepayer or taxpayer investment.

The CHP program may not exceed 50 megawatts. Funding for individual projects is capped at \$350 per kilowatt.

The act also requires the authority to establish a pilot program to support sustainable practices and economic prosperity of Connecticut farms by using organic waste with on-site anaerobic digestion facilities to generate electricity and heat. The assistance can take the form of loans, grants, or power purchase agreements. The authority may approve no more than five projects under the program, each with a maximum size of 1,500 kilowatts (1.5 megawatts) and a maximum cost of \$450 per kilowatt.

The authority must allocate \$4 million annually from the Clean Energy Fund for the programs, \$2 million for the CHP projects and \$2 million for the digesters. By January 1, 2016, it must report to the Energy and Technology Committee on the programs and whether they should continue.

§§ 104 & 105 — TIME OF USE RATES AND METERS

The act requires suppliers, as a condition of maintaining their licenses, to offer a time-of-use price option to customers. The option must include a two-part price designed to minimize customer bills by encouraging the reduction of energy consumption during the most energy intense hours of the day. The licensee must file its time-of-use rates with the PURA.

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

§§ 106 & 109 — RESIDENTIAL SOLAR PROGRAM

Under the act, the Clean Energy Finance and Investment Authority must implement a residential photovoltaic (PV) solar energy program, which must result in at least 30 megawatts of new PV generating capacity being installed in the state by December 31, 2022. The program must be funded with up to one-third of the annual revenue from the renewable energy charge on electric bills.

Incentives

Under the act, the authority must offer direct financial incentives for the purchase or lease of qualifying residential PV systems. 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. When determining the type and amount of incentive to provide, the authority must consider (1) verified PV solar system characteristics, such as operational efficiency, size, location, shading, and orientation and (2) willingness-to-pay studies. Under the act, participants in this

OLR PUBLIC ACT SUMMARY

program who receive the upfront incentive are ineligible to benefit from the net metering law. Under this law, customers with class I generating systems receive a billing credit when their systems produce more power than the customer uses (in effect, the customer's meter runs backwards during these periods).

The act requires PURA to increase the incentive provided under the program 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.

Program Plan

By law, the board that administers the Clean Energy Fund must develop a biennial comprehensive plan. Under the act, starting with the FY 12/13 plan, each plan must contain a proposed schedule for offering the incentives over the duration of the program. The schedule must:

1. provide for "blocks" that result in at least 30 MW of residential PV capacity and projected incentive levels for each block;
2. provide incentives that are sufficient to meet residential consumers' reasonable payback expectations, considering the estimated cost of solar installations, the value of the energy offset by the system, and the availability and estimated value of other incentives, such as federal and state tax incentives and revenues from the sale of solar renewable energy credits (RECs);
3. provide incentives that decline over time to help foster the development of a state-based solar industry;
4. automatically move to the next block once the fund has committed the resources for a block; and
5. provide comparable incentives to buy or lease qualifying systems.

The authority may retain a consultant with expertise in solar energy program design to help develop the incentive schedules, which DEEP must review and approve. The authority can modify the approved schedule before it issues its next plan to account for changes in state or federal law or regulation or developments in the solar market when these changes could affect the expected return on investment of a typical residential PV system by 20% or more.

The authority must post on its website the incentives schedule, available funding, and incentive estimators, and solar capacity remaining in the current block. It must establish and periodically update program guidelines, including (1) eligibility criteria, (2) standards for installing energy efficient equipment or building practices as a condition of receiving program funding, (3) procedures to ensure that reservations are made and incentives paid to PV systems that are very likely to be installed and operated as indicated in the funding application, and (4) reasonable protocols for measuring and verifying energy production.

Funding

Funding for these incentives must come from the renewable energy surcharge on electric bills but may not use more than one-third of this annual revenue, plus any federal funding that becomes available.

OLR PUBLIC ACT SUMMARY

Training and Development

The authority must identify barriers to developing a permanent Connecticut-based solar workforce and provide for comprehensive training, accreditation, and certification programs through institutions and individuals accredited and certified to national standards.

Report

By January 1, 2014, and every two years thereafter through the program's duration, the authority must report to the Energy and Technology Committee on progress toward the 30 MW goal.

§§ 107 & 108 — ZERO EMISSION GENERATION PROGRAM

Electric Company Solicitation Plan

Starting January 1, 2012, each electric company must solicit and file with PURA for its approval, one or more long-term (15 year) power purchase contracts with owners or developers of zero-emission generation projects of less than 1,000 kilowatts (1 megawatt or MW) capacity. These systems must be located on the customer side of the meter and serve the electric company's distribution system. PURA can give preferences to contracts for technologies that are manufactured, researched, or developed in the state.

The companies must submit a proposed six-year solicitation plan by January 1, 2012. The plan must include a timetable for soliciting proposals, with declining incentives during each year of the program.

Solicitations conducted by a company must be for the purchase of renewable energy credits (RECs) produced by eligible projects. (Owners of renewable generation facilities can sell the power they produce on the wholesale electric market as "green power" or can sell the RECs associated with this power separately from the power.)

The production of a megawatt hour of electricity from a solar energy source placed in service on or after July 1, 2011 creates one REC. The obligation to purchase credits must be apportioned to the companies based on their respective loads at the start of the procurement period, as determined by PURA. These credits count against the companies' obligations under the Renewable Portfolio Standard (RPS). A credit is in effect the year it is created and the following calendar year. Electric companies are not required to enter into a contract in 2012 that provides a payment of more than \$350 per REC. For contracts entered into between 2013 and 2017, at least 90 days before each annual electric company solicitation, PURA may lower the REC price cap by 3% to 7% annually. In doing so, PURA must (1) provide notice and an opportunity for public comment and (2) consider such factors as the actual bid results from the most recent solicitation and reasonably foreseeable reductions in the cost of eligible technologies.

The companies must spend the following amounts to buy RECs under the program: \$8 million in the program's first year (2012), increasing by \$8 million per year in each of the next three years.

After year four, PURA must review contracts entered into under the program.

OLR PUBLIC ACT SUMMARY

If the cost of the technologies included in the contracts has been reduced, PURA must seek to enter new contracts to extend the program for another two years, for the total of six years.

If PURA determines the cost has been reduced, the aggregate procurement of RECs by electric companies must (1) increase by an additional \$8 million per year in years five and six, (2) be \$48 million in years seven to fifteen, inclusive, and (3) decline by \$8 million per year in years 16 to 21, inclusive. If PURA determines the costs have not been reduced, the aggregate procurement of RECs by electric companies must (1) be \$32 million in years five to thirteen, inclusive, and (2) decline by \$8 million per year in years 14 to 19, inclusive. Under both scenarios, any money not allocated in any given year may roll into the next year's available funds.

The act requires each electric company, by January 1, 2012, to propose a six-year solicitation plan that includes a timetable and methodology for soliciting proposals for long-term RECs with declining incentives that will end in 2022 from in-state generators. PURA must review and approve the solicitation plan. The approved plan must be designed to foster a diversity of project sizes and participation among all eligible customer classes, subject to cost-effectiveness considerations.

Approval of Procurement Plans

The companies must conduct separate procurement processes for (1) systems up to 100 kilowatts (a typical residential PV system is 5 to 10 kilowatts), (2) systems between 100 and 250 kilowatts, and (3) systems between 250 and 1,000 kilowatts. PURA must give preference to competitive bidding for resources above 100 kilowatts, with bids ranked in order of the present value of their required REC price unless it determines that an alternative methodology is in the best interest of electric customers and the development of a competitive and self-sustaining market. Systems up to 100 kilowatts are eligible to receive a REC price equal to the weighted average accepted bid price in the most recent solicitation for systems of between 100 and 250 kilowatts, plus an additional 10%. Each electric company must execute its approved six-year solicitation plan. The RECs it purchases count towards its obligations under the Renewable Portfolio Standard, under which electric companies and competitive suppliers must get part of their power from renewable resources.

Each company must submit its preferred procurement plan to PURA for its review and approval. PURA must hold a hearing as an uncontested case to approve, reject, or modify an application for approval.

PURA may approve the plan only if it finds that (1) the company conducted the solicitation and evaluation by a fair, open, competitive, and transparent process; (2) approval of the solicitation plan would provide the greatest expected ratepayer value from energy or RECs at the lowest reasonable cost; and (3) the procurement plan satisfies other criteria established in the approved solicitation plan. PURA may not approve any proposal made under the procurement plan unless it determines that (1) the plan and proposals encompass all foreseeable sources of revenue or benefits and (2) the proposals, together with such revenue

OLR PUBLIC ACT SUMMARY

or benefits, would result in the greatest expected ratepayer value from energy or RECs.

If an electric company's solicitation does not result in proposed contracts totaling the mandated annual expenditure and PURA has reduced the cap price by more than 3%, PURA must issue a request for proposals for additional contracts within 90 days. PURA must approve contract proposals on a least-cost basis, but an electric company need not enter into a contract that provides for a payment in any year of the contract that exceeds the prior year's renewable energy price cap minus 3%.

If the electric company fails to execute its approved solicitation plan, it may petition PURA for an extension of up to 90 days. If it does not submit this petition or it fails to cure the deficiency, PURA must assess a noncompliance fee of 125% of the difference between the annual expenditures the company is required to make under the act and its actual contractually committed expenditure for RECs from eligible projects in that year. PURA can waive the fee if it determines that meeting the program requirements would be commercially infeasible.

The electric company must collect noncompliance fees, keep them in a separate interest-bearing account, and disburse them to DEEP quarterly. This money must be used to support the deployment of zero emission generating systems installed in the state, with priority given to otherwise underserved market segments, such as low-income housing, schools and other public buildings, and nonprofit organizations.

Consultant

PURA may, in its discretion, retain an independent consultant with energy procurement expertise. The consultant must be unaffiliated with any electric company or its affiliates. It must not have benefited directly or indirectly from employment or contracts with the company or its affiliates in the preceding five years, except as an independent consultant. The electric company must (1) give the consultant immediate and continuing access to all documents and data it reviewed, used, or produced in its bid solicitation and evaluation process; (2) make all its personnel, agents, and contractors used in the bid solicitation and evaluation available for the consultant to interview; and (3) conduct any additional modeling requested by the consultant to test the assumptions and results of the bid evaluation process. The consultant may not participate in, or advise the company with respect to, any decisions in the bid solicitation or bid evaluation process.

Resale of RECs

The electric companies can resell or otherwise dispose of the energy or RECs they purchase, but they must net the cost of payments made to projects under the contracts against the proceeds of the sale of energy or solar RECs. The difference must be credited or charged to their customers through a reconciling component of electric rates, as determined by PURA, using a charge or credit that does not change when a customer switches electric suppliers.

OLR PUBLIC ACT SUMMARY

Cost Recovery

PURA's administrative costs in reviewing the procurement plan and the costs of the consultant must be recovered through a reconciling component of electric rates as determined by PURA. The electric company is entitled to recover its reasonable costs of complying with its approved procurement plan and prudently incurred fees through the same type of mechanism.

Report

Within 60 days after PURA approves the procurement plans submitted by January 1, 2013, it must report to the Energy and Technology Committee. The report must document, for each procurement plan: (1) the total number of RECs bid relative to the number of credits requested by the electric company, (2) the total number of bidders in each market segment, (3) the number and value of contracts awarded, (4) the total weighted average price of the RECs or energy purchased, and (5) the extent to which the technologies' costs have been reduced. PURA may not report individual bid information or other proprietary information.

§ 110 — LOW EMISSION GENERATION PROGRAM

The act establishes a similar program for low-emission generation technologies. These are generation projects that (1) are less than 2 MW in size, (2) are located on the customer side of the meter, (3) serve the distribution system of the electric company, and (4) use class I technologies that have emissions of no more than 0.07 pounds per megawatt-hour of nitrogen oxides, 0.10 pounds per megawatt-hour of carbon monoxide, 0.02 pounds per megawatt-hour of volatile organic compounds, and one grain (presumably of particulate matter) per one hundred standard cubic feet. PURA can give preference to contracts for technologies manufactured, researched, or developed in the state.

The obligation to purchase RECs must be apportioned to the electric companies based on their respective distribution system loads at the start of the procurement period, as determined by PURA. The maximum an electric company must pay for a REC is \$200 per megawatt-hour. The REC resale provision of the zero-emission program applies to the low-emission program, as does the ability of the electric company to count its purchase of the RECs towards its renewable portfolio standard obligations.

Solicitation Plan

Starting January 1, 2012, and within 180 days, each electric company must solicit and file with PURA for its approval one or more 15-year power purchase contracts. RECs are created in the same way as under the zero emission program.

Funding

The companies can spend up to \$4 million in year one (2012), increasing by \$4 million per year in each of the next two years. After year three, PURA must review the contracts entered into under this program. If the cost of the

OLR PUBLIC ACT SUMMARY

technologies eligible for the contracts has been reduced, PURA must seek to enter new contracts for a total of five years.

The aggregate procurement of RECs must (1) increase by an additional \$4 million per year in years four and five, (2) be \$20 million per year in years six through fifteen, and (3) decline by \$4 million per year in years 16 through 20.

If PURA determines that the costs have not been reduced, the aggregate procurement of RECs must (1) be \$12 million per year in years four through fifteen, and (2) decline by \$4 million in the last two years, provided any money not allocated in any given year may roll into the next year's available funds.

§ 111 — CONDOMINIUM PROGRAM

The act requires the Clean Energy Finance and Investment Authority, in consultation with DEEP, 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

§ 112 — LOW-INCOME RATE DISCOUNTS

The act requires DEEP to conduct a proceeding, by June 30, 2012, to develop discounted rates for electric and gas company customers whose household income is not more than 60% of the state median. The proceeding must at least review the current and future availability of rate discounts for individuals who receive state or federal means-tested assistance, through (1) discounts through the electricity purchasing pool authorized to operate under the law, (2) Connecticut Energy Assistance Program benefits, (3) assistance funded or administered by the Department of Social Services (DSS) or DEEP, (4) other state-funded or state-administered programs, (5) conservation programs assistance, or (6) matching payment program benefits to help electric company customers pay off their arrearages.

DEEP must (1) coordinate resources and programs, to the extent practicable; (2) develop rates that take into account indigency and allow these households to meet the costs of essential energy needs; (3) require single family households to have a home energy audit as a prerequisite to qualifying, with the cost subsidized from the Energy Efficiency Fund for low-income homeowners; (4) analyze the benefits and anticipated costs of the discounted rates; and (5) review utility rate discount policies or programs in other states.

DEEP must determine which, if any, of its programs should be terminated, modified, or have their funding reduced because program recipients would benefit more from a low-income rate. It must establish a rate reduction that is equal to the anticipated funds transferred from the programs it terminates, modifies, or reduces and the reduced cost of serving low-income households participating in the program, and other sources. DEEP may issue recommendations regarding programs administered by DSS.

DEEP must order (1) each electric company to file proposed rates consistent

OLR PUBLIC ACT SUMMARY

with its decision within 60 days after issuing the decision and (2) appropriate modifications to existing low-income programs.

The cost of discounted rates and related outreach activities must be paid (1) from normal rate-making procedures and (2) on a semi-annual basis through the systems benefits charge. The discounts must be funded solely from (1) the savings from the programs that DEEP terminates, modifies, or reduces, plus the reduced cost of providing service to those eligible for the discounted or low-income rates; (2) any available energy assistance; and (3) other sources of coverage for these rates, such as generation available through the electricity purchasing pool operated by DEEP.

By February 1, 2012, DEEP 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.

§ 113 — ELECTRIC SUPPLIER CODE OF CONDUCT

The act requires beginning July 1, 2011 each supplier to file annually with PURA a list of any aggregator or agent working on its behalf (aggregators gather customers together but do not actually sell power to them).

Sales Solicitations

The act imposes rules governing sales and solicitations of generation services to customers having a demand of up to 100 kilowatts by a supplier, aggregator, or its agent that are conducted and consummated entirely by (1) mail; (2) door-to-door sale; (3) telephone or other electronic means; (4) during a scheduled appointment at the premises of a customer; or (5) at a fair, trade or business show, convention, or exposition. These solicitations include those where the sale is solicited and the customer's agreement or offer to purchase is received at a place other than the seller's place of business. These sales must be conducted (1) in accordance with any municipal ordinances regarding door-to-door solicitations; (2) between 10 a.m. and 6 p.m., unless the customer schedules an earlier or later appointment; and (3) with both Spanish and English written materials available. Representatives of a supplier, aggregator, or agent must prominently display or wear a photo identification badge stating the name of their employer or the electric supplier they represent.

The act requires that any third-party agent who contracts with or is otherwise compensated by a supplier to sell electric generation services be the supplier's legal agent. Agents may not sell generation services for a supplier unless they are employees or contractors of the supplier and have received appropriate training directly from the supplier.

Any sale or solicitation, including from any person representing the supplier, aggregator, or agent must (1) identify the salesperson and the generation services company or companies he or she represents; (2) include a statement that they do not represent an electric company; and (3) explain the purpose of the solicitation and all rates, fees, variable charges, and terms and conditions for the services

OLR PUBLIC ACT SUMMARY

provided. No entity, including an aggregator or agent of a supplier or aggregator, that sells or offers for sale any electric generation services for or on behalf of a supplier, may engage in any deceptive acts or practices in the marketing, sale, or solicitation of these services.

By law, a supplier may not advertise or disclose the price of electricity in a way that would mislead a reasonable person into believing that the electric generation services portion of the bill will be the person's total electric bill. When advertising or disclosing the price for electricity, the supplier must disclose the electric company's current charges, including the competitive transition assessment and the systems benefits charge, for that customer class. Finally, suppliers must comply with the federal telemarketing law, which among other things restricts when they can call. The act extends these provisions to aggregators and to agents of suppliers and aggregators.

Required Disclosures

The act requires each supplier to disclose to PURA in a standardized format (1) the amount of additional RECs the supplier will purchase beyond required credits, i.e., those required under the RPS; (2) where the additional credits are being derived from; and (3) the types of renewable energy sources that will be purchased. Each supplier may only advertise RECs purchased beyond those required under the RPS and must report to PURA the renewable energy sources of such credits and whenever the mix of these sources changes.

Generation Services Contracts

The act requires each supplier to provide customers with a demand of less than 100 kilowatts with a written contract. Each contract for generation services must contain (1) all material terms of the agreement; (2) a clear and conspicuous statement explaining the rates that the customer will pay, including the circumstances under which the rates may change; and (3) information on how those rates compare with the customer's current electric generation service costs; and for how long those rates are guaranteed. The contract must also include a clear and conspicuous statement providing the customer's right to cancel the contract within three days of either signing it or receiving the supplier's notice, describing under what circumstances, if any, the supplier may terminate the contract, and describing any early termination penalty. Each contract must be signed by or otherwise agreed to by the customer.

Confirming Service Requests

Under prior law, a supplier could not begin serving a customer until he or she signed a service contract or agreed through one of four mechanisms to receive the service. These included the customer signing a document fully explaining the nature and effect of the service initiation. The act instead requires the customer to sign a contract that meets the act's requirements. It retains the other three options.

Right of Rescission

OLR PUBLIC ACT SUMMARY

Under prior law, customers with demand up to 500 kilowatts could cancel a contract with a supplier within three business days of entering into it. The act gives the customer until three business days after (1) this date or (2) when the customer receives the supplier's written contract, whichever is later.

Changes to Contracts

Under the act, a supplier may not make a material change in the terms or duration of any contract without the customer's express consent. But, a supplier may renew a contract by clearly informing the customer in writing, 30 to 60 days before the renewal date, of the renewal terms and of the option not to accept the renewal offer. The supplier may not charge a residential customer a termination or early cancellation fee if the customer terminates or cancels the renewal within seven business days after receiving the first billing statement for the renewed contract.

Termination Fees

The act bars supplier contracts from charging a residential customer a fee for termination or early cancellation of a contract of more than (1) \$100 or (2) twice the estimated bill for energy services for an average month, whichever is less. The supplier must provide a customer an estimate of his or her average monthly bill when it offers a contract.

Record-keeping

The act requires suppliers to maintain records of signed service contracts or consents for at least two years from the contract's expiration date. The supplier must provide the records to DEEP or the customer on request.

Penalties for Violations

By law, a violation of the existing consumer protection provisions of the laws governing suppliers and aggregators is an unfair trade practice. The act also makes a violation of the protections it adds an unfair trade practice. It makes contracts void and unenforceable if PURA finds they resulted from unfair or deceptive marketing practices or violations of the act's consumer protection provisions. Any waiver of the act's provisions by a customer is void and unenforceable by the supplier.

In addition, the act allows DEEP to impose the following sanctions for any violation or failure to comply with existing law or the act's provisions: (1) civil penalties of up to \$10,000; (2) suspension or revocation of a supplier's or aggregator's license; or (3) a prohibition, following a contested case hearing, on accepting new customers.

The act allows DEEP to adopt regulations on abusive switching practices, solicitations, and renewals by electric suppliers, among other things.

§§ 114 & 115 — BILLING

Direct Billing by Suppliers

OLR PUBLIC ACT SUMMARY

Under prior law, competitive suppliers could provide billing and collection services for their customers with at least 100 kilowatts of demand. The act requires suppliers, starting July 1, 2012, to provide these services or obtain them from the electric company, paying their pro rata share of these costs. A customer who is directly billed by a supplier and who paid the electric company the cost of billing and other services must receive a credit on his or her monthly electric bill.

By law, DPUC was required to adopt regulations specifying the billing format for electric companies and suppliers that directly bill their customers. The regulations had to provide guidelines for determining the billing relationship between the companies and suppliers, addressing such things as allocation of partial bill payments. Under the act, (1) these guidelines are effective until July 1, 2012 and (2) DEEP must adopt regulations governing direct billing.

Electric Company Bills

Under prior law, electric bills had to include a statement about the availability of the program under which electric companies provide information about competitive suppliers at certain times. The act limits this provision, as it applies to electric companies, to the bills of customers with demand of 500 kilowatts or less over the preceding 12 months.

The act eliminates the requirement that electric company bills indicate the generation service charge (the retail cost of power) for those customers who buy their power from suppliers (whether or not their supplier bills them directly).

Competitive Suppliers' Bills

The act modifies the billing information a supplier that chooses to provide billing and collection services to its customers must provide. It eliminates requirements that such bills include the:

1. distribution charge, including all applicable taxes;
2. systems benefits charge;
3. transmission rate as adjusted by law;
4. competitive transition assessment; and
5. conservation and renewable energy charges.

By law, these charges and rates are the same for all customers, whether they buy power from the electric company or supplier, and appear on electric company bills.

Under prior law, the bill had to show the customer's rate and usage for the current month and each of the previous 12 months in the form of a bar graph or other visual format, unless the customer is subject to a demand charge. The act eliminates this exception.

Report

The act requires PURA to review the costs and benefits of suppliers billing for all components of electric service, and report by February 1, 2012 to the Energy and Technology Committee on the results of the review.

§ 115 — WEATHERIZATION PROGRAM

OLR PUBLIC ACT SUMMARY

The act requires the DEEP commissioner to administer the federally-funded weatherization assistance program; under current practice DSS administers 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.

The program must also include weatherization assistance for emergency shelters for homeless individuals and victims of domestic violence. The commissioner may adopt regulations to implement and administer this aspect of the program.

§ 116 — REPLACEMENT HEATING SYSTEM AND CHP PROGRAMS

The act establishes programs to (1) finance the replacement of inefficient residential heating equipment and (2) provide financial incentives for such replacement equipment and combined heat and power (CHP) systems. By October 1, 2011, DEEP must establish a plan that includes procedures and parameters for these programs.

Financing Program

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%. Replacement fuel oil furnaces and burners must have an efficiency rating of at least 86% and burners must have thermal purge or temperature reset controls. Replacement natural gas boilers must have an annual fuel utilization efficiency rating of at least 90% and a gas furnace must have an annual fuel utilization efficiency rating of at least 95%. 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.

A customer who participates in the program must repay the financing as part of his or her monthly gas or electric bill or by other means. The program may be funded by the residential financing program supported by the Connecticut Energy Efficiency Fund or the Clean Energy Fund.

Financial Incentive Program

The act also requires DEEP to establish an energy savings infrastructure pilot program providing financial incentives to eligible entities that install CHP systems, energy efficient heating oil burners, boilers, and furnaces, and natural gas boilers and furnaces. 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 Clean Energy Finance and Investment Authority.

CHP Systems. By October 1, 2011, DEEP must begin accepting applications for financial incentives for CHP systems up to 1 MW. To qualify for the incentives, the system must reduce energy costs at an amount equal to or greater than the amount of the system's installation cost within 10 years of the installation. DEEP must review the current market conditions for such systems, including any existing federal or state financial incentives, and determine the appropriate financial incentives needed to encourage installation of the systems. The incentives may include providing private financial institutions with loan loss protection or grants to lower borrowing costs. Financial incentives may not exceed \$200 per kilowatt. A project accepted for the incentives also qualifies for a waiver of the (1) backup power rate charged by electric companies and (2) requirement to provide baseload electricity. Any purchase of natural gas for a CHP system installed under this program is exempt from the natural gas company's distribution charge.

Heating Equipment. By December 31, 2011, DEEP must begin accepting applications for financial incentives for the installation of more efficient fuel oil and natural gas boilers and furnaces meeting the efficiency standards described in the financing program. DEEP must review the current market conditions for such systems and equipment upgrades, including, but not limited to, any existing federal or state financial incentives, and establish the appropriate financial incentives needed to encourage such upgrades. 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. Any loan provided as a financial incentive must include the cost of any related incentives, as determined by DEEP. 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

OLR PUBLIC ACT SUMMARY

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.

By October 1, 2014, DEEP must report to the Energy and Technology Committee with regard to the projects assisted by the program, the amount of public funding, the energy savings from the technologies installed, and any recommendations for changes to the program. These may include incentives that encourage consumers to install more efficient fuel oil and natural gas boilers and furnaces prior to failure or gross inefficiency of their current heating system.

§ 118 — STATE AGENCY ENERGY CONSERVATION

The act makes DEEP, rather than OPM, responsible for planning and managing energy use in state-owned and -leased buildings and implementing related programs.

The act requires the DEEP commissioner, by July 1, 2012, to develop a plan in consultation with the Department of Administrative Services (DAS), to reduce energy use in state-owned or -leased buildings at least 10% from its current consumption by January 1, 2013 and by an additional 10% by July 1, 2018. The plan must at least (1) assess current energy consumption for all fuels used in state-owned buildings, (2) identify at least 100 buildings with the highest aggregate energy costs in FY 11, (3) establish targets for conducting energy audits of these buildings, and (4) determine which energy efficiency measures are most cost-effective for them. The plan must provide for the financing of these measures through the use of energy performance contracting pursuant to the act, bonding, or other means.

The act allows any state agency or municipality to enter into an energy-savings performance contract with a qualified energy service provider to produce utility cost savings, or operation and maintenance cost savings, as these terms are defined below. Any energy-savings measure implemented under these contracts must comply with applicable building codes. A state agency or municipality may implement other capital improvements in conjunction with an energy-savings performance contract so long as the measures that are being implemented to achieve the cost savings and other capital improvements are in the aggregate cost-effective over the term of the contract.

By January 1, 2013, and annually thereafter, the DEEP commissioner must report on the status of plan implementation and provide recommendations on state buildings' energy use to the Energy and Technology Committee.

The act also requires the DEEP commissioner, in consultation with the Department of Public Works, to establish energy efficiency standards for building space leased on or after January 1, 2013 by the state.

§ 119 — DEEP OFFICE OF ENERGY EFFICIENT BUSINESSES

The act creates, within available appropriations, an office of energy efficient businesses within DEEP and requires it to provide in-state businesses (1) a single

OLR PUBLIC ACT SUMMARY

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.

§ 120 — TERMINATION OF SERVICE FOR HOUSEHOLDS WITH HOSPITALIZED CHILDREN

The law bars electric and gas utilities, from November 1 through May 1, from terminating, or refusing to reinstate, service to residential customers who are “hardship cases” who cannot pay their bill. The act additionally prohibits the utilities from denying service during this period. It also makes the prohibition apply year-round in cases where such customers have a child up to 24 months old who (1) lives in the customer’s household, (2) has been admitted to the hospital, and (3) has received discharge papers on which the attending physician has indicated that utility service is needed for the child’s health and well being.

§ 121 — VIRTUAL NET METERING

This act requires electric companies to provide their municipal customers with virtual net metering and make any needed interconnections, including installing metering equipment, for customers who need it. The act specifies how (1) the metering equipment must operate and (2) the electric companies must bill those who participate.

The law requires electric utilities to provide equipment and billing for net metering (CGS § 16-243h). In general, the net metering law allows a customer with an on-site electricity generator powered by a renewable energy resource to earn billing credits from an electric company when the customer generates more power than he or she uses, essentially “running the meter backwards.” The “virtual net metering” authorized by the act allows the customer to share these credits to lower the electricity bills of other “beneficial accounts” the customer designates.

By February 1, 2012, DEEP must conduct a proceeding to develop the administrative processes and program specifications, including a program cap of \$1 million per year for the credits provided to the beneficial accounts, apportioned to each electric company based on its consumer load, to implement these provisions.

Virtual Net Metering Equipment

Under the act, electric companies must interconnect with and provide virtual net metering equipment to any “virtual net metering facility” that requests it. The act defines these facilities as a customer-owned class I renewable energy source (solar, wind, fuel cells, etc.) that can generate up to two megawatts of electricity. The customer must be one of the electric company’s in-state retail end-users and within the same service territory as the other accounts to which it will distribute credits.

OLR PUBLIC ACT SUMMARY

As under the current net metering law, the act requires the virtual net metering equipment to be able to (1) measure the electricity consumed from the electric company's facilities; (2) deduct the amount of electricity the customer produced, but did not consume; and (3) calculate the customer's net production or consumption for each monthly billing period.

Billing

Under the act, a customer participating in virtual net metering can designate "beneficial accounts" that will receive the billing credits when the customer produces more electricity than he or she uses. These accounts must all be in-state retail end users and in the same electric company service territory as the customer. The customer must notify the electric company about the other accounts in writing at least 60 days before the generating facility begins operating. The customer can amend the list of accounts only once a year by providing another 60 days' written notice. The municipal customer host may not designate more than five beneficial accounts.

When the customer produces more electricity than he or she uses in a monthly billing period, the act requires the electric company to bill the customer for zero kilowatt hours (kwh). For each extra kwh produced, the electric company must assign a credit that equals the retail cost per kwh the customer would otherwise have been charged. The credits are then used to reduce the charges on the beneficial accounts in the next billing period, although no account can be reduced below zero kwh. However, the shared billing credit is only for the generation service charge (the cost of power as distinct from such costs as transmission and distribution.) Under prior law, the credit that a customer received for his own account applied to all of the charges on the bill.

If any unused credits remain after the electric company has reduced all of the beneficial accounts to zero kwh, the act requires the electric company to carry them forward from one monthly billing period to the next until the end of the calendar year. At the end of each year the company must pay the customer for any unused credits at the wholesale rate the company pays for the power it buys to serve its standard service customers.

Report

By January 1, 2013, and annually thereafter, each electric company must report to DEEP on the cost of its virtual net metering program. DEEP must combine this information and report it annually to the Energy and Technology Committee.

EFFECTIVE DATE: Upon passage

§§ 122 & 123 — ENERGY-SAVINGS PERFORMANCE CONTRACTING

The act allows any state agency or municipality to enter into an energy-savings performance contract with a qualified energy services provider to produce utility or operation and maintenance cost savings. A state agency or municipality may implement other capital improvements in conjunction with the contracts so

OLR PUBLIC ACT SUMMARY

long as (1) they are being implemented to achieve the required cost savings and (2) the other capital improvements are in the aggregate cost-effective over the contract's term.

Definitions

Under the act, an energy-savings performance contract is one between a state agency or municipality and a qualified energy service provider to evaluate, recommend, and implement one or more energy savings measures. A performance contract must guarantee energy cost savings and include (1) the design and installation of equipment and, if applicable, operation and maintenance of any of the measures implemented and (2) guaranteed annual savings that meet or exceed the total annual contract payments the agency or municipality makes including financing charges incurred over the contract's life.

To be qualified, the provider must be a corporation approved by DAS with a record of successful energy performance contract projects that (1) is experienced in designing, implementing, and installing energy efficiency and facility improvement measures; (2) has the technical capabilities to ensure the measures generate energy and operational cost savings; and (3) can secure the financing needed to support energy savings guarantees.

The contract must reduce utility or operation and maintenance costs. Utility cost savings are utility expenses eliminated or avoided on a long-term basis as a result of equipment installed or modified or services performed by a qualified energy service provider. They do not include merely shifting personnel costs or similar short-term cost savings. Operation and maintenance cost savings means a measurable decrease in these costs and future replacement expenditures that result directly from implementing one or more utility cost savings measures. These savings must be calculated against an established baseline of operation and maintenance costs.

Under the act a measure, piece of equipment, activity, or facility is considered cost-effective if an agency or municipality reasonably expects that the present value of the energy it will save or produce over its useful life, including any compensation received from a utility, is more than the net present value of the costs of implementing, maintaining, and operating it over the same period, discounted at the cost of public borrowing.

The act defines "energy-savings measure" to include a wide variety of efficiency and renewable energy measures. These include, among others:

1. replacing or modifying lighting and electrical components, fixtures, or systems, improvements in street lighting efficiency, or computer power management software;
2. class I renewable energy;
3. cogeneration systems that produce steam or forms of energy, such as heat or electricity, for use primarily within a building or complex of buildings;
4. automated or computerized energy control systems;
5. heating, ventilation, or air conditioning system modifications or replacements;
6. replacement or modification of windows or doors;

7. insulation;
8. indoor air quality improvements; and
9. water conserving measures.

The act defines an “investment-grade audit” as a study by the provider selected for a particular project. It must include detailed descriptions of the recommended improvements for the project, their estimated costs, and the utility and operations and maintenance cost savings projected to result from them.

Agency Roles in Performance Contracting

DEEP, in consultation with OPM and ECMB, must help state agencies and municipalities identify, evaluate, and implement cost-effective conservation projects at their facilities and create promotional materials to explain the energy performance contract program. OPM, in consultation with ECMB and DEEP, must inform agencies and municipalities of opportunities to develop and finance energy performance contracting projects. It must provide technical and analytical support, including (1) procuring energy performance contracting services, (2) reviewing verification procedures for energy savings, and (3) assisting in structuring and arranging financing for energy performance contracting projects.

DEEP may charge fees to cover costs incurred for its administrative support and resources or services provided to the state agencies and municipalities that use its technical support services. The fees must be disclosed before services are rendered. Any participating municipality may opt out of the state performance contract process rather than incur the fees. Agencies and municipalities may add the costs of these fees to the total cost of the energy performance contract.

Initial administrative funding to establish the performance contracting process for agencies and participating municipalities must be recovered from the ECMB.

Standardized Procedures

The act requires DEEP, by July 1, 2012 and within available appropriations, to establish a standardized energy performance contract process for state agencies and municipalities. DEEP must work with ECMB and must consult with OPM and DAS in developing the process. A municipality may use the standardized process or establish its own.

The standardized process must include standard procedures for entering into a performance contract and standard energy performance contract documents. The documents must include requests for qualifications (RFQs); RFPs; investment-grade audit contracts; energy savings performance contracts, including the form of the project savings guarantee; and project financing agreements.

Prequalification of Energy Performance Contractors

DAS, in consultation with DEEP, must issue an RFQ from companies that can offer energy performance contract services to create a list of qualified companies. State agencies must use the list; municipalities can use the list or establish their own qualification process.

When reviewing RFQs (apparently responses to the RFQ), DAS must consider a company’s experience with:

OLR PUBLIC ACT SUMMARY

1. design, engineering, installation, maintenance, and repairs associated with performance contracts;
2. conversions to a different energy or fuel source associated with a comprehensive energy efficiency retrofit;
3. post-installation project monitoring, data collection, and reporting of savings;
4. overall project management and qualifications;
5. accessing long-term financing;
6. financial stability;
7. projects of similar size and scope;
8. in-state projects and Connecticut-based subcontractors;
9. U.S. Department of Energy programs;
10. professional certifications; and
11. other factors DAS determines to be relevant and appropriate.

Selection of Contractors

Before entering an energy performance contract, a state agency or municipality that uses the standardized procedures must issue an RFP to three or more qualified providers. The agency or municipality may award the performance contract to the provider that best meets its needs, which need not be the lowest cost provider.

A cost-effective feasibility analysis must be included in the responses to the RFP and serves as the selection document. The agency or municipality must use the analysis to select a qualified provider to engage in final contract negotiations. In making its final selection, the agency or municipality must consider:

1. contract terms,
2. the proposal's comprehensiveness,
3. the provider's financial stability,
4. comprehensiveness of cost savings measures,
5. experience and quality of technical approach, and
6. overall benefits to the agency or municipality.

Energy Audit

The provider selected as a result of the RFP process must prepare an investment-grade energy audit. Upon acceptance, the audit becomes part of the final energy performance contract of the state agency or municipality. The audit must include estimates of how much utility and operation and maintenance cost savings would increase and estimates of all costs of the utility cost savings measures or energy-savings measures. These include:

1. itemized design costs,
2. engineering,
3. equipment and materials,
4. installation,
5. maintenance and repairs, and
6. debt service.

If the state or municipality decides not to execute an energy services

OLR PUBLIC ACT SUMMARY

agreement after the audit is prepared and the costs and benefits described in it are not materially different from those described in the feasibility study submitted in response to the RFP, the agency or municipality must pay the costs of preparing the audit. Otherwise, the audit costs are included in the costs of the energy performance contract.

Independent Review of Projected Costs Savings

The above guidelines may require that a licensed professional engineer review the cost savings projected by the qualified provider. The engineer must have at least three years experience in energy calculation and review. He or she may not be (1) an officer or employee of a provider for the contract under review or (2) otherwise associated with the contract.

In conducting the review, the engineer must focus primarily on the proposed improvements from an engineering perspective, the methodology and calculations related to cost savings, increases in revenue, and, if applicable, efficiency or accuracy of metering equipment. The engineer must maintain the confidentiality of any proprietary information he or she acquires while reviewing the contract.

Project Financing

A municipality may use funds designated for operating and capital expenditures or utilities for any energy-savings performance contract, including those authorized by the act. A contract may provide for financing by a third party, including tax-exempt financing. The financing provision may be separate from the contract. An agency or municipality may use designated funds, bonds, lease purchase agreements, or a master lease for any energy-savings performance contracts, so long as their use is consistent with the purpose of the appropriation.

Energy-savings performance contracts must provide that (1) all payments between parties, except obligations on termination of the contract before its expiration, will be made over time and (2) the objective of the contract is implementation of cost savings measures and energy and operational cost savings.

An energy-savings performance contract, and payments under it, may extend beyond the fiscal year in which the contract became effective, subject to appropriations, if required by law, for costs incurred in future fiscal years. The contract may run for up to 20 years and the length of the contract may reflect the useful life of the cost savings measures. A contract may provide for payments over a period not to exceed deadlines specified in it from the date of the final installation of the cost savings measures.

Reconciliation and Annual Reports

The contract may provide that reconciliation of the amounts owed under it will occur in a period beyond one year, with final reconciliation occurring within the term of the contract. A contract must include contingency provisions if the actual savings do not meet predicted savings.

The contract must require the provider to give the agency or municipality an annual reconciliation of the guaranteed energy cost savings. If the reconciliation reveals a shortfall in annual savings, the provider is liable for the shortfall. If the

OLR PUBLIC ACT SUMMARY

reconciliation reveals an excess in annual energy cost savings, that excess remains with the agency or municipality but may not be used to cover potential energy cost savings shortages in subsequent contract years or savings shortages in prior years.

During the term of each contract, the provider must monitor the reductions in energy consumption and cost savings attributable to the cost savings measures installed under the contract. The provider must, at least annually, report to the agency or municipality documenting the performance of the cost savings measures. The report must comply with International Performance Measurement and Verification Protocols.

Modifications of Energy Savings Calculations

The provider and agency or municipality may agree to modify savings calculations based on any of the following:

1. subsequent material change to the baseline energy consumption identified at the beginning of the performance contract;
2. changes in the number of days in the utility billing cycle, the total square footage of the building, the facility's operational schedule, or its temperature;
3. material change in the weather or in the amount of equipment or lighting used at the facility; or
4. any other change that reasonably would be expected to modify energy use or energy costs.

Reporting Requirement and Use of Savings

Any agency or municipality participating in the standardized energy performance contract process that enters into an energy performance contract must report to OPM and DEEP the project's name and host, the investment on the project, and the expected energy savings when the contract is executed. It may direct the savings realized under the performance contract to contract payment and other required expenses and, when practicable, it may reinvest savings beyond that required for contract payment and other required expenses into additional energy saving measures.

§§ 124, 137, & 138 — GREEN CONNECTICUT LOAN GUARANTY PROGRAM

Program Requirements

Prior law required the Connecticut Health and Educational Facilities Authority (CHEFA) to establish the Green Connecticut Loan Guaranty Fund to help finance energy efficiency and renewable energy projects for individuals, non-profit organizations, and small businesses. The act transfers the responsibility for administering the program from CHEFA to the Clean Energy Finance and Investment Authority. The act also transfers the bond funding for this program from CHEFA to the new authority.

The act eliminates a requirement that CHEFA consult with OPM in

OLR PUBLIC ACT SUMMARY

identifying the types of projects that are eligible for the program and establishing priorities.

The act requires the Clean Energy Finance and Investment Authority, in consultation with CHEFA and ECMB to:

1. ensure that this program integrates with existing state energy efficiency and renewable energy programs;
2. establish program performance targets to ensure sufficient participation in the secondary financial markets and to coordinate with existing financing programs to enable efficiency improvements for at least 15% of state single-family homes by 2020;
3. enter into contracts with one or more entities to perform loan origination services; and
4. exercise other powers needed to properly administer the program.

Terms of Financial Assistance

The act requires the financial assistance to meet the following terms:

1. eligible energy conservation projects must meet cost-effectiveness standards adopted by the Clean Energy Finance and Investment Authority in consultation with ECMB and CHEFA;
2. loans must be at interest rates determined by the Clean Energy Finance and Investment Authority to be no higher than needed to have financial institutions participate in the program; and
3. the fee paid for an energy audit provided under the program may be added to the amount of the resulting loan and then reimbursed from the fund to the borrower.

§§ 125 & 126 — DISCLOSURE OF CONSUMPTION DATA

The act requires electric and gas companies, starting January 1, 2012, to maintain the energy consumption data of all typical nonresidential buildings they serve. They must make the data available to the public free of charge. They must maintain the data in a format that (1) is compatible for uploading to the U.S. Environmental Protection Agency's Energy Star portfolio manager (which allows consumers to compare their building's energy use to that of similar buildings) or similar system, for at least the most recent 36 months, and (2) preserves the customer's confidentiality.

Also starting January 1, 2012, the companies must provide aggregate town customer usage information that preserves the confidentiality of individual customers to any municipal legislative body that requests this information.

EFFECTIVE DATE: Upon passage

§ 127 — ELECTRIC COMPANY OWNERSHIP OF RENEWABLE GENERATION

Prior law generally barred electric companies from owning power generation facilities. The act allows an electric company, as well as the owner or developer of generation projects that do not pollute, to submit a proposal to DEEP to build,

OLR PUBLIC ACT SUMMARY

own, or operate up to an aggregate of 30 MW of generation capacity using class I renewable energy sources. The proposals must be submitted between July 1, 2011 and July 1, 2013. Each facility must be between one and five MW. The aggregate ownership by an electric company is capped at 10 MW, and they can enter into joint ownership agreements with private developers. DEEP must evaluate the proposals under its general rate-setting principles and may approve one or more proposals if it finds that the proposal serves ratepayers' long-term interests. DEEP (1) may not approve any proposal supported in any form of cross subsidization by entities affiliated with the electric company and (2) must give preference to proposals that make efficient use of existing sites and supply infrastructure. An electric company may not, under any circumstances, recover more than the full costs identified in a proposal, as approved by DEEP.

The company must use the power, capacity, and related products produced by the facility to meet the needs of its standard service and last resort customers (the latter serves large customers who do not choose a supplier). The amount of renewable energy produced from the facilities counts towards the electric company's class I renewable portfolio standard obligations.

DEEP must evaluate the approved proposals and report to the Energy and Technology Committee on whether proposals should be accepted beyond July 1, 2013.

The act permits the resale or other disposition of energy or associated RECs purchased by the electric company so long as it nets the cost of payments made to projects under the long-term contracts against the proceeds of the sale of energy or RECs, and the difference is credited or charged to distribution customers through a reconciling component of electric rates as determined by PURA that is nonbypassable when switching electric suppliers.

§ 128 – BUILDING PERMIT FEE WAIVER

The act allows municipalities to adopt ordinances exempting class I renewable energy projects from municipal building permit fees.

§ 129 — RENEWABLE PORTFOLIO STANDARD STUDY

The act requires DEEP to analyze (1) options for minimizing the cost to electric ratepayers of procuring renewable resources under the RPS and (2) the feasibility of increasing the RPS. The analysis must consider the benefits, costs, and impacts of expanding the definition of a class I renewable energy source to include hydropower and other technologies that do not use nuclear or fossil fuels.

By February 1, 2012, DEEP must report the results of such analysis to the governor and the Energy and Technology Committee.

§ 132 — FEES FOR ENERGY AUDITS

The act requires that each electric, gas, or heating fuel customer, regardless of heating source, be assessed the same fees, charges, co-pays, or other similar terms to access any audits administered by the Home Energy Solutions program. The

OLR PUBLIC ACT SUMMARY

costs of subsidizing audits for ratepayers whose primary source of heat is not electricity or natural gas may not exceed \$500,000 per year.

§ 133 — STUDY ON RATE-BASING EFFICIENCY COSTS

The act requires PURA to conduct a proceeding to analyze the costs and benefits of allowing an electric company to earn a rate of return, subject to rate-making principles, on its long-term investments in energy efficiency. It requires PURA to report the results of the proceeding to the Energy and Technology Committee by February 1, 2012.

§ 134 — POWER PLANT SAFETY STUDY

The act establishes a 16-member task force to study power plant safety. It must examine developing regulations for power plant safety, training protocols, audits, reporting requirements, qualifications and potential licensing requirements for a power plant inspector or operator, penalties for failing to comply with the requirements, and the best practices of other states. It must also evaluate which agency should be responsible for plant safety oversight and given access to facilities and records. It must cover plants being built and those in operation.

The task force consists of the following members:

1. two appointed by the House speaker;
2. two appointed by the Senate president pro tempore;
3. one each appointed by the House and Senate majority and minority leaders; and
4. the chairpersons and ranking members of the Energy and Technology and Public Safety committees.

Any of the members may be a legislator. All appointments must be made no later than July 31, 2011. Any vacancy must be filled by the appointing authority.

The House speaker and Senate president pro tempore must select the chairpersons of the task force from among its members. The chairpersons must schedule the first meeting of the task force, which can be no later than August 30, 2011.

The administrative staff of the two committees must serve as administrative staff of the task force.

By February 1, 2012, the task force must report its findings and recommendations to the Energy and Technology and Public Safety committees. The task force terminates when it submits its report or January 1, 2012, whichever is later.

§ 135 — HEATING SYSTEM CONVERSION PROGRAM

The act requires DEEP to establish, by October 1, 2011, a natural gas and heating oil conversion program to allow a gas or heating oil company to finance the conversion to gas or oil heat by potential residential customers who heat their homes with electricity. DEEP must adopt regulations to establish procedures and terms for the program. By January 1, 2012, and annually thereafter, it must report

OLR PUBLIC ACT SUMMARY

to the Energy and Technology and Environment committees on the program's progress.

§ 136 — CII RESPONSIBILITIES

The act eliminates the administration of the Clean Energy Fund from Connecticut Innovation, Inc.'s responsibilities.

§ 139 — ON-BILL FINANCING STUDY

The act requires DEEP, by January 1, 2012 and in consultation with utility companies, to analyze the potential of on-bill financing of renewable power and energy efficiency investments. DEEP must report its findings to the Energy and Technology Committee.

§ 140 — REPEALERS

The act repeals several obsolete energy statutes.

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