Senate

General Assembly

File No. 468

January Session, 2017

Substitute Senate Bill No. 106

Senate, April 6, 2017

The Committee on Energy and Technology reported through SEN. WINFIELD of the 10th Dist. and SEN. FORMICA of the 20th Dist., Chairpersons of the Committee on the part of the Senate, that the substitute bill ought to pass.

AN ACT CONCERNING THE DIVERSITY OF BASELOAD ENERGY SUPPLIES IN THE STATE AND ACHIEVING CONNECTICUT'S GREENHOUSE GAS EMISSIONS MANDATED LEVELS.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. (NEW) (*Effective from passage*) (a) In order to secure a long term supply of diverse cost-effective resources to provide more reliable electric service for the benefit of the state's electric ratepayers and to meet the state's energy and environmental goals and policies established in the Integrated Resources Plan, pursuant to section 16a-3a of the general statutes, the Comprehensive Energy Strategy, pursuant to section 16a-3d of the general statutes, section 22a-200a of the general statutes and the state-wide solid waste management plan developed pursuant to section 22a-241a of the general statutes, on or after October 1, 2017, the Commissioner of Energy and Environmental Protection, in consultation with the procurement manager identified in subsection (l) of section 16-2 of the general statutes, the Office of Consumer Counsel and the Attorney General, shall, on behalf of

Connecticut alone: (1) Issue one or more solicitations from providers of the following resources constructed on or after the date the commissioner issues the solicitation pursuant to this subdivision: (A) Class I renewable energy sources, as defined in section 16-1 of the general statutes, that emit no pollutants and have a nameplate capacity rating of twenty megawatts or more; (B) verifiable large-scale hydropower, as defined in section 16-1 of the general statutes, and any associated transmission; (C) Class I renewable energy resources that 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 per one hundred standard cubic feet; and (D) Class I anaerobic digestion facilities that are part of a provider response under subparagraph (B) of subdivision (2) of this subsection; and (2) issue one or more solicitations from providers of the following resources constructed before the date the commissioner issues the solicitation pursuant to this subdivision: (A) Nuclear power generating facilities that are fully relicensed to operate by the federal Nuclear Regulatory Commission by the effective date of this section and through 2029 or later; (B) trash-to-energy facilities that are registered Class II renewable energy sources, as defined in section 16-1 of the general statutes, provided such facilities (i) advance the state's recycling and waste diversion goals by acquiring and installing new or upgraded material recovery technology, and (ii) develop new Class I anaerobic digestion facilities or partner with existing Class I anaerobic digestion facilities to divert material recovered from the waste stream; and (C) Class I biomass facilities that went into service on or after December 1, 2013, and provide a waste stream management benefit to the state in accordance with the state-wide solid waste management plan developed pursuant to section 22a-241a of the general statutes. All such resources shall be delivered into the control area of the regional independent system operator, as defined in section 16-1 of the general statutes.

(b) The Commissioner of Energy and Environmental Protection, in consultation with the procurement manager identified in subsection (l)

of section 16-2 of the general statutes, the Office of Consumer Counsel and the Attorney General: (1) Shall evaluate project proposals received in response to any solicitation issued pursuant to subsection (a) of this section based on whether such proposal is in the best interest of ratepayers and whether the benefits of such proposal outweigh the costs to ratepayers, based on the following: (A) The delivered prices of such sources compared to the forecasted price of energy, as determined by the commissioner or his or her designee; (B) impacts on electric system operations and reliability; (C) the extent to which such proposal will contribute to: (i) The local sourcing requirement set by the regional independent system operator, as defined in section 16-1 of the general statutes; and (ii) the goals established in the state-wide solid waste management plan developed pursuant to section 22a-241a of the general statutes; and (D) fuel diversity; and (2) may evaluate project proposals received in response to any solicitation issued pursuant to subsection (a) of this section based on the forecasted price of capacity or environmental attributes, as determined by the commissioner or his or her designee.

(c) The commissioner may hire consultants with expertise in the quantitative modeling of electric markets and physical electric system modeling, as applicable, to assist in implementing this section, including, but not limited to, evaluating proposals submitted pursuant to this section. All reasonable costs, not to exceed two million dollars, associated with the commissioner's solicitation and review of proposals pursuant to this section shall be recoverable through the nonbypassable federally mandated congestion charge, as defined in subsection (a) of section 16-1 of the general statutes. Such costs shall be recoverable regardless of whether the commissioner selects any proposal pursuant to solicitations issued pursuant to this section.

(d) If the commissioner finds one or more proposals received pursuant to this section to be in the best interest of ratepayers, in accordance with the provisions of subsection (b) of this section, consistent with the requirements to reduce greenhouse gas emissions in accordance with section 22a-200a of the general statutes, and in

accordance with the policy goals outlined in the Comprehensive Energy Strategy, adopted pursuant to section 16a-3d of the general statutes, the commissioner may select one or more proposals, provided: (1) The benefits of each proposal exceeds the costs of such proposal; and (2) the total annual energy output of the proposals selected pursuant to this section, in the aggregate, shall not exceed eleven million one hundred thousand megawatt-hours of electricity, provided: (A) The total annual energy output of the proposals described in subparagraph (A) of subdivision (1) of subsection (a) of this section and subparagraph (C) of subdivision (1) of subsection (a) of this section selected pursuant to this section shall not exceed two hundred sixty-two thousand nine hundred fifty megawatt-hours of electricity; (B) the total annual energy output of the proposals described in subparagraph (B) of subdivision (1) of subsection (a) of this section selected pursuant to this section shall not exceed two million one hundred ninety-one thousand two hundred fifty megawatt-hours of electricity; (C) the total annual energy output of the proposals described in subparagraph (D) of subdivision (1) of subsection (a) of this section selected pursuant to this section shall not exceed eighty-seven thousand six hundred fifty megawatt-hours of electricity; (D) the total annual energy output of the proposals described in subparagraph (A) of subdivision (2) of subsection (a) of this section selected pursuant to this section shall not exceed eight million three hundred twenty-six thousand seven hundred fifty megawatt-hours of electricity; (E) the total annual energy output of the proposals described in subparagraph (B) of subdivision (2) of subsection (a) of this section selected pursuant to this section shall not exceed eighty-seven thousand six hundred fifty megawatt-hours of electricity; and (F) the total annual energy output of the proposals described in subparagraph (C) of subdivision (2) of subsection (a) of this section selected pursuant to this section shall not exceed eighty-seven thousand six hundred fifty megawatt-hours of electricity.

(e) The commissioner may, on behalf of all customers of electric distribution companies, direct the electric distribution companies, as defined in section 16-1 of the general statutes, to enter into agreements

for energy, capacity, any environmental attributes and any associated transmission, or any combination thereof, from proposals submitted pursuant to this section as follows: (1) For proposals pursuant to subdivision (1) of subsection (a) of this section and subparagraphs (B) and (C) of subdivision (2) of subsection (a) of this section, for a period not to exceed twenty years; and (2) for proposals pursuant to subparagraph (A) of subdivision (2) of subsection (a) of this section, for a period not to exceed five years.

(f) Any agreement described in subsection (e) of this section shall be subject to review and approval by the Public Utilities Regulatory Authority. Such review shall commence upon the filing of the signed power purchase agreement with the authority. The authority shall issue a decision on any such agreement not later than ninety days after such filing, except that if the commissioner delegates any authority to the electric distribution companies pursuant to subsection (i) of this section, the authority shall issue a decision on such agreement not later than one hundred twenty days after such filing. In the event the authority does not issue a decision within ninety days or one hundred twenty days, as applicable, after such agreement is filed with the authority, the agreement shall be deemed approved. The net costs of any such agreement, including costs incurred by the electric distribution companies under the agreement and reasonable costs incurred by the electric distribution companies in connection with the agreement, shall be recovered on a timely basis through a fully reconciling component of electric rates for all customers of electric distribution companies. Any net revenues from the sale of products purchased in accordance with any agreement entered into pursuant to this section shall be credited on a timely basis to customers through the same fully reconciling rate component for all customers of the contracting electric distribution company.

(g) With regard to the energy procured by an electric distribution company pursuant to subsection (e) of this section, such electric distribution company may: (1) Sell such energy into the relevant market; or (2) retain such energy to meet the standard service

requirements of section 16-244c of the general statutes. In determining whether to sell or retain such energy, the company shall select the option that is in the best interest of such company's ratepayers.

(h) Any certificates issued by the New England Power Pool Generation Information System for any Class I renewable energy source or Class II renewable energy source procured by an electric distribution company pursuant to subsection (e) of this section may be: (1) Sold into the New England Power Pool Generation Information System renewable energy credit market to be used by any electric supplier or electric distribution company to meet the requirements of section 16-245a of the general statutes, as amended by this act, provided any revenues from such sale are credited to electric distribution company customers as described in this subsection; or (2) retained by the electric distribution company to meet the requirements of section 16-245a of the general statutes, as amended by this act. In determining whether to sell or retain such certificates, the electric distribution company shall select the option that is in the best interest of such company's ratepayers.

(i) The commissioner may, at his or her discretion, delegate his or her authority in subsections (b) to (h), inclusive, of this section to the electric distribution companies, provided any necessary procedures are put in place, in accordance with the provisions of this subsection, to avoid any potential conflicts of interest. The commissioner may not delegate his or her authority in subsection (a) of this section. If the commissioner delegates his or her authority pursuant to this subsection, the commissioner may revoke such delegation at any time. If the commissioner delegates his or her authority pursuant to this subsection, the commissioner shall provide notice of such delegation at the time the commissioner issues the solicitation pursuant to subsection (a) of this section. Such procedures to avoid any potential conflicts of interest shall include, but not be limited to, the following: (1) Each electric distribution company shall notify the commissioner and provide public notice prior to the end of the solicitation period if such electric distribution company, such electric distribution

company's parent company, any subsidiary of such electric distribution company or any entity in which such electric distribution company has a financial interest intends to respond to the solicitation pursuant to this section. The commissioner shall not delegate his or her authority to: (A) Any electric distribution company that responds to the solicitation but did not notify the commissioner pursuant to this subsection; or (B) any electric distribution company that cannot demonstrate that it has complied with the provisions of this subsection, if such demonstration is requested by the commissioner; (2) each electric distribution company that intends to respond to the solicitation pursuant to this section shall: (A) Establish a group of individuals responsible for developing a response to the solicitation issued pursuant to subsection (a) of this section, which shall be known as the bid team; and (B) establish a group of individuals responsible for evaluating and selecting proposals pursuant to subsections (b) to (h), inclusive, of this section, which shall be known as the evaluation team. No individual may be a member of both the bid team and the evaluation team; (3) each electric distribution company that intends to respond to the solicitation pursuant to this section shall establish and maintain a screen or firewall between its bid team and evaluation team with respect to information or communications relating to the solicitation and potential responses pursuant to this section. Each electric distribution company shall ensure that no substantive or material internal or external communications, in any form, occur between any member of its bid team and any member of its evaluation team about such solicitation, the solicitation process, or any potential responses to such solicitation; (4) each electric distribution company that intends to respond to the solicitation pursuant to this section shall ensure that all activity conducted pursuant to subsection (a) of this section is conducted solely by the bid team. Such electric distribution company shall ensure that no member of the bid team consults, advises or communicates directly or indirectly with a member of the evaluation team about the solicitation or any response to the solicitation during the preparation or submission of the response or the evaluation process; (5) each electric distribution company that intends

to respond to the solicitation pursuant to this section shall ensure that the evaluation team responsibilities do not involve any communication, advice or consultation with the bid team about the solicitation or any response to the solicitation. Such electric distribution company shall ensure that no member of the evaluation team consults, advises or communicates directly or indirectly with a member of the bid team about the solicitation or any response to the solicitation during the preparation or submission of such response or the evaluation process; (6) each electric distribution company that intends to respond to the solicitation pursuant to this section shall ensure that the evaluation team does not open or review any submitted responses until after the deadline for submitting responses to the solicitation pursuant to this section; and (7) each electric distribution company delegated authority pursuant to this section shall direct all questions regarding submitted responses to the commissioner and shall not contact any individual or entity that responded to the solicitation pursuant to this section. Only the commissioner may contact any individual or entity that responds to such a solicitation.

Sec. 2. Subsection (a) of section 16-245a of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2017*):

(a) An electric supplier and an electric distribution company providing standard service or supplier of last resort service, pursuant to section 16-244c, shall demonstrate:

(1) On and after January 1, 2006, that not less than two per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(2) On and after January 1, 2007, not less than three and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources

and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(3) On and after January 1, 2008, not less than five per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(4) On and after January 1, 2009, not less than six per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(5) On and after January 1, 2010, not less than seven per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(6) On and after January 1, 2011, not less than eight per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(7) On and after January 1, 2012, not less than nine per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(8) On and after January 1, 2013, not less than ten per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from

Class I or Class II renewable energy sources;

(9) On and after January 1, 2014, not less than eleven per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(10) On and after January 1, 2015, not less than twelve and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(11) On and after January 1, 2016, not less than fourteen per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(12) On and after January 1, 2017, not less than fifteen and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(13) On and after January 1, 2018, not less than seventeen per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(14) On and after January 1, 2019, not less than nineteen and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(15) On and after January 1, 2020, not less than twenty per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources; **[**.**]**

(16) On and after January 1, 2021, not less than twenty-one per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(17) On and after January 1, 2022, not less than twenty-two per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(18) On and after January 1, 2023, not less than twenty-three per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(19) On and after January 1, 2024, not less than twenty-four per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(20) On and after January 1, 2025, not less than twenty-five per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(21) On and after January 1, 2026, not less than twenty-six per cent

of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(22) On and after January 1, 2027, not less than twenty-seven per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(23) On and after January 1, 2028, not less than twenty-eight per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(24) On and after January 1, 2029, not less than twenty-nine per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(25) On and after January 1, 2030, not less than thirty per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(26) On and after January 1, 2031, not less than thirty-one per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(27) On and after January 1, 2032, not less than thirty-two per cent of the total output or services of any such supplier or distribution

company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(28) On and after January 1, 2033, not less than thirty-three per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(29) On and after January 1, 2034, not less than thirty-four per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(30) On and after January 1, 2035, not less than thirty-five per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(31) On and after January 1, 2036, not less than thirty-six per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(32) On and after January 1, 2037, not less than thirty-seven per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(33) On and after January 1, 2038, not less than thirty-eight per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources

and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(34) On and after January 1, 2039, not less than thirty-nine per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(35) On and after January 1, 2040, not less than forty per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources.

Sec. 3. Subsection (c) of section 16-244r of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2017*):

(c) (1) The aggregate procurement of renewable energy credits by electric distribution companies pursuant to this section shall (A) be eight million dollars in the first year, and (B) increase by an additional eight million dollars per year in years two to four, inclusive.

(2) After year four, the authority shall review contracts entered into pursuant to this section and if the cost of the technologies included in such contracts have been reduced, the authority shall seek to enter new contracts for the total of six years.

(3) After year six, the authority shall seek to enter new contracts for the total of seven years.

(A) The aggregate procurement of renewable energy credits by electric distribution companies pursuant to this subdivision shall (i) increase by an additional eight million dollars per year in years five, **[**and**]** six and seven, (ii) be **[**forty-eight**]** fifty-six million dollars in years **[**seven**]** eight to fifteen, inclusive, and (iii) decline by eight million dollars per year in years sixteen to **[**twenty-one**]** twenty-two, inclusive,

provided any money not allocated in any given year may roll into the next year's available funds.

(B) For the sixth and seventh year [solicitation] solicitations, each electric distribution company shall solicit and file with the Public Utilities Regulatory Authority for its approval one or more long-term contracts with owners or developers of Class I generation projects that: (i) Emit no pollutants and that are less than one thousand kilowatts in size, located on the customer side of the revenue meter and serve the distribution system of the electric distribution company, provided such contracts do not exceed fifty per cent of the dollar amount established for [year] years six and seven under subparagraph (A) of this subdivision; and (ii) are less than two megawatts in size, located on the customer side of the revenue meter, serve the distribution system of the electric distribution company, and use Class I technologies that have no 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 per one hundred standard cubic feet, provided such contracts do not exceed fifty per cent of the dollar amount established for [year] years six and seven under subparagraph (A) of this subdivision. The authority may give a preference to contracts for technologies manufactured, researched or developed in the state.

[(3)] (4) The production of a megawatt hour of electricity from a Class I renewable energy source first placed in service on or after July 1, 2011, shall create one renewable energy credit. A renewable energy credit shall have an effective life covering the year in which the credit was created and the following calendar year. The obligation to purchase renewable energy credits shall be apportioned to electric distribution companies based on their respective distribution system loads at the commencement of the procurement period, as determined by the authority. For contracts entered into in calendar year 2012, an electric distribution company shall not be required to enter into a contract that provides a payment of more than three hundred fifty dollars, per renewable energy credit in any year over the term of the

contract. For contracts entered into in calendar years 2013 to 2017, inclusive, at least ninety days before each annual electric distribution company solicitation, the Public Utilities Regulatory Authority may lower the renewable energy credit price cap specified in this subsection by three to seven per cent annually, during each of the six years of the program over the term of the contract. For contracts entered into in calendar year 2018, at least ninety days before the electric distribution company solicitation, the Public Utilities Regulatory Authority may lower the renewable energy credit price cap specified in this subsection by sixty-four per cent, during year seven of the program over the term of the contract. In the course of lowering such price cap applicable to each annual solicitation, the authority shall, after notice and opportunity for public comment, consider such factors as the actual bid results from the most recent electric distribution company solicitation and reasonably foreseeable reductions in the cost of eligible technologies.

Sec. 4. (NEW) (*Effective October 1, 2017*) An electric distribution company may submit to the Public Utilities Regulatory Authority for approval one or more plans to acquire new fuel cell electricity generation that began operation on or after October 1, 2017. Any such plan shall utilize a competitive process for the purpose of providing distribution system benefits, including, but not limited to, avoiding or deferring distribution capacity upgrades, and enhancing distribution system reliability, including, but not limited to, voltage or frequency improvements. Any such plan shall give preference to proposals that make efficient use of existing sites and supply infrastructure. In the event that the authority approves such plan, an electric distribution company may submit to the authority (1) proposed power purchase agreements negotiated with persons to build, own and operate new fuel cell generation, or (2) proposals to provide financial incentives for the installation of combined heat and power systems powered by fuel cells, provided any such incentives shall be consistent with the Comprehensive Energy Strategy pursuant to section 16a-3d of the general statutes. The facilities built pursuant to said power purchase agreements and that receive said financial incentives under this section

shall not exceed a total nameplate capacity rating of ten megawatts in the aggregate. The authority shall evaluate any proposal submitted pursuant to this section in a manner that is consistent with the principles of sections 16-19 and 16-19e of the general statutes and may approve one or more proposals if it finds that such proposal (A) was developed in a manner that is consistent with the acquisition plan approved by the authority, (B) serves the long-term interests of ratepayers, and (C) cost-effectively avoids or defers distribution system costs. The costs incurred by an electric distribution company under this section shall be recovered from all customers of the contracting electric distribution company through a fully reconciling component of electric rates for all customers of electric distribution companies, until the electric distribution company's next rate case, at which time such costs and investments shall be recoverable through base distribution rates. Nothing in this section shall preclude the resale or other disposition of any energy products, capacity and associated environmental attributes purchased by the electric distribution company, provided the electric distribution company shall net the cost of payments made to projects under any long-term contracts entered into pursuant to subdivision (1) of this section against the proceeds of the sale of any energy products, capacity and environmental attributes and the difference shall be credited or charged to distribution customers through a reconciling component of electric rates, as determined by the authority, that is nonbypassable when switching electric suppliers. The electric distribution company may use any energy products, capacity and environmental attributes produced by such facility to meet the needs of customers served pursuant to section 16-244c of the general statutes. Notwithstanding the provisions of subdivision (1) of subsection (h) of section 16-244c of the general statutes, certificates issued by the New England Power Pool Generation Information System for any Class I renewable energy source acquired pursuant to this section may be retained by the electric distribution company to meet the requirements of section 16-245a of the general statutes, as amended by this act.

This act shall take effect as follows and shall amend the following sections:		
Section 1	*from passage*	New section
Sec. 2	*October 1, 2017*	16-245a(a)
Sec. 3	*July 1, 2017*	16-244r(c)
Sec. 4	*October 1, 2017*	New section

Statement of Legislative Commissioners:
In Section 1(a), "no emissions of no more" was changed to "emissions of no more", for clarity and in Subsec. (e), "as defined in section 16-1 of the general statutes," was added after "electric distribution companies", for purposes of clarity.

ET *Joint Favorable Subst.*

OFA Fiscal Note

State Impact: See Below

Municipal Impact: See Below

Explanation

The bill (1) requires the state to solicit proposals for certain types of energy, (2) extends certain programs related to renewable energy credits, and (3) allows the electric distribution companies (EDC's, i.e., Eversource and United Illuminating) to purchase power from, and provide incentives for, certain fuel cell systems.

The bill results in a cost of up to $2.0 million to the Department of Energy and Environmental Protection (DEEP) as it allows DEEP to hire consultants with expertise in quantitative modeling of electric markets and physical electric system modeling to assist in evaluating certain proposals. The costs for consultants would be recovered by a reconciling component of electric rates, as determined by PURA and as required by the bill. These costs would increase electric rates, including the rates the state and municipalities pay. Any resultant costs to the state and municipalities would be negligible.

Additionally, the bill allows DEEP to select proposals that are in the best interest of ratepayers. The bill subjects any resulting agreement to the Public Utilities and Regulatory Authority's (PURA) review and approval.

The Out Years

The annualized ongoing fiscal impact identified above would

continue into the future subject to the cost of electricity and consultants.

OLR Bill Analysis

sSB 106

AN ACT CONCERNING THE DIVERSITY OF BASELOAD ENERGY SUPPLIES IN THE STATE AND ACHIEVING CONNECTICUT'S GREENHOUSE GAS EMISSIONS MANDATED LEVELS.

SUMMARY

This bill (1) requires the state to solicit proposals for certain types of energy, (2) extends certain programs related to renewable energy credits (RECs), and (3) allows the electric distribution companies (EDCs, i.e., Eversource and United Illuminating) to purchase power from and provide incentives for certain fuel cell systems.

Starting October 1, 2017, the bill requires the commissioner of the Department of Energy and Environmental Protection (DEEP), in consultation with certain other state officials, to solicit proposals from certain types of power generating facilities to sell power, capacity, or environmental attributes (i.e., RECs). The commissioner must conduct two separate solicitations: one for proposals from certain renewable energy facilities to be built after the solicitation and one for proposals from existing nuclear power plants, trash-to-energy facilities, and Class I biomass facilities.

The bill specifies the factors the commissioner and officials must use to evaluate the proposals, including whether they are in the ratepayers' best interests, how they will impact electric system operations and reliability, and whether their benefits outweigh their costs. If the commissioner finds that a proposal meets certain criteria, he may direct the EDCs to enter into an agreement under the proposal to purchase energy, capacity, RECs, or any associated transmission. Under certain conditions, the commissioner may also delegate his authority to review and select proposals to the EDCs.

Under the bill, the agreements are subject to review and approval by the Public Utilities Regulatory Authority (PURA). Agreements with nuclear facilities cannot exceed five years and the agreements with other types of energy facilities cannot exceed 20 years. The total annual energy output under them cannot exceed 11.1 million megawatt hours (MWh) with additional caps for each particular energy source (e.g., an agreement with a nuclear facility is capped at 8.3 million MWh).

The bill allows the EDCs to sell or keep the power or RECs they purchase under the agreements and requires them to recover their net costs from entering into the agreements through a fully reconciling component of electric rates.

Starting in 2021, the bill annually increases the state's Renewable Portfolio Standard (RPS) requirement for Class I renewable energy sources (e.g., solar and wind) by one percent, until it reaches 40% in 2040. In general, the RPS requires a portion of the power provided by EDCs and retail electric suppliers to come from certain renewable and other clean energy resources.

The bill also extends, by one year, a program that requires the EDCs to annually purchase $8 million in RECs under 15-year contracts with certain clean energy generation projects.

Lastly, the bill allows the EDCs, under certain conditions, to (1) enter into power purchase agreements (PPAs) negotiated with others to build, own, and operate new fuel cell generation and (2) provide financial incentives to install fuel cell-powered combined heat and power systems. The bill establishes an approval process for the projects and limits their total generating capacity to 10 megawatts in the aggregate. The net costs EDCs incur for the projects must be recovered from their ratepayers.

EFFECTIVE DATE: October 1, 2017, except the provision (1) requiring the DEEP commissioner to solicit proposals from nuclear and other types of power generating facilities is effective upon passage

and (2) extending the program that requires the EDCs to annually contract for $8 million in RECs is effective July 1, 2017.

DEEP SOLICITATIONS OF PROPOSALS

Solicitation of Proposals

Beginning October 1, 2017, the bill requires the DEEP commissioner to issue two separate solicitations to secure a long-term supply of diverse cost effective resources to provide more reliable electric service for the benefit of the state's electric ratepayers and to meet the state's energy and environmental goals and polices established in its Integrated Resources Plan, Comprehensive Energy Strategy, greenhouse gas emission reduction law, and state-wide solid waste management plan. He must issue the solicitations on behalf of the state in consultation with the state's electric procurement manager, the Office of Consumer Counsel, and attorney general. All resources must be delivered into the regional independent system operator's (ISO-NE's) control area (i.e., New England's electric grid).

Proposals from New Facilities. The bill requires the commissioner to issue at least one solicitation for proposals from providers of the following resources to be built after the solicitation is issued:

1. Class I renewable energy sources that emit no pollutants (e.g., wind or solar power), and can generate at least 20 megawatts (MW);

2. verifiable large-scale hydropower and any associated transmission that (a) is located within the New England electric grid or an area abutting its northern boundary, (b) delivers power to the New England grid, and (c) can generate at least 30 MW;

3. Class I renewable energy sources that emit no more than 0.07 pounds per MWh of nitrogen oxides, 0.10 pounds per MWh of carbon monoxide, 0.02 pounds per MWh of volatile organic compounds, and one grain (presumably of particulate matter) per 100 standard cubic feet; and

4. Class I anaerobic digestion facilities that are part of a response under the solicitation for proposals from existing facilities.

Proposals from Existing Facilities. The bill also requires the commissioner to issue at least one solicitation for proposals from providers of the following resources built before the solicitation is issued:

1. nuclear power generating facilities that are fully relicensed to operate by the federal Nuclear Regulatory Commission when the bill becomes effective through at least 2029;

2. trash-to-energy facilities that are registered Class II renewable energy sources that (a) advance the state's recycling and waste diversion goals by acquiring and installing new or upgraded material recovery technology and (b) develop new Class I anaerobic digestion facilities, or partner with existing Class I anaerobic digestion facilities, to divert material recovered from the waste stream; and

3. Class I biomass facilities that (a) went into service on or after December 1, 2013 and (b) provide a waste stream management benefit to the state under the state-wide solid waste management plan.

Proposal Evaluation

The bill requires the commissioner, in consultation with the same officials, to evaluate a proposal received in response to the solicitations based on whether it is in the ratepayers' best interest and its benefits outweigh it costs to ratepayers, based on the following factors:

1. the energy source's delivered price compared to the forecasted price of energy, as determined by the commissioner or his designee;

2. the proposal's impact on electric system operations and reliability;

3. the extent to which the proposal will contribute to (a) ISO-NE's local sourcing requirement and (b) the goals established in the state-wide solid waste management plan; and

4. fuel diversity.

The commissioner and officials may also evaluate the proposals based on the forecasted price of capacity or RECs, as determined by the commissioner or his designee.

Consultants and Cost Recovery

The bill allows the commissioner to hire consultants with expertise in quantitative modeling of electric markets and physical electric system modeling, as applicable, to assist in implementing the bill, including evaluating the proposals. The reasonable costs, up to $2 million, associated with the commissioner's solicitation and review of proposals must be recoverable through the non-bypassable federally mandated congestion charge on electric bills (the bill does not specify who must determine what costs are reasonable or whether the subsequent charges must be approved by PURA). The costs must be recoverable regardless of whether the commissioner selects any proposals.

Proposal Selection and Caps

The bill allows the commissioner to select one or more proposals if he finds that a proposal's benefits exceed its costs and that it is (1) in the ratepayers' best interest, (2) consistent with the state's requirements to reduce greenhouse gas emissions, and (3) in accordance with the Comprehensive Energy Strategy's policy goals.

Under the bill, the total annual energy output of all selected proposals cannot exceed 11.1 million MWh of electricity. The total annual energy output for each type of energy source is further capped as shown in Table 1.

Table 1: Annual Energy Output Caps

Energy Source	Annual Cap
New Class I renewable energy sources that emit no pollutants and have a nameplate capacity of at least 20 MW and new low emission Class I renewable energy sources	262, 950 MWh
New verifiable large-scale hydropower and associated transmission	2,191,250 MWh
New Class I anaerobic digestion facilities that are part of proposals from existing trash-to-energy facilities	87,650 MWh
Existing nuclear power facilities licensed to operate through at least 2029	8,326,750 MWh
Existing Class II trash-to-energy facilities that (a) acquire and install new or upgraded material recovery technology and (b) develop or partner with new Class I anaerobic digestion facilities	87,650 MWh
Existing Class I biomass facilities that went into service on or after December 1, 2013 and provide a waste stream management benefit to the state	87,650 MWh

EDC Agreements & PURA Approval

The bill allows the commissioner, on behalf of EDC customers, to direct the EDCs to enter into agreements to purchase energy, capacity, RECs, and any associated transmission, or any combination of them, under an approved proposal. Agreements with nuclear facilities cannot have a term of more than five years. Agreements with the other facility types cannot have a term of more than 20 years.

Under the bill, the agreements must be subject to PURA's review and approval. The review must start when a signed PPA is filed with PURA and PURA must issue a decision on it within 90 days (presumably, these deadlines also apply to agreements to purchase capacity or RECs). However, if the commissioner delegates any authority to an EDC (see below), PURA has 120 days to issue a decision. If it does not issue a timely decision, the agreement is

deemed approved.

EDC Cost Recovery

The bill requires an EDC agreement's net costs, including the costs an EDC incurs under the agreement and its reasonable costs incurred in connection with the agreement, to be recovered on a timely basis through a fully reconciling component of electric rates for all EDC customers. Any net revenue from the sale of products purchased under an agreement must be credited to customers on a timely basis through the same fully reconciling rate component.

EDC Use of Power or RECs

If an EDC procures energy under an agreement, the bill allows it to sell the energy in the relevant market or use it as the power it provides when a customer chooses not to buy power from a retail electric supplier (e.g., standard service.) In determining whether to sell or use the power, the EDC must choose the option that is in its ratepayers' best interest.

If an EDC procures RECs under an agreement, the bill allows it to (1) sell them into the New England Power Pool Generation Information System REC market to be used by any electric supplier or EDC to meet its RPS requirements or (2) keep them to meet its own RPS requirement. If an EDC sells its RECs, any revenues from the sale must be credited to its customers. In deciding whether to sell or keep the RECs, the EDC must choose the option that is in its ratepayers' best interest.

DEEP Delegation to EDCs

The bill allows the commissioner, at his discretion, to delegate his various authorities under the bill to the EDCs, except for his authority to issue solicitations. To do so, the commissioner must provide notice of the delegation when he issues the solicitation and put certain procedures in place to avoid any potential conflicts of interest. The commissioner may revoke any authority he delegates at any time.

Conflict of Interest Procedures. If the commissioner delegates

authority to the EDCs, the bill requires each EDC to notify the commissioner and provide public notice before the end of the solicitation period if it, its parent company or subsidiaries, or any entity in which it has a financial interest intends to respond to the solicitation. The commissioner cannot delegate his authority to an EDC that (1) responds to the solicitation but did not notify the commissioner as required or (2) cannot show that it has complied with the bill's conflict of interest provisions, if the commissioner requests it.

If the commissioner delegates authority to the EDCs, each EDC that intends to respond to a solicitation must:

1. establish (a) a "bid team" responsible for developing a proposal and (b) an "evaluation team" responsible for evaluating and selecting proposals under the bill (no one can be a member of both teams);

2. establish and maintain a screen or firewall between its bid team and evaluation team with respect to information or communications related to the solicitation and potential responses, ensuring that no substantive or material internal or external communications, in any form, occur between any members of its bid team and evaluation team about the solicitation, the solicitation process, or any potential responses;

3. ensure that (a) all activity conducted to respond to a solicitation is conducted solely by bid team members and (b) no bid team member consults, advises, or communicates directly or indirectly with an evaluation team member about the solicitation or any response to it during the preparation or submission of the response or the evaluation process;

4. ensure that (a) the evaluation team's responsibilities do not involve any communication, advice, or consultation with the bid team about the solicitation or any response to it and (b) no evaluation team member consults, advises, or communicates directly or indirectly with a bid team member about the

solicitation or any response to it during the preparation or submission of the response or the evaluation process; and

5. ensure that the evaluation team does not open or review any submitted responses until after the deadline for submitting them has passed.

Each EDC to whom the commissioner delegates authority must direct all questions about submitted responses to the commissioner and must not contact any person or entity that responded to the solicitation. Only the commissioner may contact a person or entity that responds to a solicitation.

RENEWABLE PORTFOLIO STANDARD INCREASE

The RPS law requires the EDCs and retail electric suppliers to procure an increasing portion of their power from certain renewable and other clean energy resources (they can also meet the requirement by buying RECs). For 2017, at least 15.5% of their power must come from Class I renewable energy sources and in 2020, the last year of annual increases required under current law, at least 20% of their power must come from these sources. Starting on January 1, 2021, the bill increases the Class I RPS requirement by one percent at the start of each year until it reaches 40% in 2040. The bill does not change the law's requirement for an additional 3% of power to be from Class I or Class II sources.

REC PROGRAM EXTENSION

Beginning in January 2012, the law required each EDC to annually enter into 15-year contracts to procure $8 million in RECs from certain clean energy generation projects. Under current law, this annual contracting requirement lasts for six years (through 2017). The bill extends the requirement for an additional seventh year. As required during each of the program's previous six years, in year seven the EDCs will have to enter into a 15-year contract to procure $8 million of RECs.

As under the law's requirement for year six, in year seven the EDCs

may procure (1) up to $4 million in RECs from Class I generation projects that are less than 1 MW in size and emit no pollutants and (2) up to $4 million in RECs from Class I technologies that are less than 2 MW in size and 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. All projects must also (1) be on the customer's side of the meter and (2) serve the EDC's distribution system.

When the program began in 2012, the law established a $350 price cap per REC and allowed PURA to lower the cap by 3% to 7% annually in subsequent years. For year seven, the bill allows PURA to lower the price cap by 64% (to $126). As under current law, 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.

EDC FUEL CELL PROJECTS

EDC Fuel Cell Plans

The bill allows the EDCs to submit to PURA one or more plans to acquire new fuel cell electricity generation that begins operating on or after October 1, 2017. The plans must use a competitive process to provide distribution system benefits, including avoiding or deferring distribution capacity upgrades, and enhancing distribution system reliability, including voltage or frequency improvements. They must also give preference to proposals that efficiently use existing sites and supply infrastructure. (The bill does not specify a timeline or procedure for PURA to review and approve the plans.)

Fuel Cell Proposals

Once PURA approves a plan, the bill allows an EDC to submit (1) proposed PPAs negotiated with others to build, own, and operate new fuel cell generation or (2) proposals to provide financial incentives to

install fuel cell-powered combined heat and power systems consistent with the state's Comprehensive Energy Strategy. The projects' total generating capacity cannot exceed 10 megawatts in the aggregate.

PURA must evaluate the proposals in a way consistent with its statutory principles for regulating utilities and setting rates. It may approve one or more proposals if it finds that they (1) were developed in a way that was consistent with the PURA-approved acquisition plan, (2) serve ratepayers' long-term interests, and (3) cost effectively avoid or defer distribution system costs.

Cost Recovery

The bill requires the costs an EDC incurs under the approved plan and proposals to be recovered through a fully reconciling rate component for all EDC customers, until the EDC's next rate case, when the costs and investments must be recovered through the company's base distribution rates.

The bill allows an EDC to resell or dispose of any energy products, capacity, and RECs it purchases (presumably under an approved proposal). However, if it does so, it must net the proceeds from the sale or disposal against the costs of payments made to projects under any long-term contracts entered into under the bill's PPA provision. (It is unclear whether the requirement to net proceeds against costs would also apply to financial incentives.) The difference must be credited or charged to the EDC's customers through a reconciling rate component, as determined by PURA, which cannot be bypassed when switching electric suppliers.

The bill also allows an EDC to use any energy products, capacity, and RECs produced by a facility (presumably under an approved proposal) to meet the needs of its standard service customers. An EDC may also keep any RECs issued by the New England Power Pool Generation Information System for any Class I renewable energy source acquired under the bill to meet its RPS requirements.

BACKGROUND

Related Bills

HB 7036, reported favorably by the Energy and Technology Committee, allows EDCs to (1) build, own, and operate new fuel cell generation; (2) enter into PPAs negotiated with people to build, own, and operate new fuel cell generation; and (3) provide financial incentives for installing fuel cell-powered combined heat and power systems.

HB 7104, reported favorably by the Energy and Technology Committee, eliminates EDCs' and electric suppliers' ability to make up a deficiency in meeting the RPS in one year in the first three months of the next year.

COMMITTEE ACTION

Energy and Technology Committee

Joint Favorable Substitute
Yea 17 Nay 7 (03/21/2017)