The Commonwealth of Massachusetts

In the Year Two Thousand Fourteen

SENATE, Thursday, June 19, 2014

The committee on Ways and Means, to whom was referred the Senate Bill relative to credit for thermal energy generated with renewable fuels (Senate, No. 1970), reports, recommending that the same ought to pass with an amendment substituting a new draft with the same title (Senate, No. 2214).

For the committee, Stephen M. Brewer

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In the Year Two Thousand Fourteen

An Act relative to credit for thermal energy generated with renewable fuels.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1	SECTION 1. Section 3 of chapter 25A of the General Laws, as appearing in the 2012
2	Official Edition, is hereby amended by inserting after the definition of "State Agency" the
3	following definition:-
4	"Useful thermal energy", energy in the form of direct heat, steam, hot water or other
5	thermal form that is used in production and beneficial measures for heating, cooling, humidity
6	control, process use or other valid thermal end use energy requirements and for which fuel or
7	electricity would otherwise be consumed.
8	SECTION 2. Section $11F\frac{1}{2}$ of said chapter 25A is hereby amended by striking out
9	subsections (a) and (b), as so appearing, and inserting in place thereof the following 2
10	subsections:-
11	(a) The department shall establish an alternative energy portfolio standard for all retail
12	electricity suppliers selling electricity to end-use customers in the commonwealth. Every retail
13	electric supplier providing service under contracts executed or extended on or after January 1,

14 2009 shall provide a minimum percentage of kilowatt-hour sales, as determined by the 15 department, to end-use customers in the commonwealth from alternative energy generating 16 sources and the department shall annually thereafter determine the minimum percentage of 17 kilowatt-hour sales to end-use customers in the commonwealth which shall be derived from 18 alternative energy generating sources. For the purposes of this section, "alternative energy 19 generating source" shall mean a source which generates energy using any of the following: (i) 20 combined heat and power; (ii) flywheel energy storage; (iii) energy efficient steam technology; 21 (iv) any facility that generates useful thermal energy using sunlight, biomass, biogas, including 22 renewable natural gas that is introduced into the natural gas distribution system, liquid biofuel or 23 naturally occurring temperature differences in ground, air or water, whereby 1 megawatt-hour of 24 alternative energy credit shall be earned for every 3,412,000 British thermal units of net useful 25 thermal energy produced and verified through an on-site utility grade meter or other means 26 satisfactory to the department; provided, however, that facilities using biomass fuel shall be low 27 emission, use efficient energy conversion technologies and fuel that is produced by means of 28 sustainable forestry practices; or (v) any other alternative energy technology approved by the 29 department under an administrative proceeding conducted under chapter 30A. The following 30 technologies and fuels shall not be considered alternative energy supplies: (A) coal; (B) 31 petroleum coke; (C) oil; (D) natural gas, except when used in combined heat and power or as a 32 biogas generating useful thermal energy; (E) construction and demolition debris, including but 33 not limited to chemically treated wood; and (F) nuclear power.

(b) The department shall set: (i) emission performance standards that are protective of
public health, including standards for eligible biomass, biogas and liquid biofuel technologies
that limit eligibility only to best-in-class commercially-feasible technologies, inclusive of energy

37 conversion and emissions controls, with regard to reducing emissions of particulate matter sized 38 2.5 microns or less and carbon monoxide and other air pollutants; (ii) for eligible biomass, 39 biogas and liquid biofuel technologies, a requirement of 50 per cent reduction in life-cycle 40 greenhouse gas emissions compared to a high efficiency unit utilizing the fuel that is being 41 displaced or, for a new load, a high-efficiency natural gas unit, if natural gas is available at 42 reasonable cost to the site or otherwise the fuel that is most likely to be utilized; (iii) for eligible 43 biomass, biogas and liquid biofuel technologies, requirements for thermal storage or other means 44 to minimize any significant deterioration of efficiency or emissions due to boiler cycling, if 45 feasible; (iv) for eligible biomass, biogas and liquid bio-fuel technologies, fuel conversion 46 efficiency performance standards achievable by best-in-class commercially-feasible 47 technologies; and (v) in consultation with the department of conservation and recreation, for 48 forest-derived biomass, requirements that fuel shall be provided by means of sustainable forestry 49 practices; provided, however, that the department shall adopt any existing or new biomass fuel 50 sustainability standards if deemed appropriate by the department after a public comment process. 51 At least once every 2 years, the department shall review and update all standards for new 52 alternative energy generating sources to strengthen them, as appropriate, as technology 53 improvements occur.

54 SECTION 3. Said section 11F¹/20f said chapter 25A, as so appearing, is hereby further 55 amended by adding the following 2 subsections:-

(e) Notwithstanding the determination that 1 alternative energy credit is to be earned per
3,412,000 British thermal units in subsection (a), the department may provide that for certain
nonemitting renewable thermal technologies, an alternative energy credit shall be earned for less

59	than 3,412,000	British thermal	units of net	useful thermal	energy so as to	o stimulate the
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60 development of new on-site renewable thermal energy generating sources.

61	(f) The department shall consult with the department of environmental protection and
62	department of public health in developing the emissions performance standards found in clause
63	(i) of subsection (b) and with the department of environmental protection in developing the
64	emissions reductions found in clause (ii) of said subsection (b).

65 SECTION 4. This act shall take effect on January 1, 2015.