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SENATE . . . . . No. 1970

The Commonwealth of Massachusetts

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:

SECTION 1. Section 3 of chapter 25A of the General Laws, as appearing in the 2010 Official Edition, is hereby amended by inserting after the definition "State Agency" the following new definition:-

"Useful thermal energy", energy in the form of direct heat, steam, hot water, or other thermal form that is used in production and beneficial measures for heating, cooling, humidity control, process use, or other valid thermal end use energy requirements and for which fuel or electricity would otherwise be consumed.

SECTION 2. Said chapter 25A, is hereby further amended by striking 11F1/2, as appearing in the 2008 Official Edition, and inserting in place thereof the following section:-

Section 11F1/2. (a) The department shall establish an alternative energy portfolio standard for all retail electricity suppliers selling electricity to end-use customers in the commonwealth. Every retail electric supplier providing service under contracts executed or extended on or after January 1, 2009 shall provide a minimum percentage of kilowatt-hour sales, as determined by the department, to end-use customers in the commonwealth from alternative energy generating sources and the department shall annually thereafter determine the minimum percentage of kilowatt-hour sales to end-use customers in the commonwealth which shall be derived from alternative energy generating sources. For the purposes of this section, an alternative energy generating source is one which generates energy using any of the following: (1) combined heat and power; (2) flywheel energy storage; (3) energy efficient steam technology; (4) any facility that generates useful thermal energy using sunlight, biomass, bio-gas, liquid bio-fuel or naturally occurring temperature differences in ground, air or water, whereby one megawatt-hour of alternative energy credit shall be earned for every 3,412,000 British thermal units of net useful thermal energy produced and verified through an on-site utility

grade meter or other means satisfactory to the department; provided, however, that facilities using biomass fuel shall be low emission, use efficient energy conversion technologies and fuel that is produced by means of sustainable forestry practices or (5) any other alternative energy technology approved by the department under an administrative proceeding conducted under chapter 30A; provided, however, that the following technologies and fuels shall not be considered alternative energy supplies: coal, petroleum coke, oil, natural gas, except when used in combined heat and power; construction and demolition debris, including but not limited to chemically treated wood; and nuclear power.

(b) The department shall set: (1) emission performance standards that are protective of public health, including standards for eligible biomass, bio-gas and liquid bio-fuel technologies that limit eligibility only to best-in-class commercially-feasible technologies, inclusive of energy conversion and emissions controls, with regard to reducing emissions of particulate matter sized 2.5 microns or less as well as carbon monoxide and other air pollutants; (2) for eligible biomass, bio-gas and liquid bio-fuel technologies, a requirement of 50% reduction in life-cycle GHG emissions compared to a high efficiency unit utilizing the fuel that is being displaced, or for a new load, a high efficiency natural gas unit, if natural gas is available at reasonable cost to the site or otherwise the fuel that is most likely to be utilized; (3) for eligible biomass, bio-gas and liquid bio-fuel technologies, requirements for thermal storage or other means to minimize any significant deterioration of efficiency or emissions due to boiler cycling, if feasible; and, (4) in consultation with the department of conservation and recreation, and requirements for forest-derived biomass fuel be provided by means of sustainable forestry practices, and that the department adopt any existing or new biomass fuel sustainability standards if deemed appropriate by the department after a public comment process. At least once every 2 years the department shall review and update all standards for new alternative energy generating sources to strengthen them, as appropriate, as technology improvements occur.

(c) The department shall adopt regulations allowing for a retail supplier to discharge its obligations under this section by making an alternative compliance payment in an amount established by the department. Such regulations shall outline procedures by which each retail supplier shall annually submit for the department's review a filing illustrating the retail supplier's compliance with the requirements of this section.

(d) A municipal lighting plant shall be exempt from the obligations under this section so long as and insofar as it is exempt from the requirements to allow competitive choice of generation supply under section 47A of chapter 164.

(e) Notwithstanding the determination that one alternative energy credit is to be earned per 3,412,000 BTU in section (a), the department may provide that for certain non-emitting renewable thermal technologies an alternative energy credit is earned for less than 3,412,000 BTU of net useful thermal energy, so as to stimulate the development of new on-site renewable thermal energy generating sources.

62 (f) The department shall consult with the department of environmental protection and
63 department of public health in developing the emissions performance standards found in (b)(1)
64 and with the department of environmental protection in developing the emissions reductions
65 found in (b)(2).