

HOUSE No. 3914

By Mr. Patrick of Falmouth, petition of Matthew C. Patrick and others for legislation to promote renewable electric generation and energy efficiency. Telecommunications, Utilities and Energy.

The Commonwealth of Massachusetts

PETITION OF:

Matthew C. Patrick
Christine E. Canavan

William N. Brownsberger

In the Year Two Thousand and Seven.

AN ACT PROMOTING RENEWABLE ELECTRIC GENERATION AND ENERGY EFFICIENCY.

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

1 Chapter 164 of the General Laws is hereby amended by adding
2 the following 3 sections:—

3 **Section 138.** (a) In this section, unless context otherwise
4 requires, the following words shall have the following meanings:

5 “Net metering”, the process of measuring the difference
6 between electricity delivered by an electric distribution company
7 and electricity generated by a renewable-net-metering facility and
8 fed back to the distribution company.

9 “Renewable-net-metering facility”, a facility for the production
10 of electrical energy that has a generating capacity of not more
11 than two thousand (2,000) kilowatts, is located on or in the
12 vicinity of a customer’s premise, is intended primarily to offset
13 part or all of that customer’s requirements for electricity, and gen-
14 erates electricity using any of the following: (i) solar photovoltaic
15 or solar thermal electric energy; (ii) wind energy; (iii) ocean
16 thermal, wave, or tidal energy; (iv) fuel cells utilizing renewable
17 fuels; (v) landfill gas; (vi) naturally following water and hydro-
18 electric; or (vii) low-emission, advanced biomass power conver-
19 sion technologies.

20 “Virtual billing”, enables the combination of all the meters
21 under ownership or lease of a legally established entity in the
22 commonwealth for the purposes of net metering.

23 (b) A distribution company customer that uses electricity gener-
24 ated by a renewable-net-metering-facility may elect net metering.

25 (i) If the electricity generated by the renewable-net-metering
26 facility during a billing period plus any generation credits
27 carried forward from prior billing periods exceeds the cus-
28 tomer’s kilowatt-hour usage during the billing period, the
29 customer shall be billed for zero kilowatt-hour usage and
30 the excess generation shall be credited to the customer’s
31 account for the following billing period.

32 (ii) If the customer’s kilowatt-hour- usage exceeds the elec-
33 tricity generated by the renewable-net-metering facility
34 during the billing period plus any generation credits carried
35 forward from prior billing periods, the customer shall be
36 billed for the net kilowatt-hour usage at the applicable rate.

37 (c) Net metering shall apply to all charges calculated on a kilo-
38 watt-hour basis, including distribution, transmission, generation,
39 and transition charges.

40 (d) Net metering shall be implemented using a single meter.
41 Where an electro-mechanical meter is employed, the meter shall
42 register the flow of electric power in both directions and shall dis-
43 play the net flow. Where a digital meter is employed, it shall be
44 programmed to register the net flow as implemented in electro-
45 mechanical meters, or shall separately register the inward flow to
46 the customer and the outward flow to the distribution company to
47 enable subsequent calculation of the net flow.

48 (e) Distribution companies are prohibited from imposing
49 special fees or higher rates on net metering customers, such as
50 backup charges, or additional controls or liability insurance as
51 long as the renewable-net-metering facility complies with the
52 applicable interconnection, safety, and power quality standards;
53 provided, however, that distribution companies may charge a net
54 metering customer with a renewable-net-metering facility with a
55 generating capacity greater than 60 kilowatts for the actual cost of
56 any additional metering equipment required to implement net
57 metering

58 (f) Virtual billing for municipalities and their associations,
59 businesses and their associations, homeowner or condominium
60 associations, educational or non-profit institutions and their asso-
61 ciations shall be permitted.

62 Section 139. (a) In this section, unless context otherwise
63 requires, the following words shall have the following meanings:

64 “Least Cost Planning” (LCP), requires that all new power sup-
65 plies and demand side management be prioritized for acceptance
66 by the Department of Telecommunications and Energy according
67 to the lowest combined financial, societal and environmental
68 costs. The combined costs are to be used to prioritize the acquisi-
69 tion of sources of power, energy efficiency programs and demand
70 side management programs and will be based on the assumptions
71 in penalties per megawatt hour listed in the Chart by purchasing
72 new megawatts of renewable generation that meets requirements
73 of MGL Chapter 125 A, Section 11 F.

74 (b) The Department of Telecommunications, utilities and
75 Energy will initiate proceedings at least every two years, or earlier
76 at the discretion of the Chair, to adjust the Power Supply Rank-
77 ings Chart listed below.

78 Power Supply Rankings Chart (in dollars per megawatt hour)

79 Coal combustion; \$6.00

80 Clean Coal gasification; \$4.5

81 Clean Coal gasification with carbon sequestration; \$3.5

82 Oil#6: \$5.00

83 Oil#2 combined cycle turbines; \$4.00

84 Nuclear; \$3.5

85 Natural gas combustion; \$3.00

86 Natural gas combined cycle turbines; \$2.00

87 Waste to energy; \$2.00

88 Bio Mass Combustion; \$1.00

89 Hydro; \$0.5

90 Fuel cell; natural gas, \$0.5; fuel cell with a renewable source of
91 hydrogen, 0

92 Land-fill gas; 0

93 Bio Mass Composting; 0

94 Combined power and heat; 0

95 Wind; 0

96 Solar Thermal; 0

97 Solar Photovoltaic; 0

98 Energy Efficiency; minus \$1

99 Demand side response management; minus \$1

100 Peak demand side response management; minus \$1.5

101 (c) Within six months of the enactment of this act, all distribu-
102 tion companies and retail power suppliers shall submit to the
103 Department a power supply procurement plan for all expected
104 new demand of electric power supply in their service area or
105 regions of operation for a three year period. The Department will
106 initiate proceedings to accept public comment on each plan.

107 (d) The Department's approval of each plan will be contingent
108 upon a determination that each utility and retail provider of elec-
109 tricity has demonstrated a reasonable attempt to purchase all
110 available energy efficiency demand side management and renew-
111 able energy supplies, as determined by a consultant under contract
112 to the Department.

113 (e) The Department shall set a goal for each distribution com-
114 pany and retail provider of achieving zero growth of fossil fuel
115 generated electricity based upon ISO New England's projections
116 for new demand of electric power supply growth within the three
117 year time period.

118 (f) Contracts for renewables, efficiency and demand side man-
119 agement that have longer terms shall be given a higher priority by
120 the Department.

121 (g) Within three years of the enactment of this legislation all
122 distribution companies and retail suppliers of electricity shall
123 submit a power supply procurement plan for their complete power
124 supply portfolio to the Department for review and approval.
125 Every five years from that time going forward the Department
126 will undertake review of all distribution companies and retail
127 power suppliers least cost power supply procurement plans for
128 review and approval.

129 (h) The Department shall set a new goal after three years, for
130 distribution companies and retail suppliers, that reduces the con-
131 sumption of fossil fuel based electricity from levels of usage cur-
132 rent at that time. The Department's approval of the plans shall be
133 based on how well the distribution companies and retail suppliers
134 achieve the reduction of fossil fuel generated electricity in relation
135 to the availability of non fossil fuel resources as determined by a
136 consultant under contract and employ of the department.

137 (i) The consultant(s) under contract with the department shall
138 be paid through an assessment of each utility that shall be
139 recoverable through an increase in systems benefit charge
140 for energy efficiency programs.

141 **Section 140.** (a) In this section, unless context otherwise
142 requires, the following words shall have the following meanings:

143 “Adjustable Rate Cap” (ARC), requires that the Department of
144 Telecommunications and Energy conduct hearings to determine
145 the level of revenue necessary to cover a utility’s expenses and a
146 reasonable return on investment or profit level. The Department
147 then sets the rate to cover those expenses plus a reasonable profit.
148 Positive or negative differences in that profit level will be recon-
149 ciled in consumer rates in succeeding years.

150 (b) Within two months from the enactment of this act, The
151 Department shall initiate proceedings to determine the appropriate
152 level of revenue for each distribution company in the Common-
153 wealth and a process to reconcile profits or losses at the end of the
154 term. Rates for the succeeding term shall be adjusted to make up
155 for the difference from the established level of revenue approved
156 by the Department.