

An Act Relative to ...

SECTION 1. Chapter 25A of the General Laws is hereby amended by inserting after section 11I the following sections:-

Section 11J. There shall be a Commonwealth Solar Incentive Program to encourage the development of solar photovoltaic technology by residential, commercial, governmental and industrial electricity customers throughout the Commonwealth. The program shall be structured to achieve a total of 1600 megawatts DC of solar photovoltaic facilities interconnected to the distribution system of a distribution company, as defined in section 1 of chapter 164, by December 31, 2020, which shall be met via the requirements of subsection (g) of section 11F and section 11K. All solar photovoltaic facilities that participate in this program shall be qualified by the department as eligible to participate in the renewable energy portfolio standard program, under said section 11F. The aggregate nameplate capacity of the facilities qualified under 11K shall be equal to 1600 megawatts DC minus the aggregate nameplate capacity of facilities that have qualified and become operational under subsection (g) of section 11F. For the purpose of calculating aggregate capacity, the department shall convert individual project AC nameplate capacity into DC, using a reasonable industry-accepted method.

The department, in consultation with the department of public utilities, shall publish an interim report on the progress of the program by January 1, 2018, and a final report on the program within 120 days of qualifying the 1600 megawatts DC. The reports shall assess the solar market in the Commonwealth, quantify the costs and benefits of the program, and offer any policy and program recommendations.

Section 11K. Declining Block Solar Incentive Program.

(a) As used in this section, the following words shall, unless the context otherwise requires, have the following meanings:—

“Bundled solar compensation value”, a tariff-based compensation established under subsection (c) for the energy and non-energy attributes associated with electricity produced by a solar virtual metering facility that shall be a fixed per kilowatt-hour amount over the incentive term. The bundled solar compensation value has two components: (1) solar virtual metering credits, as defined in section 139 ½ of chapter 164; and (2) a residual incentive value, as provided in subsection (e).

“Campus solar virtual metering facility”, a facility as defined in section 139 ½ of chapter 164.

“Community shared solar virtual metering facility”, a facility as defined in section 139 ½ of chapter 164.

“Declining Block Value”, a tariff-based compensation established under subsection (c) that is calculated from the total kilowatt-hours produced by an eligible solar generation facility. In the instance of a phase 2 solar net metering facility, it shall be the phase 2 solar incentive; in the instance of a solar virtual metering facility, it shall be the bundled solar compensation value; and, in the instance of a solar merchant generating facility, it shall be the difference between the bundled solar compensation value and the solar virtual metering credit.

“Distribution Company”, an entity as defined in section 1 of chapter 164.

“Emergency power generating facility”, a phase 2 solar net metering facility as defined in section 139 ½ of chapter 164 that is an integral and material component of an emergency generation system that includes battery storage or other generating equipment and that is configured to provide a material amount of electricity as emergency power for a reasonable period of time during unscheduled power outages to an electric distribution customer.

“Low income residential solar virtual metering facility”, a facility as defined in section 139 ½ of chapter 164.

“Merchant solar generating facility”, a facility for the production of electrical energy that uses sunlight to generate electricity and that is interconnected with an electric distribution system of a distribution company, and that is not a transmission facility, and provided that such facilities shall have a nameplate capacity of less than or equal to 5 megawatts AC as a landfill solar facility, and 2 megawatts AC for all other such facilities, but does not meet the definitions of a Phase 2 solar net metering facility or solar virtual metering facility, as defined in section 139 ½ of chapter 164, or meets the definition of a virtual metering facility but opts out of treatment as such.

“Phase 2 solar incentive”, a tariff-based compensation for the non-energy attributes associated with electricity produced by a phase 2 solar net metering facility that shall be a fixed per kilowatt-hour amount over the incentive term, and is independent of and paid separately from phase 2 solar net metering credits.

“Phase 2 solar net metering facility”, a facility as defined in section 139 ½ of chapter 164.

“Private entity solar virtual metering facility”, a facility as defined in section 139 ½ of chapter 164.

“Program”, the Declining Block Solar Incentive Program as created in this section.

“Solar virtual metering credit”, as defined in section 139 ½ of chapter 164.

“Solar virtual metering facility”, a facility as defined in section 139 ½ of chapter 164.

- (b) The declining block solar incentive program shall be a statewide program implemented by all distribution companies pursuant to tariffs approved by the department of public utilities. The declining block solar incentive program shall include: (1) a schedule of standard, declining block values to be offered by each distribution company to eligible solar generating facilities over the duration of the program; (2) a series of steps, with associated nameplate capacity, target subscription periods, and declining block values that decline from step to step; (4) automatic opening of the next step as soon as the nameplate capacity and available incentives for an open step are fully committed or reserved; and (5) a set aside that reserves a reasonable amount of incentive program capacity for eligible generators up to 25 kW in nameplate capacity. The declining block solar incentive program shall ensure that the developers, owners, investors, customers, and lenders of the solar generation projects receive incentives to facilitate the financing of eligible solar facilities. Proponents of such facilities shall rely on such incentives for the entire term of the applicable tariff.

- (c) The department shall develop declining block values that shall be reviewed and approved by the department of public utilities. In developing such declining block values, the department shall seek to approximate the requisite incentive levels that would be elicited through competitive procurement while ensuring market diversity, and fostering the sustained and orderly development of a state-based solar industry. Declining block values for a facility shall not be reduced once such solar facility has qualified under the terms of the applicable tariff.

Initial declining block values shall provide sufficient revenue to support the economic viability of solar generating facilities. Declining block values shall reflect the technical and economic characteristics of typical solar generating facilities that serve distinct solar market segments and customer classes, and shall take into account such factors as: (1) project nameplate capacity and expected performance; (2) current capacity-weighted mean installed cost by relevant nameplate capacity categories to construct new solar generating facilities in the Commonwealth and other states in ISO-NE, with reasonable adjustments for varying costs of construction in different locations; (3) ongoing operation and maintenance costs; (4) finance costs, including a risk-appropriate cost of debt and return on equity, and capital structure (debt-to-equity ratio), taking into account the stability of the tariff payments and the market pricing of investments with a similar value volatility and income-risk profile on a pre-tax basis; (5) local, state and federal taxes and fees; (6) expected values from solar net metering credits or solar virtual metering credits pursuant to section 139 ½ of chapter 164; (7) any federal or state incentives, including tax incentives, in addition to the program; (8) customers' reasonable payback expectations; (9) data from competitive solicitations for bundled output or attributes and output in other jurisdictions for similar systems that become operational; and (10) other factors, as appropriate. The department may further adjust declining block values to encourage solar development in the following categories or further the following objectives: solar virtual metering facility of a municipal or other governmental entity, as defined by said section 139 ½ of said chapter 164; low income residential solar virtual metering facility, with any adjustment designed to preserve hedge value; geographically targeted areas of the

distribution system as determined by a distribution company; and emergency power generating facility.

- (d) The program shall be structured as a single unified statewide program such that each program step shall comprise the aggregate solar capacity available across all distribution companies and market segments, except for any set aside as may be provided pursuant to clause 5 of subsection (b) and that any solar capacity reserved or enrolled in a step shall be applied against available aggregate capacity in that step irrespective of distribution company service territory or market segment , provided however, that declining block values within the step may be differentiated pursuant to (c).

- (e) The program shall provide incentive payments for phase 2 solar net metering facilities, solar virtual metering facilities, and merchant solar generating facilities:
 - (1) For a phase 2 solar net metering facility, the incentive shall be the phase 2 solar incentive.
 - (2) For a solar virtual metering facility, the incentive portion of the bundled solar compensation value shall be calculated as the difference between the declining block value and the solar virtual metering credit at all relevant intervals over the incentive term. For purposes of this section, and notwithstanding section 139 ½ of chapter 164, for any interval during which the value of the solar virtual metering credits exceeds the declining block value, the solar virtual metering credit shall be adjusted to equal the declining block value. Upon the written request of the customer of record, as defined in section 139 ½ of chapter 164, a facility may terminate its participation in the program. This will be a one-time election. Once the customer of record makes this election, the facility will no longer be eligible for net metering, virtual metering, or any incentives under the program.

- (3) For any merchant solar generating facility, the incentive shall be the difference between the bundled solar compensation value and a recent representative twelve month average solar virtual metering credit. Once established, the incentive for a merchant solar generating facility shall remain fixed over the incentive term. For sake of clarity, the incentive payment shall be determined independently and provided separately from any payments the merchant solar generating facility receives for the sale of electricity pursuant to the provisions of the Federal Power Act, the Public Utility Regulatory Policies Act of 1978, and 18 U.S.C. § 292.301, governing small power production facilities.
- (f) The program shall include a mechanism to automatically adjust declining block values under subsection (c) in subsequent steps if a step enrolls faster or more slowly than what is targeted pursuant to subsection (b). When reservations and enrollments in the program reach 50 percent of total program capacity as specified in section 11J, the department shall review the remaining steps and incentive levels in light of any unanticipated changes in the underlying economic, technical or regulatory conditions, and recommend to the department of public utilities adjustments, if any, necessary to address excessive or inadequate incentives if the applicable incentive levels continue. Any changes prescribed in any order by the department of public utilities, after notice and opportunity for public comment, shall apply prospectively to future incentive steps and shall not result in any adjustment to the current step, provided however that in no event shall any such change be effective sooner than six months from the date of such order, and in no event shall such change apply to existing customers that are enrolled or have obtained reservations.
- (g) The incentive provided under the declining block program shall be available for a 15 year term, measured from the initial date of commercial operation, provided however, that the department may propose a term of not less than 10 years for phase 2 solar net metering facilities with a nameplate capacity of 25 kW AC or less as part of its filing pursuant to subsection (b).

- (h) The department shall include with its filing pursuant to subsection (c) eligibility criteria for the program, including but not limited to requirements for: (1) participating customers; (2) nameplate capacity and technical specifications; (3) installation standards; (4) equipment warranties; (5) performance; and (6) relocation of equipment. Such eligibility criteria shall not unreasonably restrict the assignment of the incentive to a developer, a system owner, or an installer. The tariffs shall establish a dispute resolution process. Each applicant who seeks eligibility for incentives via the program shall provide documentation to demonstrate eligibility. The department shall develop and propose a reasonable method of documenting and demonstrating such eligibility requirements, including a method to document and demonstrate that recipients of solar virtual metering credits meet the eligibility requirements. The department, in consultation with the electric distribution companies, shall propose a single, independent entity to receive and review the documentation to determine eligibility for all applicants. The eligibility process shall include a dispute resolution procedure for applicants and distribution companies as approved by the department.
- (i) The department shall establish a system for solar facilities to obtain reservations of capacity in a step that provides a reasonable assurance that reservations are approved only for solar facilities that can demonstrate a high likelihood of being installed and operated as proposed. In developing this system, the department shall consider procedures to meet this objective such as: (1) non-refundable reservation fees or performance bonds; (2) performance milestones; and (3) deadlines for project completion and, if missed, procedures for relinquishing reservations of capacity. The department shall establish a common procedure for restoring capacity into program steps upon the relinquishment or reduction of a facility's capacity reservation. The department shall consider the differences among market segments when establishing the system and these procedures. Such a system may be established in coordination with any similar systems established under sections 139 or 139 ½ of chapter 164.

- (j) Funding of the incentives under the tariff-based program be shared proportionately among distribution companies in a manner that reasonably approximates the load ratio share of each distribution company, through the following process:
- (1) During the fourth year of the program and every three years thereafter, upon a joint petition of the distribution companies, the department of public utilities shall review the amount of incentives paid out by each distribution company, net of the market value of any renewable attributes obtained by each distribution company under their respective solar incentive tariffs. To the extent that any distribution company and its distribution customers are bearing more than a proportionate share of the statewide net incentives as measured against a threshold above the load ratio share of the distribution company as of the then current year applied to the statewide net incentives, over a representative period of the operation of the program, the department of public utilities shall authorize an adjustment to the mandatory renewables charge established under section 20 of chapter 25 to reflect a reapportionment of the amount of such net incentives through each distribution company's contribution to the Massachusetts Renewable Energy Trust Fund. Any amounts associated with the adjustment to the mandatory renewable charge shall be excluded by the distribution company from the rate recovery mechanism defined in section 94K of chapter 164, and amounts forming the basis of the adjustment shall be established such that the Massachusetts Renewable Energy Trust Fund remains fully funded as intended under chapter 25.

 - (2) For purposes of determining the amount of the distribution company's actual net incentives that vary from that calculated on the basis of load ratio share, a threshold shall be used as follows: to the extent an distribution company's share of costs exceeds a threshold equal to its load ratio share multiplied by 1.10, an adjustment to the mandatory renewables charge shall be implemented. To the extent the share of costs for a given distribution company is at or below the

threshold, no adjustment shall be required. Any adjustment shall be calculated and approved by the department using company-specific net incentives above the threshold and company-specific kilowatt-hour sales. If only one distribution company is so affected, the amount shall be allocated to the other distribution companies based on their respective kilowatt-hour sales. The adjustment to the mandatory renewables charge shall be prospective only.

- (k) Phase 2 solar net metering facilities, solar virtual metering facilities, and merchant generating facilities receiving incentives under this section shall, during the term of the program, transfer title of all non-energy attributes to the distribution company to which said facilities are interconnected. The distribution company may elect to retain such attributes to meet the applicable annual requirements under section 11F, provided that any attributes not so used shall be sold into the market. To the extent there are any other market products or attributes that are obtained from such facilities, such market products shall be sold in the market.

The distribution company shall credit the proceeds of any sales of attributes used for compliance under section 11F or any other market products or attributes acquired from the solar generation facilities for the benefit of distribution customers through the provisions of section 94K of chapter 164. If the distribution company has elected to retain any attributes used for compliance under section 11F, the distribution company shall credit the market value of the such attributes against the cost through the provisions of said section 94K and the market value of such attributes shall be included in the cost of basic service for which the attributes were retained, subject to the approval of the department of public utilities.

For accounting purposes only, the distribution company may elect to account for the bundled incentive paid to solar virtual metering facilities such that the cost of the energy is procured at the real time market price of energy and the balance of payments and

virtual metering credits shall be attributable to the purchase of environmental and any other attributes acquired. This accounting shall have no effect on the compensation to which the customers of record and recipients of credits of solar virtual metering facilities are otherwise entitled.

- (1) The department shall adopt rules and regulations necessary to implement this section.

SECTION 2. Chapter 164 of the General Laws is hereby amended by inserting after section 94I the following sections:-

Section 94J. For all rate classes of each distribution company, the department shall review and approve a minimum monthly contribution to be included on a customer's total bill that ensures each customer contributes each month a reasonable amount toward the costs of the electric distribution system that are not caused by volumetric consumption. Minimum monthly contributions may differ by rate class and by amount of customer load within each rate class. The department may exempt or modify the minimum monthly contribution for the low income rate class. Each distribution company may elect to include its proposal for minimum monthly contributions: (1) as part of its next base distribution rate proceeding; or (2) as part of a revenue neutral rate design filing that is supported by appropriate cost of service data across all rate classes and that is decided within six months of its filing. A distribution company may propose minimum monthly contributions in a revenue neutral, rate design filing, as long as the scope of the filing is limited to the minimum monthly contributions requirements authorized by this section. The department shall ensure that any minimum monthly contributions approved in a revenue neutral rate design filing are applied in a nondiscriminatory manner so that customers with renewable energy generating facilities are subject to the same monthly contributions as customers who do not have onsite renewable energy generating facilities.

Section 94K. Rate Recovery Mechanism

- a. The following total costs incurred by a distribution company shall be recovered by the distribution company through an annually reconciling rate recovery mechanism, which is to be approved by the department: (i) the costs of all incentive payments specified in paragraph (e) of section 11K of chapter 25A; (ii) the costs of all solar virtual metering credits as defined in section 139 1/2; (iii) the costs of solar net metering credits as defined in section 139 1/2 ; and (iv) the incremental costs described in subsection (b) For distribution companies that have not yet implemented revenue decoupled rates, the rate recovery mechanism shall also recover any distribution charges displaced by phase 2 solar net metering and solar virtual metering facilities. Any net proceeds obtained by a distribution company from any resulting energy, environmental attributes or other market products shall be applied to the rate recovery mechanism. By January 1, 2016, the cost recovery mechanism set forth in section 139 (b)(2)(c) and section 139 1/2 (j) shall be consolidated with said rate recovery mechanism to create one rate recovery mechanism for all the applicable costs, . The costs in the rate recovery mechanism shall be recovered from any customer receiving any delivery service from the distribution company or who is otherwise connected to a distribution system for service when a form of self-supply is not available. The net costs to be included in the rate recovery mechanism shall be forecasted at the beginning of each applicable twelve month period and reconciled to actual costs and actual proceeds at the end of the applicable period. The net forecasted costs shall include an estimate of the costs netted against a forecasted estimate of the proceeds from the expected sale of any energy, environmental attributes, or other market products. The rates shall be designed to assure equitable recovery of costs from all distribution customers across all rate classes in a manner that is not by-passable.

- b. Each distribution company shall take all reasonable steps necessary to ensure the timely, accurate, and prudent administration of the program, including customer interaction,

billing, payment processing, completion of interconnection studies, additional metering, and construction of interconnections. To meet this objective, the distribution companies shall add an appropriate amount of additional employee resources in appropriate functions, install such additional metering as may be necessary, and make all necessary changes to its billing and payment systems, the incremental costs of which shall be recoverable from all customers through the rate recovery mechanism set forth in subsection (a) above, subject to the review and approval of the department.

SECTION 3. Section 138 of said chapter 164, as so appearing, is hereby amended by inserting in lines 27, 43, 61, and 83 after the figure “25,” each time it appears, the following words:-

“or the rate recovery mechanism set forth in section 94K”

SECTION 4. Section 139 of said chapter 164, is hereby amended by striking out paragraph (f), as appearing in the 2010 Official Edition, and inserting in place thereof the following paragraph:-

(f) The aggregate net metering capacity of facilities that are a non-solar Class I facility, a non-solar agricultural net metering facility, a wind net metering facility, or an anaerobic digestion net metering facility shall not exceed 3 per cent of the distribution company’s peak load, which includes all such facilities that are interconnected or have been approved as eligible for net metering as of the effective date of this section. The maximum amount of nameplate capacity eligible under this section and under section 139 ½ of chapter 164 by a municipality or other governmental entity shall be 10 megawatts AC. For the purpose of calculating the aggregate capacity, the capacity of a non-solar Class I facility, a non-solar agricultural net metering facility, a wind net metering facility or an anaerobic digestion net metering facility shall be its nameplate rating. Once the aggregate net metering cap has been reached, any new

non-solar Class I facility, non-solar agricultural net metering facility, wind net metering facility or anaerobic digestion net metering facility not previously in operation or included as eligible under said cap shall be eligible to net meter and shall be eligible to produce net metering credits provided that the net metering credits for such facilities shall be calculated as a credit equal to the excess kilowatt-hours by time of use billing period, if applicable, multiplied by the sum of the distribution company's: (i) default service kilowatt-hour charge in the ISO-NE load zone where the customer is located; (ii) transmission kilowatt-hour charge; and (iii) transition kilowatt-hour charge; provided further, however, that this shall not include the demand side management and renewable energy kilowatt-hour charges set forth in sections 19 and 20 of chapter 25 or the rate recovery mechanism set forth in chapter 94K. No aggregate net metering cap shall apply to solar net metering facilities.

SECTION 5. Said chapter 164 of the General Laws is hereby amended by inserting after section 139 the following section:-,

Section 139 ½

(a) For purposes of this section, unless the context otherwise requires, the following words shall have the following meanings:

“Campus solar virtual metering facility”, a solar virtual metering facility where the facility, the customer of record, and the recipients of credits are all located on the same parcel of land and where they have a documented relationship regarding the use or occupancy of the land other than a beneficial interest in the solar virtual metering facility, including but not limited to a landlord-tenant relationship.

“Community shared solar virtual metering facility”, a solar virtual metering facility with three or more eligible recipients of credits, provided that no more than 50% of the credits produced by the facility are allocated to two such recipients, and provided further that each of the remaining recipients receive no more than the amount of credits produced annually by 25 kW AC capacity.

“Customer of Record”, an eligible customer with the distribution company: (1) whose name appears on the account associated with a phase 2 solar net metering facility or the account associated with a solar virtual metering facility; and (2) who makes elections regarding the phase 2 solar net metering credits or the solar virtual metering credits.

“Landfill solar virtual metering facility”, a solar virtual metering facility located at a landfill that has received the approval of the department of environmental protection for the use of a solar photovoltaic facility at the landfill as a post-closure use.

“Low income residential solar virtual metering facility”, a solar virtual metering facility that allocates all of its solar virtual metering credits to the providers or residents of low or moderate income housing, as defined under section 20 of chapter 40B.

“Phase 2 solar net metering facility”, solar plant or equipment that uses sunlight to produce, manufacture or otherwise generate electricity that is interconnected to a distribution company’s distribution system and that is not a transmission facility, and that feeds electricity back to the distribution company through an eligible customer’s revenue meter, and that begins operating on or after July 1, 2015. A phase 2 solar net metering facility is a facility that was designed with a nameplate capacity to meet no more than 100 percent of the customer’s annual on site electricity consumption, as determined by a three-year average or, if an average cannot be determined or is not reasonably representative, by a reasonable forecast of projected electricity consumption.

Documentation of eligibility and electricity consumption shall be prepared by the customer of record and may be verified by the distribution company. If a phase 2 solar net metering facility was designed to meet no more than 100 percent of the net metering customer's on-site electricity consumption but the nameplate capacity ultimately installed is larger based on unforeseen circumstances issues and is no more than either 1 kilowatt or 10 percent larger, whichever is greater, than designed, it shall remain eligible as a phase 2 solar net metering facility; provided that the nameplate capacity shall not exceed 5 megawatts. The nameplate capacity of a phase 2 solar net metering facility must be less than or equal to 5 megawatts AC.

“Private entity solar virtual metering facility”, a solar virtual metering facility with a nameplate capacity of less than or equal to 1 megawatt AC where the customer of record and all recipients of credits are either the same legal entity, as registered with the state secretary, or are otherwise legally affiliated, and provided that such facility is not a community shared solar virtual metering facility, low income residential solar virtual metering facility, or campus solar virtual metering facility, provided further that the customer of record and all recipients of credits qualify for this definition.

“Recipient of credits,” an eligible customer of the distribution company whose name appears on the account receiving solar virtual metering credits produced by a solar virtual metering facility, provided that the recipient of credits meets eligibility requirements associated with the solar virtual metering facility classification.

“Revenue meter”, a meter that is owned, operated, and provided by the distribution company, and that is not a production meter, and that measures phase 2 solar net metering credits or solar virtual metering credits resulting from the delivery of electricity to the distribution company.

“Solar net metering”, the process of measuring the difference between electricity delivered by a distribution company to a customer of record and solar electricity generated and fed back to the distribution company by a phase 2 solar net metering facility.

“Solar net metering credit”, a credit for the production of solar electricity equal to the excess kilowatt-hours by time of use billing period, if applicable, multiplied by the sum of the distribution company’s: (i) default service kilowatt-hour charge in the ISO-NE load zone where the customer is located; (ii) distribution kilowatt-hour charge; (iii) transmission kilowatt-hour charge; and (iv) transition kilowatt-hour charge; provided, however, that this shall not include the demand side management and renewable energy kilowatt-hour charges set forth in sections 19 and 20 of chapter 25 or the rate recovery mechanism set forth in chapter 94K.

“Solar virtual metering credit”, a credit equal to the excess kilowatt-hours by time of use billing period, if applicable, multiplied by the sum of the distribution company’s: (i) default service kilowatt-hour charge in the ISO-NE load zone where the customer of record is located; (ii) transmission kilowatt-hour charge; and (iii) transition kilowatt-hour charge; provided, however, this shall not include the demand side management and renewable energy kilowatt-hour charges set forth in sections 19 and 20 of chapter 25 or the rate recovery mechanism set forth in chapter 94K.

“Solar virtual metering facility”, solar plant or equipment that uses sunlight to produce, manufacture or otherwise generate electricity, that is interconnected to a distribution company’s distribution system, and that is not a transmission facility, and that feeds electricity to the distribution company through an appropriate meter, and where all electricity delivered to the facility is used only for operating the facility’s systems, and that begins operating on or after July 1, 2015. The nameplate generating capacity of a solar virtual metering facility shall not exceed 2 megawatts AC, provided that a solar virtual metering facility at a landfill shall have a nameplate

generating capacity of less than or equal to 5 megawatts AC, and provided that a private entity solar virtual metering facility shall have a nameplate generating capacity of less than or equal to 1 megawatt AC. A solar virtual metering facility shall be one of the following: campus solar virtual metering facility; community shared solar virtual metering facility; landfill solar virtual metering facility; low income residential solar virtual metering facility; private entity solar virtual metering facility; solar virtual metering facility of a municipality or other governmental entity.

“Solar virtual metering facility of a municipality or other governmental entity”, a solar virtual metering facility: (1) that is owned or operated by a municipality or other governmental entity; or (2) of which the municipality or other governmental entity is assigned 100 per cent of the output; provided that the customer of record and all recipients of credits qualify for this classification.

(b) (1) A phase 2 solar net metering facility or solar net metering customer or solar virtual metering facility or solar virtual metering customer or recipient of credits shall not be: an electric utility, generation company, aggregator, supplier, energy marketer or energy broker, within the meaning of those terms as defined in sections 1 and 1F.

(2) Eligibility of a facility as a phase 2 solar net metering facility or as a solar virtual metering facility must be determined when the facility seeks an assurance, as provided in subsection (k), of net metering or virtual metering eligibility and, once determined, a facility’s eligibility for either phase 2 solar net metering or solar virtual metering will apply for the life of the facility, unless the customer of record terminates net metering or virtual metering services. If a customer of record seeks to expand a phase 2 solar net metering facility, the customer of record must make a new demonstration of on-site electricity consumption. If a customer of record seeks to expand a phase 2 net metering facility or a solar virtual metering facility, the customer of record must

seek an assurance of net metering or virtual metering eligibility for the capacity associated with such expansion as provided in subsection k, below.

(c) (1) As provided in section 94J of chapter 164, all distribution company customers shall be subject to a minimum monthly contribution.

(2) A customer of record using electricity generated by a phase 2 solar net metering facility may elect net metering services as follows:

If the electricity generated and fed back to the distribution company by the phase 2 solar net metering facility during a billing period exceeds the kilowatt-hours delivered by a distribution company during the billing period, the customer of record shall be billed for 0 kilowatt-hours delivered by a distribution company and the excess solar net metering credits shall be credited to the customer of record's account. Solar net metering credits may be carried forward from month to month. If the electricity delivered by a distribution company exceeds any solar net metering credits generated by the phase 2 solar net metering facility during the billing period, the customer of record shall be responsible for the balance at the distribution company's applicable rate. Distribution companies shall be prohibited from imposing special fees on facilities under this subsection with a nameplate capacity under 60 kilowatts, such as backup charges and demand charges, or additional controls or liability insurance, as long as the facility meets the other requirements of the interconnection tariff and all relevant safety and power quality standards.

(3) A distribution company customer of record with a solar virtual metering facility may elect virtual metering services as follows:

The total production for the billing period by the solar virtual metering facility shall be credited to the customer of record's account. Credits may be carried forward from month to month.

Except as provided in paragraph (i), the customer of record may allocate solar virtual metering credits to eligible recipients of credits, provided that the recipients of credits are interconnected with the same distribution company and located within the same ISO-NE load zone. Written notice of the identities of the recipients of solar virtual metering credits and the amounts of the credits to be allocated shall be in a form as the distribution company shall reasonably require. To the extent that the kilowatt-hour usage of the customer of record and of the recipients of credits exceeds any solar virtual metering credits, the customer of record and the recipient of credits shall each be responsible for their respective balance at the distribution company's applicable rate.

(4) Subject to the review and approval of the department, a distribution company may elect to establish a policy of installing two meters at a phase 2 solar net metering and/or solar virtual metering facility.

(d) A distribution company shall from time to time, file tariffs regarding necessary interconnection studies and the type, costs and timeframe for installing metering and distribution system upgrades to accommodate facilities under this section for department review and approval. Such tariffs shall require that all facilities maintain adequate insurance. Before providing net metering service or virtual metering service under this section, a customer of record seeking these services associated with a phase 2 solar net metering facility or a solar virtual metering facility must complete all necessary documentation to allow the distribution company to offer these services, including documentation associated with obtaining appropriate asset identification for reporting generation to ISO-NE.

(e) There shall be no limit on the aggregate capacity of phase 2 solar net metering facilities or solar virtual metering facilities.

(f) A municipality or other governmental entity that is a member of a cooperative corporation, provided that said cooperative corporation is organized under section 136 and comprised solely of municipalities or other governmental entities, may designate said cooperative corporation as the customer of record for a solar virtual metering facility, provided that all of the recipients of solar virtual metering credits are also members of said cooperative but may not designate said cooperative corporation as the customer of record for a phase 2 solar net metering facility. Each municipality or other governmental entity is subject to the aggregate capacity cap under subsection (f) of section 139, and it may transfer all or part of such aggregate capacity cap to said cooperative corporation, allowing said cooperative corporation to increase its aggregate capacity cap as an other governmental entity to more than 10 megawatts AC of eligible solar virtual metering facilities or eligible phase 2 solar net metering facilities. Such cooperative corporation shall not be considered an electric company, generation company, aggregator, supplier, energy marketer or energy broker, as those terms are defined in sections 1 and 1F.

(g)

(1) Behind-the-meter treatment shall be available to solar generation facilities that are actually physically located behind the revenue meter or are located on the same parcel as and within a reasonably short distance from where the customer of record's load is measured. For purposes of this subsection, behind-the-meter treatment shall mean the provision of net metering credits to an eligible phase 2 solar net metering customer. All other solar generation facilities meeting the applicable size requirements shall be eligible for virtual metering as otherwise provided in this section. To be eligible for behind-the-meter net metering, a solar generation facility must deliver the electricity it produces directly from the solar generation facility to a delivery point behind or to the customer of

record's revenue meter (hereinafter referred to as the "NM delivery point") over a dedicated line that is direct from the generation to the NM delivery point. A solar generation facility that is not (i) physically located on the same parcel as and behind the revenue meter of the customer of record's account or (ii) on the same parcel as and within a reasonably short distance from the account where the customer of record's load is measured shall not receive behind-the-meter treatment by connecting to the NM delivery point through an electrical connection that was planned and constructed for the primary purpose of avoiding the locational limitations of this section to obtain behind-the-meter treatment. If there is a dispute about the purpose of an electrical connection that delivers the energy directly to the NM delivery point over a dedicated line, the proponent of the facility shall have the right to file a petition with the department for review, and if the department determines that the primary purpose of the direct and dedicated electrical connection is not to become eligible for behind-the-meter treatment, the department may permit behind-the-meter treatment.

- (2) No single parcel other than a landfill may contain more than: (i) two megawatts AC of solar nameplate capacity eligible as a solar virtual metering facility; (ii) five megawatts AC of solar nameplate capacity that is eligible for phase 2 solar net metering; or (iii) two megawatts AC of solar nameplate capacity eligible where there are both phase 2 solar net metering facilities and solar virtual metering facilities, provided that each facility is the subject of a separate interconnection application and is individually metered. No person shall be permitted to avoid the nameplate capacity limits set forth in this section by segmenting a solar generation project or facility into smaller facilities on contiguous parcels; provided, however, that a project or facility shall not be considered segmented if the solar generation projects or facilities are developed and owned by entities that are not legally or financially affiliated with each other and there were no financial or other arrangements made between project developers or owners that were designed to technically avoid the application of the size limitations. Unless one facility's development milestones all occur no less than 12 months earlier than the corresponding milestone for the other facility or facilities, a facility shall be considered segmented into

smaller facilities if: (i) two or more facilities are on contiguous parcels, and (ii) any of the following are true: involve the same point of common coupling, same developer, same parcel owner, same interconnecting customer, same customer of record, or same recipient of credits. For purposes of this section, a facility's milestones shall be: (1) its filing of an interconnection application with a distribution company; and (2) its filing of an application for eligibility for an incentive as a phase 2 solar net metering facility or virtual metering facility. The department of public utilities shall have the authority to resolve disputes regarding project segmentation.

(h) A customer of record may request a payment for an accumulated balance of solar net metering credits to electric accounts for a phase 2 solar net metering facility. Such payments will occur no more than one time per year as long as: (1) the excess net metering credits on an account exceed the higher of: (i) 50 percent of the customer's actual billings on the applicable account for the prior twelve months, including all rates and charges billed to the account in that period; or (ii) 50 percent of the prior twelve months billings estimated for the typical customer bill on basic service in the rate class applicable to the account; or (2) the customer of record's account is to be closed. For such payments, the distribution company shall re-calculate the excess credits at the rate of a solar virtual metering credit.

(i) For solar virtual metering facilities of municipalities or other governmental entities, a distribution company may elect to provide payments in lieu of applying credits to the electric accounts of designated recipients of credits, as long as:

(1) The reasonably expected annual electricity to be produced by the solar virtual metering facility is equal to or less than past electricity consumption on the accounts of the recipients of credits, based on a one-time verification. If the electricity consumption at such accounts decreases after such verification, the recipient of credits will remain

eligible for such payments, provided that the designated account is still consuming some electricity and remains as a customer receiving a form of delivery service from the distribution company.

- (2) At the written request of the customer of record, the distribution company may re-allocate the payments for credits to the customer of record and the recipients of credits, provided that such changes are requested no more often than once per year, and with 60 days' advance notice to the distribution company.
- (3) Nothing in this subsection shall prohibit the distribution company and the customer of record of a solar virtual metering facility from reaching a mutual agreement regarding payments for an accumulated balance of solar virtual metering credits and the process associated with such payments.

(j) Subject to section 94K, the electric distribution portion of all credits that are provided by a distribution company to customers with phase 2 solar net metering facilities and solar virtual metering facilities and the distribution company delivery charges displaced by such facilities shall be recovered from all customers by a distribution company through an annually fully reconciling cost recovery mechanism, to be approved by the department.

(k) The department shall adopt rules and regulations as necessary to carry out this section, including adoption or continuation of a system that provides proposed phase 2 solar net metering facilities and solar virtual metering facilities an assurance of net metering eligibility or virtual metering eligibility.

SECTION 6. Before September 1, 2014, the department of energy resources shall commence development of a comprehensive and integrated declining block incentive program proposal, comprising the matters set forth in section 11K of chapter 25A. The distribution companies, as defined in section 1 of chapter 164, in consultation with the department of energy resources,

shall develop draft tariff terms and conditions that are designed to implement said declining block incentive program on terms, to the extent practicable, that are substantially the same among each of the distribution companies. In developing said declining block incentive program and engaging with the distribution companies in development of the corresponding draft tariffs, the department of energy resources shall consult with the distribution companies and other stakeholders, and shall convene at least one public meeting. On or before November 1, 2014, (i) the department of energy resources shall file with the department of public utilities a petition seeking approval of said declining block incentive program proposal; and (ii) the distribution companies shall jointly file a petition with the department of public utilities seeking approval of illustrative tariffs. To the extent there are any material disagreements during the respective consultation processes regarding the development of the content of either filing, the nature of any such disagreements shall be reasonably noted in the respective filings. To the extent the department of energy resources and the distribution companies agree on the content of each filing, the filing may be made jointly by all parties. The respective petitions shall demonstrate that the proposed program and tariffs meet the standards set forth in section 11K.

SECTION 7. The department of public utilities shall issue an order on the petition or petitions of the department of energy resources and distribution companies under Section 6 in furtherance of 11K of chapter 25A no later than June 1, 2015. Distribution companies shall be required to submit compliance tariffs within 30 days of the department's order, with the tariffs becoming effective July 1, 2015.

SECTION 8.

(a) A solar photovoltaic facility that is not interconnected or that has not received the assurances specified in clauses (i) and (ii) below, before July 1, 2015, shall be eligible as a solar net metering facility under sections 138 and 139 of chapter 164 of the General Laws, and shall qualify under subsection(g) of section 11F of chapter 25A provided such solar facility meets the requirements of said sections and applicable regulations, and: (i) receives an assurance of

qualification from the department of energy resources as an eligible renewable energy generating source under said subsection (g) of said section 11F of said chapter 25A; (ii) receives an assurance of net metering eligibility under the system required by said section 139 of said chapter 164; (iii) provides to the relevant distribution company, or its assignee as approved by the department of public utilities, a deposit in an amount equal to \$60 per 1 kilowatt of the nameplate capacity of such facility; and (iv) is mechanically complete before said assurances in clause (i), and where required (ii), expire, are revoked, or are withdrawn. Provided further, that solar facilities with a nameplate capacity of 25 kilowatts or less are not subject to clause (iii) above if not subject to clause (ii) above. For purposes of this subsection “mechanically complete” shall mean that substantially all of the solar generating equipment on the customer’s side of the distribution company’s meter, including panels, inverters, ballasts, or other mounting equipment, has been physically constructed and all payments due to the distribution company under such facility interconnection service agreement have been paid as and when due. All solar photovoltaic facilities must be mechanically complete by September 30, 2016 to maintain eligibility under subsection (g) of section 11F of said chapter 25A and sections 138 and 139 of said chapter 164.

- (b) A deposit referred to in clause (iii) of subsection (a) shall be returned to the applicant upon notice to the distribution company or its approved designee from the department of energy resources that the facility has met the requirements of subsection (a). If a facility fails to meet any of the requirements of subsection (a), the deposit shall be forfeited and credited to all distribution customers of the distribution company.

- (c) On and after January 1, 2016, any solar photovoltaic facility, that has not been interconnected or that has not met the requirements of clause (i) of subsection (a), and where applicable, (ii) and (iii) of subsection (a), shall not be eligible as a renewable generating resource for a program under said subsection (g) of section 11F of chapter 25A and shall not qualify as a solar net metering facility under sections 138 and 139 of chapter 164.

(d) Nothing provided in this section shall preclude solar facilities from being qualified as a phase 2 solar net metering facility or solar virtual metering facility under section 139 ½ of said chapter 164 or as an eligible renewable generating resource under subsection (c) of said section 11F of said chapter 25A or any facility eligible under section 11K of said chapter 25A as of the effective date.