



May 27, 2016

Kaitlin Kelly  
Department of Energy Resources  
100 Cambridge Street, Suite 1020  
Boston, MA 02114

Re: Comments on RPS Class I Emergency Regulations, 225 C.M.R. § 14.00 et seq.

Dear Ms. Kelly:

On April 8, 2016, the Commonwealth of Massachusetts Department of Energy Resources (“DOER”) issued emergency regulations, 225 C.M.R. § 14.00 et seq., adopted pursuant to G.L. c. 25A, § 11F and G.L. c. 30A, § 2. Among other things, these emergency regulations expand the Commonwealth’s Solar Renewable Energy Certificate programs (commonly known as “SREC I and SREC II”) beyond the prior cumulative program cap of 1,600 megawatts (“MW”) direct current (“DC”) to all otherwise eligible solar projects under certain timing and other conditions. Pursuant to DOER’s request for comments, Fitchburg Gas and Electric Light Company d/b/a Unitil, Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid (“National Grid”), NSTAR Electric Company and Western Massachusetts Electric Company, each d/b/a Eversource Energy (“Eversource”) (collectively, the “Distribution Companies”) hereby offer the following comments.

I. Introduction and Background Information

The emergency regulations appear to be DOER’s response to the pending fulfillment of the SREC II program this year, given that: (1) a sufficient aggregate capacity of SREC II projects greater than 25 kilowatts (“kW”) each already have been qualified for the SREC II program; and (2) the target aggregated capacity of SREC II projects that are less than or equal to 25 kW each is expected to be met this year. DOER’s emergency regulations appear to offer a “bridge” so that the Commonwealth’s solar market can transition from SREC II to a successor solar incentive program, which DOER stated it is currently in the process of designing and developing. Pursuant to the emergency regulations, the eligible capacity of SREC II has been changed from 1,600 MW DC, less the amount qualified for SREC I, to all solar projects that are qualified for SREC II by the DOER on or before January 8, 2017 or upon the establishment of a new incentive program, whichever occurs first. Accordingly, the emergency regulations apply

to: (1) facilities that had filed a complete application in anticipation of participating in SREC II; (2) facilities that had joined a “waiting list” for SREC II; and (3) new applicants to SREC II that can interconnect or meet a required construction time frame (with extensions).

## II. Distribution Company Comments on RPS Class I Emergency Regulations

### a. Summary of Comments

In sum, as discussed in more detail below, the Distribution Companies support the extension of SREC II in a manner consistent with Governor Baker’s commitment to expand the construction of renewable generation projects, while lowering costs borne by electricity customers who fund the subsidy programs that make them feasible, including the Solar Carve-Out of the RPS. First, if solar projects that are qualified for SREC II after the statewide target of 1,600 MW DC has been reached are provided with current SREC II values, Massachusetts distribution customers will pay more than is necessary to successfully incentivize the construction of additional solar capacity in the Commonwealth. Alternately, an extension of the SREC II program with a reduced solar incentive for the duration of the transition period will enable the same amount of solar development to occur at a lower cost to electricity customers. In the context of the transition to the next solar incentive program, DOER should begin to implement the Legislature’s directives to facilitate the expansion of solar while reducing solar incentives and associated costs. DOER should also limit the total expansion possible under these emergency regulations, and not provide additional unwarranted extensions to project owners. Finally, inconsistencies in the emergency regulations regarding the extended capacity of SREC II should be addressed and clarified. For each of these reasons, DOER’s emergency regulations should be revised.

### b. Enrolling more solar projects in SREC II under the same market sector SREC factors will burden Massachusetts distribution customers with unnecessary costs.

Once the original SREC II program cap of 1,600 MW is met, additional solar projects can be effectively encouraged and supported using lower incentives. Accordingly, in order to mitigate the costs of qualifying more units for participation in SREC II, DOER should reduce the SREC factors that would apply to solar projects admitted to SREC II pursuant to the extension.

In combination with net metering credits, SREC II provides much higher incentives to solar projects than those provided by similar programs in neighboring states for comparable systems. As shown in Appendix A, attached hereto, Connecticut and Rhode Island are paying

substantially less for solar than Massachusetts is proposing to pay as an extension of SREC II. For example, based on some simplifying assumptions,<sup>1</sup> a Massachusetts residential solar project enrolled in SREC II and net metering would receive approximately \$410 per megawatt-hour (“MWh”) for its output on a levelized basis over a fifteen-year period (assuming the project earns SRECs for 10 years, RECs for five years). Over fifteen years, the same project in Connecticut enrolled in the “ZREC program” and net metering would receive approximately \$260 per MWh, and in Rhode Island, it would receive approximately \$377 per MWh through the “Renewable Energy Growth” program. Also, over a period of fifteen years, a Massachusetts solar project enrolled in SREC II “Market Sector C” and receiving “market net metering credits” would receive approximately \$291 per MWh for its output. Over fifteen years, the same project in Connecticut or Rhode Island would receive approximately \$162 per MWh or \$167 per MWh, respectively, based on actual results from 2015.<sup>2</sup>

One way to bring the costs of the SREC II extension into closer alignment with the values offered in neighboring states would be to lower the SREC II factors that systems are eligible for, thus maintaining consistency with the program’s overall design. Assuming that DOER’s extension of the SREC II program results in an aggregated total of 200 MW of additional incremental solar projects, a reduction of SREC II factors by an average of 0.25 for all market sector categories would mitigate the associated costs for electric distribution customers who fund these subsidies. An average 0.25 reduction in all SREC II factors would save customers approximately \$149 million over 10 years, or approximately \$15 million per year. This would lower the values for residential systems to a levelized \$360 per MWh and the “Market Sector C” project to a levelized \$241 per MWh. This type of broad reduction will bring Massachusetts solar incentives closer to the level of incentives available in other states, and begin the transition to the new, upcoming solar incentive program, as described further in Section II.d., below.

In addition, DOER’s decision to extend SREC II and provide further SREC II incentives for solar projects cannot be made in isolation, and must consider the associated bill impacts for Massachusetts distribution customers who are shouldering the expense of this and other renewable energy related subsidy programs through their electricity bills. As shown in the three

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<sup>1</sup> Total electricity delivery and supply rates for residential customers are assumed to be 18 cents in Massachusetts, and 16 cents in Connecticut, and are escalated at 1.5% per year. These rates are illustrative; actual rates will vary by customer, along with future rate designs and changes in supply costs.

<sup>2</sup> All estimates have been calculated on a levelized basis.

tables provided below, Eversource specifically analyzed the costs already being borne by its customers as a result of projects already receiving incentives from DOER’s SREC I and SREC II programs (identified below as “Solar Carve-Out”), plus the costs of providing other subsidies, some of which are commonly received by solar projects (e.g., net metering credits). The data shows the cumulative impact of these subsidies, as well as the disproportionate amount that its residential customers are paying for net metering credits and solar incentives, versus the revenues received associated with these subsidies by renewable distributed generation developers (as represented by the Small C&I rate class, which includes virtual net metering facilities).

Table 1: “Payments of Net Metering Credits to Eversource Electricity Customers By Rate Class”

	<b>2015</b>		<b>2014</b>	
	<b>NM Credit \$</b>	<b>% of Total \$</b>	<b>NM Credit \$</b>	<b>% of Total \$</b>
<b>Residential</b>	\$2,128,348	5.0%	\$995,736	4.2%
<b>Residential Low Income</b>	\$28,823	0.1%	\$130,907	0.5%
<b>Small C&amp;I</b>	\$40,206,852	94.0%	\$22,431,120	93.5%
<b>Large C&amp;I</b>	\$415,755	1.0%	\$430,426	1.8%
<b>Total</b>	\$42,779,778	100.0%	\$23,988,189	100.0%

Table 2: “Illustrative Example of Renewable Energy Costs borne by an Average Eversource Residential Electricity Customer Receiving Basic Service on Class R-1 (i.e., using 500 kWh) in January 2016”

	<b>Cost in \$</b>	<b>% of Total Bill</b>
Solar Carve Out	\$5.37	4.9%
RPS (except Solar Carve Out)	\$3.10	2.8%
Net Metering	\$2.10	1.9%
Long Term Contracts	\$0.02	0.0%
Utility-owned Solar	\$ -	0.0%
Smart Grid Pilots	\$(0.02)	0.0%
Renewable Energy Charge	\$0.25	0.2%
<b>Total Bill</b>	<b>\$109.32</b>	

Table 3: “Illustrative Example of Renewable Energy Costs borne by an Average Eversource Residential Low-Income Electricity Customer Receiving Basic Service on Class R-2 (i.e., using 500 kWh and receiving a discount of 27% of the total bill) in January 2016”

	<b>Cost in \$</b>	<b>% of Total Bill</b>
Solar Carve Out	\$3.92	5.2%
RPS (except Solar Carve Out)	\$2.26	3.0%
Net Metering	\$1.53	2.0%
Long Term Contracts	\$0.01	0.0%
Utility-owned Solar	\$ -	0.0%
Smart Grid Pilots	\$(0.01)	0.0%
Renewable Energy Charge	\$0.18	0.2%
Total Bill	\$75.66	

National Grid can confirm that, based on information that was examined in its ongoing base rate proceeding, the information provided in the three tables above would be comparable to its customers. In light of this information, DOER should calibrate all further solar incentives provided to solar projects to ensure that Massachusetts distribution customers are not paying more for such solar incentives than are necessary to enable additional solar construction.

In addition, the Distribution Companies disagree with commenters recommending further extensions of time beyond DOER’s proposed deadline of January 8, 2017 for completion of certain solar projects. At the DOER’s May 20, 2016 public hearing, several commenters recommended that there should be further extensions of time beyond the deadline of January 8, 2017 that DOER proposed in the emergency regulations, and additional time provided for project completion based on milestones (e.g., based on 50% project construction or other completion milestones). However, DOER has presented a “good cause” extension for special circumstances, and there should not be another extension of time that would be available to all solar projects. Notably, the solar development, ownership, and investment communities are competing in a mature, unregulated solar market where they have analyzed risks associated with project timing and completion, and made development decisions based on their acceptance of such risks. Also, they are likely to participate in the next solar incentive program that has been authorized by the Legislature (as discussed further in Section II.d., below). There is no reason to provide additional extensions of time for projects to be included in SREC II beyond the deadline of January 8, 2017, or the earlier adoption of the new program, as provided in the emergency regulations.

- c. An extension with lower incentives would enable the same amount of solar development at a lower cost to electricity customers.

The Distribution Companies have projected that the costs of admitting an additional 200 MW into the SREC II program at the current factors would add approximately \$517 million in costs to their customers over ten years. Instead, DOER should adjust the SREC II factors for projects admitted as part of the extension in order to lower this cost and begin a transition to the new, upcoming solar incentive program, as described below. The cost savings to customers could be significant. For instance, if DOER admits an additional 200 MW of solar capacity to the SREC II program, and promulgates the Distribution Companies' recommended average reduction of 0.25 to each of the SREC II factors, this change would result in a ten year cost of approximately \$365 million, thereby allowing the same amount of solar capacity to be built in the Commonwealth for approximately \$152 million less, a savings of approximately \$15 million per year for ten years. In addition, because the solar market has generally outpaced all projections since the establishment of the SREC I program in 2010, in order to contain the costs of its SREC II extension, DOER should amend its emergency regulations to create a "safety valve" for customers of an absolute cap of an additional 200 MW of solar capacity to be enrolled in SREC II. An additional 200 MW would represent more than a 20% increase in the original SREC II program capacity, and with reduced factors the associated costs could be reduced by about 30%.

- d. The Legislature has already directed DOER to reduce future solar incentives and associated costs in a new solar program.

In St. 2016, c. 75, § 11(b), "An Act Relative to Solar Energy," the Legislature directed DOER to create a new solar incentive program, and provided criteria that were clearly intended to reduce the cost of solar incentives. This objective would be circumvented by providing additional solar projects with the SREC II level of incentives. In fact, half of the statutory criteria specifically mention consideration of project costs, ratepayer costs, and other revenue streams that are available to solar projects. Such deliberate wording includes: "at a reasonable cost to ratepayers," "considers underlying system costs, including but not limited to module costs, balance of system costs, installation costs and soft costs," "takes into account electricity revenues and any federal or state incentives," "relies on market-based mechanisms or price signals as much as possible to set incentive levels," "minimizes direct and indirect program costs," and "features a known or easily estimated budget to achieve program goals." Accordingly, in implementing an extension of the SREC II program in its emergency

regulations, DOER should begin to follow these statutory directives and reduce all SREC II incentives provided to solar projects that become a part of this extension.

- e. An inconsistency in the emergency regulations should be addressed and clarified.

Finally, a revised definition in the emergency regulations appears inadvertently inconsistent with other revised provisions. The revised definition of “Solar Carve-out II Program Capacity Cap,” states that it is, “[t]he aggregate eligible capacity, in MW, of Solar Carve-out II Renewable Generation Units qualified by the Department within nine months of April 8, 2016 or upon the establishment of a new incentive program, whichever occurs first, minus the Solar Carve-out Program Capacity Cap.”

One inconsistency presented by the combination of this revised definition and revised regulation 225 C.M.R. § 14.05(9)(s)(3) is that a solar unit that is less than or equal to 25 kW could receive a Statement of Qualification from DOER for SREC II later than the conditions contemplated in the definition if it has applied for it before the effective date of a new solar incentive program established by DOER and can meet all other eligibility criteria.<sup>3</sup>

DOER should clarify the required timing of the Statement of Qualifications for all projects that will be included under the cap by further revising 225 C.M.R. § 14.05(9)(s) to expressly state that Statements of Qualification shall not be granted after nine months of April 8, 2016 or upon the establishment of a new incentive program, whichever occurs first, consistent with the definition of the Solar Carve-out II Program Capacity Cap. The DOER should also review revised regulations 225 C.M.R. § 14.05(9)(s) and make such additional amendments as necessary to maintain consistency with the time-frame for qualification expressed in the Solar Carve-out II Program Capacity Cap definition.

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<sup>3</sup> For example, if a new solar program has an effective date of January 1, 2017, but a solar unit that is less than or equal to 25 kW had applied for a Statement of Qualification from SREC II on December 31, 2017, technically, the project could be qualified by DOER for SREC II later than required by the Solar Carve-out II Program Cap definition because the new program had already become effective. Also, if DOER has not established a new solar program in advance of January 8, 2017, it seems that a solar unit that is less than or equal to 25 kW could apply for a Statement of Qualification later than January 8, 2017, and be qualified for the SREC II program in a manner that is also inconsistent with the definition of the Solar Carve-out II Program Cap.

III. Conclusion

The Distribution Companies appreciate the opportunity to provide comments on DOER's emergency regulations. Please contact any of the undersigned if you have any questions regarding this filing.

Sincerely,

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Very truly yours,



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