



# The Commonwealth of Massachusetts

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## DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 17-10-A

November 17, 2017

Investigation of the Department of Public Utilities, on its own Motion, Commencing a Rulemaking pursuant to G.L. c. 164, § 139A; G.L. c. 30A, § 2; and 220 CMR 2.00, to Amend 220 CMR 18.00.

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ORDER PROMULGATING FINAL REGULATIONS

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## I. INTRODUCTION AND PROCEDURAL HISTORY

On August 8, 2016, Governor Baker signed into law Chapter 188 of the Acts of 2016, An Act to Promote Energy Diversity (“Act”). Among other things, the Act requires the Department of Public Utilities (“Department”) to amend its rules and regulations implementing a new net metering provision concerning small hydroelectric power net metering facilities (“Small Hydroelectric Net Metering Facilities”), G.L. c. 164, § 139A. St. 2016, c. 188, § 10. The net metering portion of the Act was effective November 6, 2016.<sup>1</sup> The Department opened this docket to institute a rulemaking proceeding for the purpose of implementing the Act’s net metering provisions.

On May 16, 2017, pursuant to G.L. c. 30A, § 2, and 220 CMR 2.00, the Department commenced a rulemaking and announced proposed regulations amending 220 CMR 18.00 (“Proposed Net Metering Regulations”) to implement the net metering portions of the Act. Order Instituting Rulemaking, D.P.U. 17-10 (May 16, 2017). Pursuant to the requirements of G.L. c. 30A, § 2, the Department published notice of the Proposed Net Metering Regulations on June 2, 2017 in The Boston Herald and in the Massachusetts Register.

The Department sought written comments on the amendments to 220 CMR 18.00 with an initial comment submission deadline of June 30, 2017, and a reply comment submission deadline of July 14, 2017.<sup>2</sup> The Department held a public hearing on June 29, 2017. The

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<sup>1</sup> Mass. Const. Amend. Art 48, Ref. Pt. 1 (laws involving general legislation become effective 90 days after the Governor’s signature).

<sup>2</sup> The Department received comments from the following entities: Ampersand Collins Hydro LLC (“ACH”); Bay State Hydropower Association (“BSHA”); The Cadmus

Department appreciates the thoughtful comments and participation of the interested stakeholders.

Following receipt of public comments and with this Order, the Department herein promulgates final regulations contained in 220 CMR 18.00, which will become effective December 1, 2017 (“Final Net Metering Regulations”).<sup>3,4</sup> By this Order, and pursuant to G.L. c. 30A, § 2, and 220 CMR 2.00, the Department amends 220 CMR 18.00 to establish a small hydroelectric net metering program (“SHP”) that expands net metering services for

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Group, Inc. (“Cadmus”); Chad W. Cox (“Mr. Cox”); City of Springfield (“Springfield”); NSTAR Electric Company and Western Massachusetts Electric Company each d/b/a Eversource Energy (“Eversource”); Fitchburg Gas and Electric Light Company d/b/a Unitil (“Unitil”); L.P. Athol Corporation (“L.P. Athol”); Massachusetts Department of Agricultural Resources (“MDAR”); Massachusetts Department of Energy Resources (“DOER”); Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid (“National Grid”); Massachusetts Water Resources Authority (“MWRA”); New England Hydropower Company, LLC (“NEHC”); Olson Electric; State Representative Thomas A. Golden, Jr. (“Chairman Golden”); State Representative Daniel F. Cahill (“Representative Cahill”); State Representative Stephen Kulik (“Representative Kulik”); State Senator Anne M. Gobi (“Senator Gobi”); Thorndike Energy; and West Dudley Hydro. The Department has considered all of these comments in this proceeding. Throughout this Order, we refer to Eversource, National Grid, and Unitil collectively as Electric Distribution Companies.

<sup>3</sup> We refer to 220 CMR 18.00 as Net Metering Regulations.

<sup>4</sup> Legislative authority for the establishment of the Net Metering Regulations can be found at: “An Act Relative to Green Communities,” St. 2008, c. 169, § 78; “An Act Making Appropriations for the Fiscal Years 2010 and 2011 to Provide for Supplementing Certain Existing Appropriations and for Certain Other Activities and Projects,” St. 2010, c. 359, §§ 25 through 30; “An Act Relative to Competitively Priced Electricity in the Commonwealth,” St. 2012, c. 209, §§ 23 through 30.

Small Hydroelectric Net Metering Facilities to implement G.L. c. 164, § 139A.

St. 2016, c. 188, § 10.<sup>5</sup>

It is established policy of the Commonwealth of Massachusetts (“Commonwealth”) to provide, forthwith, renewable and alternative energy for the immediate preservation of the public convenience. See e.g., An Act Relative to Green Communities, St. 2008, c. 169 (“GCA”). Since the GCA’s enactment, net metering has contributed to the development of a robust and stable market for renewable energy projects in the private and public sectors.<sup>6,7</sup> Creating a program for Small Hydroelectric Net Metering Facilities in the Commonwealth is consistent with the Legislature’s intent to expand net metering services to small hydroelectric power facilities. St. 2016, c. 188, § 10. The Final Net Metering Regulations are designated

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<sup>5</sup> Attached hereto as Appendix A are the Final Net Metering Regulations at 220 CMR 18.00, marked to show the changes incorporated herein. The red-line tracked edits show changes from the Proposed Net Metering Regulations to the Final Net Metering Regulations. Attached hereto as Appendix B is a clean copy of the Final Net Metering Regulations.

<sup>6</sup> Net metering has separate limits for public and private projects, which are respectively referred to as the public cap and the private cap. The public and private caps were established pursuant to Chapter 359 of the Acts of 2010, An Act Making Appropriations for the Fiscal Years 2010 and 2011 to Provide for Supplementing Certain Existing Appropriations and for Certain Other Activities and Projects, and most recently amended by St. 2016, c. 75, §§ 5-6. G.L. c. 164, § 139(f); See also Net Metering, D.P.U. 11-10-A at 2 (2012); Net Metering, D.P.U. 14-104-A at 2 (2015).

<sup>7</sup> Municipalities and other governmental entities, as classified by the Department, are subject to the public cap. All other entities are subject to the private cap. D.P.U. 11-10-A (2012).

as 220 CMR 18.00 and are effective on December 1, 2017, when published in the Massachusetts Register.

## II. PROMULGATION OF FINAL NET METERING REGULATIONS

### A. Introduction

To implement the net metering provisions of the Act, the Department promulgates these Final Net Metering Regulations.<sup>8</sup> The Department finds that promulgation of the Final Net Metering Regulations is in the public interest and is necessary for the public convenience. Below, we discuss the public comments submitted to the Department and how such comments influenced the promulgation of the Final Net Metering Regulations pursuant to G.L. c. 164, § 139A.

### B. Need for SHP

#### 1. Introduction

The Act states that the Department “may require” the Electric Distribution Companies to amend the net metering tariff to create a program for Small Hydroelectric Net Metering Facilities in the Commonwealth. G.L. c. 164, § 139A(b); St. 2016, c. 188, § 10.

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<sup>8</sup> Net metering is available in the Commonwealth pursuant to: (1) 220 CMR 8.00, Sales of Electricity by Qualifying Facilities and On-site Generating Facilities to Distribution Companies, and Sales of Electricity by Distribution Companies to Qualifying Facilities and On-site Generating Facilities; (2) 220 CMR 11.00, Rules Governing the Restructuring of the Electric Industry; and (3) 220 CMR 18.00. For additional procedural history on net metering regulations, see Net Metering Rulemaking, D.P.U. 08-75, at 1-2 (2009) and Net Metering Rulemaking, D.P.U. 11-10, at 1 (2011). The Department conducted additional net metering rulemakings in dockets D.P.U. 12-81, D.P.U. 14-104, and D.P.U. 16-64.

Therefore, the Act authorizes the Department to determine whether or not to create the program.

2. Need for SHP Comments

The Department received comments from more than 15 different individuals and entities, the majority of which support the creation of a SHP (ACH Comments at 1; BSHA Comments at 1; Chairman Golden Comments at 1; Cox Comments at 1; Springfield Comments at 1; L.P. Athol Comments at 1-2; MWRA Comments at 2; NEHC Comments at 1; Olson Comments at 1; Representative Cahill Comments at 1; Representative Kulik Comments at 1; Senator Gobi Comments at 1-2; Thorndike Energy Comments at 1; West Dudley Hydroelectric Comments at 1). Several commenters are neutral regarding creating an SHP (Cadmus Comments at 1; Eversource Comments at 1; National Grid Comments at 2-3, 13-14; National Grid and Unitil Reply Comments at 2). Further, several commenters note the intent of the Act is to assist existing small hydroelectric facilities to become economically viable (ACH Comments at 1; BSHA Comments at 2, 7; Chairman Golden Comments at 1; Representative Cahill Comments at 1; Representative Kulik Comments at 1; Senator Gobi Comments at 1; Tr. at 14-15).

3. Need for SHP Findings

The Act states that the Department “may require the electric distribution companies to amend the net metering tariff to create a program for small hydroelectric power net metering facilities in the [C]ommonwealth.” G.L. c. 164, § 139A(b). The Department interprets the net metering provisions of the Act to grant it discretion to determine whether to create an

SHP. Most commenters support the creation of an SHP (ACH Comments at 1; BSHA Comments at 1; Chairman Golden Comments at 1; Cox Comments at 1; Springfield Comments at 1; L.P. Athol Comments at 1-2; MWRA Comments at 2; NEHC Comments at 1; Olson Comments at 1; Representative Cahill Comments at 1; Representative Kulik Comments at 1; Senator Gobi Comments at 1-2; Thorndike Energy Comments at 1; West Dudley Hydroelectric Comments at 1). The remaining commenters were silent on whether they supported the creation of an SHP and rather focused their comments on SHP implementation details should the Department create an SHP (Cadmus Comments at 1; Eversource Comments at 1; National Grid Comments at 2-3, 13-14; National Grid and Unifil Reply Comments at 2). The Department accepts that small hydroelectric facilities will benefit from a net metering program and that such a program will provide broad benefits by providing fuel diversity. As such, the Department concludes that creation of a SHP is appropriate.

C. Integrated or Distinct Program

1. Introduction

Prior to the Act, the net metering laws were limited to G.L. c. 164, §§ 138, 139, and 140. In its Proposed Net Metering Regulations, the Department proposed to integrate components of the SHP into the existing regulations. The Department received comments suggesting that the Department consider whether the SHP is entirely distinct. Below we consider whether the SHP should be isolated from the remaining net metering laws, rules, and regulations.

## 2. Integrated or Distinct SHP Comments

BSHA and Eversource argue that the Act created a separate program that is not linked to any other net metering program (BSHA Initial Comments at 5; BSHA Reply Comments at 4; Eversource Comments at 5, 7). BSHA argues that there are two distinct programs: the existing net metering program and the SHP (BSHA Reply Comments at 12, 17).

BSHA recommends that the Department not insert Small Hydroelectric Net Metering Facility into the Class II and Class III definitions and delete the reference to Class I, Class II, and Class III in Section 18.04(6A) and throughout the regulations, because Section 10 of the Act is entirely distinct from all other net metering provisions of the General Laws (BSHA Reply Comments at 16-17).

Chairman Golden, Senator Gobi, MWRA, and National Grid discuss the maximum capacity of a Small Hydroelectric Net Metering Facility. Chairman Golden and Senator Gobi claim that it was the Legislature's intent to allow any Small Hydroelectric Net Metering Facility at or under two megawatts ("MW") to participate in the SHP (Chairman Golden Comments at 1; Senator Gobi Comments at 1). MWRA recommends that a Class III net metering facility of a municipality or other governmental entity may have a generating capacity between one and two MW per unit, whereas facilities in the private cap would be limited to two MW per facility (MWRA Comments at 1-2). National Grid states that Section 139A(a) defines a Small Hydroelectric Net Metering Facility as "a facility with a nameplate capacity of 2 megawatts or less, using water to generate electricity that is

connected to a distribution company,” therefore arguing that a Small Hydroelectric Net Metering Facility cannot exceed two MW (National Grid Comments at 10).

3. Integrated or Distinct SHP Findings

When the statute’s language is certain, we afford its ordinary meaning. Engie Gas & LNG LLC v. Department of Pub. Utils., 475 Mass. 191, 197 (2016). The language of the statute is “the primary source of insight into the intent of a legislature.” Commissioner of Correction v. Superior Court Dept. of Trial Court For the County of Worcester, 446 Mass. 123, 124 (2006) citing International Fidelity Insurance Company v. Wilson, 387 Mass. 841, 853, (1983). The Legislature decided to create a new section of the General Laws, G.L. c. 164, § 139A, instead of amending one or more of the existing net metering sections, G.L. c. 164, §§ 138, 139, and 140. The Department finds this distinct section of the General Laws to indicate the Legislature’s clear intent to create a distinct program.

The general net metering program pursuant to G.L. c. 164, §§ 138, 139, and 140 (“GP”), involves calculating a net metering credit differentiated by technology (i.e., anaerobic digestion, solar, wind, other), timing (e.g., before a date of notification); purpose (i.e., agricultural), host customer and offtaker identities (i.e., public versus private), and class size (i.e., Class I, Class II, or Class III). By statute pursuant to G.L. c. 164, § 139A, the three main characteristics of the SHP are: (1) technology that uses water to generate electricity; (2) a cap allocation under a separate technology-specific cap; and (3) a net metering credit equal to the basic service charge. The separate net metering cap and separate net metering credit value for small hydroelectric facilities lend further support to the

Department's decision to create a separate and distinct SHP. Based on the separate section of the General Laws and the distinct characteristics of the SHP, the Department finds that the SHP should be an independent program and establishes the SHP through this Order.

With the creation of the SHP, the Department must consider the time frame for opening and closing the program. The Act does not specify when the SHP shall open. The Act specifies that "no more than 60 megawatts of small hydroelectric power aggregate capacity statewide shall be permitted to participate in the small hydroelectric power tariff program." G.L. c. 164, § 139A. Where there is a statutory gap, the agency charged with the administration of a statute is to spell out details of the legislative policy. United States v. Mead Corporation, 533 U.S. 218, 227 (2001), citing Chevron U.S.A., Inc. v. Natural Resources Defense Council, 467 U.S. 837, 843-844 (1984); Middleborough v. Housing Appeals Committee, 449 Mass. 514, 523 (2007), citing Zoning Board of Appeals of Wellesley v. Housing Appeals Committee, 385 Mass. 651, 654 (1982). The Department finds that the SHP shall open on the effective date of each Electric Distribution Company's Department-approved compliance tariffs pursuant to this Order.<sup>9</sup> The Department concludes that the SHP will remain open until there are 60 MW of Small Hydroelectric Net Metering Facilities interconnected to the electric distribution system, at which time the Department will certify closure of the SHP by Order.

Because the Department establishes that the SHP is an independent program, the Final Net Metering Regulations exclude Small Hydroelectric Net Metering Facilities from the

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<sup>9</sup> Rates are not effective until tariffs are approved.

Class I, Class II, and Class III definitions. 220 CMR 18.02. The following definitions in the Final Net Metering Regulations include a reference to a Small Hydroelectric Net Metering Facility participating in the SHP: (1) host customer; (2) net metering; and (3) net metering credit. 220 CMR 18.02. Further, the Final Net Metering Regulations adds the distinction of whether Small Hydroelectric Net Metering Facilities are participating in the SHP or not. 220 CMR 18.02, 18.03, 18.04, 18.05, 18.07, 18.08, 18.11. Moreover, the SHP, as distinct from the GP, does not differentiate between public and private facilities. Small Hydroelectric Net Metering Facilities that participate in the SHP must apply for a cap allocation based on the relevant Electric Distribution Company, which will not be further divided by public or private status.<sup>10</sup> As such, the statutory capacity limit per Small Hydroelectric Net Metering Facility participating in the SHP is two MW. Once the SHP is closed, Small Hydroelectric Net Metering Facilities that participate in the GP will be limited to a capacity of not more than 60 kW (i.e., a Class I net metering facility). Because Small Hydroelectric Net Metering Facilities participating in the SHP cannot also be public facilities, there is no need for the Department to define “unit” or consider whether such facilities may exceed two MW.

D. Technology Included in SHP

1. Introduction

The Act includes reference to two different types of technologies: (1) small hydroelectric facilities; and (2) anaerobic digestion facilities. The Act states that a “small

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<sup>10</sup> As discussed in Section II.E.3, the SHP cap is divided into three shares.

hydroelectric tariff” means “the default service kilowatt-hour rate of the local distribution company as defined in section 1 that receives electricity from a small hydro power facility or an anaerobic digestion net metering facility.” G.L. c. 164, § 139A. In its Order Instituting a Rulemaking, the Department sought comments regarding whether “anaerobic digestion net metering facility” should be interpreted as a legislative drafting error. D.P.U. 17-10, at 6.

The Act defined hydroelectric facilities, but excluded further definition regarding hydrokinetic facilities and information about meeting the Renewable Portfolio Standard pursuant to G.L. c. 25A, § 11F (“RPS”).<sup>11</sup> As such, the Department sought comments regarding whether the definition of a Small Hydroelectric Net Metering Facility should include hydrokinetic facilities and whether a hydroelectric facility must qualify as a Class I or Class II renewable energy generating source under G.L. c. 25A, § 11F to be treated as a Small Hydroelectric Net Metering Facility. D.P.U. 17-10, at 7.

## 2. Applicability to Anaerobic Digestion Facilities Comments

The commenters that address the issue of whether the inclusion of anaerobic digestion is a legislative drafting error unanimously agree that it is an error (BSHA Comments at 3-4; DOER Comments at 1-2; Eversource Comments at 3; National Grid Comments at 3-4; National Grid and Unitil Reply Comments at 2-3; NEHC Comments at 3). The commenters argue that there is only one mention of the term “anaerobic digestion” and that the inclusion of the term should be interpreted in the context of the SHP, which discusses net metering

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<sup>11</sup> Hydrokinetic technologies produce renewable electricity by harnessing the kinetic energy of a body of water, the energy that results from its motion.

facilities that involve the use of water (DOER Comments at 1-2; Eversource Comments at 3; National Grid Comments at 3-4).

3. Applicability to Anaerobic Digestion Facilities Findings

Section 10 of the Act includes the phrase “anaerobic digestion net metering facility” in the definition for small hydroelectric tariff. G.L. c. 164, § 139A. The term “anaerobic digestion” appears only once in Section 10 and has no other context. Section 10 of the Act could be interpreted to change the net metering credit value for anaerobic digestion net metering facilities, so that such facilities would receive a net metering credit value equal to 100 percent of the net excess kilowatt-hours (“kWh”) generated by the facility multiplied by the “default service kilowatt-hour rate of the local distribution company.” D.P.U. 17-10, at 4 citing St. 2016, c. 188, § 10. This credit value would be a different, lower rate than the existing net metering credit for anaerobic digestion net metering facilities in the GP, which is equal to 100 percent of the net excess kWh multiplied by the sum of four distribution company charges: (1) basic service kWh charge; (2) distribution kWh charge; (3) transmission kWh charge; and (4) transition kWh charge. G.L. c. 164, § 138. However, under this interpretation, the language in St. 2016, c. 188, § 10, codified in G.L. c. 164, § 139A(a) contradicts existing law in G.L. c. 164, § 138 (definitions of Class I net metering credit / Class II net metering credit) by lowering the net metering credit value for such facilities.

The Department agrees with commenters and interprets this potential conflict to be a legislative drafting error resulting in an inadvertent reference to anaerobic digestion net

metering facilities. The definition of a Small Hydroelectric Net Metering Facility is a facility that uses water to generate electricity and is connected to a distribution company.

G.L. c. 164, § 139A(a). Anaerobic digestion facilities do not use water to generate electricity. Therefore, the Department does not make any changes from the Proposed Net Metering Regulations to the Final Net Metering Regulations regarding the net metering credit calculation for anaerobic digestion net metering facilities. 220 CMR 18.02, 18.04(1), 18.04(5). Anaerobic digestion net metering facilities will continue to generate net metering credits pursuant to 220 CMR 18.04(1)/(5).

#### 4. Applicability to Hydrokinetic Facilities Comments

Several commenters argue that hydrokinetic facilities should be able to participate in the SHP (BSHA Comments at 7; BSHA Reply Comments at 8, 12, 13; DOER Comments at 4). BSHA maintains that several firms in the Commonwealth are developing or have already developed hydrokinetic projects and that these facilities should be able to net meter (BSHA Comments at 7). DOER contends that hydrokinetic facilities should be allowed to participate because they use water to generate electricity (DOER Comments at 4).

Some commenters maintain that hydrokinetic facilities should not be able to qualify for the SHP (Mr. Cox Comments at 2; Eversource Comments at 14-15; NEHC Comments at 8-10; Thorndike Energy Comments at 2). Mr. Cox and Thorndike Energy argue that hydrokinetic generation is an emerging technology unlike hydroelectric facilities, which are a proven and mature technology (Mr. Cox Comments at 2; Thorndike Energy Comments at 2). NEHC argues that hydrokinetic and hydroelectric facilities have different safety and security

requirements, upfront economic risks, and public benefits (NEHC Comments at 8-10).

Eversource asserts that in G.L. c. 25A, § 11F the Legislature differentiated between hydrokinetic facilities and hydroelectric facilities and that the Department should presume that the Legislature enacted its definition of Small Hydroelectric Net Metering Facility in the context of that separation (Eversource Comments at 14-15).

Cadmus notes that including hydrokinetic in the definition of small hydroelectric would be consistent with the System of Assurance of Net Metering Eligibility's ("System of Assurance") review for Class I hydroelectric facilities, which relies on the RPS (Cadmus Comments at 5). National Grid and Unitil assert that since there was not broad agreement on this issue, the Department may wish to exclude hydrokinetic facilities from eligibility for the SHP (National Grid and Unitil Reply Comments at 9).

#### 5. Applicability to Hydrokinetic Facilities Findings

The Legislature previously differentiated between hydrokinetic facilities and hydroelectric facilities in G.L. c. 25A, §§ 3, 11F. The Legislature defined "marine or hydrokinetic energy" in a chapter applicable to DOER as "electrical energy from: (a) waves, tides and currents in oceans, estuaries and tidal areas; (b) free-flowing water in rivers, lakes and streams; (c) free-flowing water in man-made channels; or (d) differentials in ocean temperature, called ocean thermal energy conversion." G.L. c. 25A, § 3. That the Legislature chose not to make the same distinction between hydroelectric and hydrokinetic technology in G.L. c. 164, § 139A is indicative of its intent for the SHP to be inclusive of both types of technology that use water to generate electricity. Therefore, the Department

interprets the language of “using water to generate electricity” included in the definition of a Small Hydroelectric Net Metering Facility to be broad and inclusive of hydrokinetic facilities.

The Department declines to add further specificity regarding hydrokinetic technology. We acknowledge that hydrokinetic technology is a newer technology that has not reached the maturity of hydroelectric technology. Regardless of technological maturity, the Department is confident that the 60-MW cap applicable to the SHP is sufficient to allow existing Small Hydroelectric Net Metering Facilities into the SHP in addition to new hydrokinetic facilities. The Department finds that hydrokinetic facilities that are two MW or less, obtain a cap allocation, and meet the necessary interconnection requirements may participate in the SHP.

#### 6. Applicability of RPS Comments

Most commenters argue that Small Hydroelectric Net Metering Facilities should not have to meet the RPS requirement (BSHA Comments at 6-7; Chairman Golden Comments at 1; Eversource Comments at 13; National Grid Comments at 14-15; National Grid and Unitol Reply Comments at 8-9; NEHC Comments at 8; Representative Cahill Comments at 1; Senator Gobi Comments at 1; Thorndike Energy Comments at 1). Several commenters maintain that Section 10 does not explicitly require Small Hydroelectric Net Metering Facilities to qualify for the RPS (BSHA Reply Comments at 11-13; Eversource Comments at 13; National Grid Comments at 14-15; NEHC Comments at 8; Representative Cahill Comments at 1; Senator Gobi Comments at 1). Furthermore, BSHA asserts that the Department may not impose an RPS requirement for such facilities (BSHA Reply Comments at 7-8). Thorndike Energy requests that the Department not require RPS compliance for the

SHP because it would place a significant burden on the facilities and negate the benefit of the rulemaking (Thorndike Energy Comments at 1). Chairman Golden and Senator Gobi state that it was not the Legislature's intent to require compliance with the RPS (Chairman Golden Comments at 1; Senator Gobi Comments at 1-2).

DOER recommends that Small Hydroelectric Net Metering Facilities participating in the SHP should qualify as a Class I or Class II renewable energy resource pursuant to G.L. c. 25A, § 11F (DOER Comments at 3-4). DOER argues that maintaining consistency across state administered programs is preferred (DOER Comments at 3-4).

Cadmus notes that requiring Small Hydroelectric Net Metering Facilities to be a Class I or Class II renewable energy resource pursuant to G.L. c. 25A, § 11F would be consistent with how it runs the System of Assurance (Cadmus Comments at 5). National Grid and Unitil state that if the Department's intent with the SHP is to foster the development of a market for renewable energy, then the Department should set the appropriate criteria to meet that objective (National Grid Comments at 15; National Grid and Unitil Reply Comments at 8-9).

#### 7. Applicability of RPS Findings

The RPS is a statutory obligation that requires electricity suppliers, including regulated Electric Distribution Companies and competitive suppliers, to obtain a percentage of electricity from qualifying units for their retail customers. St. 1997, c. 164, § 332; G.L. c. 25A, § 11F. The RPS began with an obligation of one percent in 2003, and then increased by one-half percent annually until it reached four percent in 2009. St. 1997,

c. 164, § 50. In 2009, as a part of the GCA, the RPS was broken into RPS Class I and RPS Class II, and the Class I annual obligation was set to increase by one percent annually.

St. 2008, c. 169, § 32. In reviewing the legislative history regarding the development of the RPS in the past 20 years, the Legislature's silence regarding the RPS requirement in relationship to the SHP is significant. The Department is further persuaded by members of the Legislature that submitted comments representing their intent that Small Hydroelectric Net Metering Facilities should not have to meet the RPS requirement (Chairman Golden Comments at 1; Representative Cahill Comments at 1; Senator Gobi Comments at 1-2). To impose the RPS requirement would exclude many existing hydroelectric facilities from the SHP, which would thwart the legislative intent (BSHA Comments at 6-7; Thorndike Energy Comments at 1; Tr. at 8, 15, 17). While the Department acknowledges DOER's comment that maintaining consistency across state administered programs is preferred, to require RPS compliance for facilities participating in the SHP would contradict the legislative intent. The Department concludes that facilities participating in the SHP are not required to meet RPS requirements. Nonetheless, the Department encourages newly constructed facilities that will apply to the SHP to meet RPS requirements.

E. SHP Cap, Transfer, and Tracking

1. Introduction

The Act states that no more than 60 MW of small hydroelectric power aggregate capacity statewide shall be permitted to participate in the small hydroelectric power tariff program. G.L. c. 164, § 139A. The Department interprets the Act to require the creation

of a separate net metering cap for Small Hydroelectric Net Metering Facilities not to exceed 60 MW. D.P.U. 17-10, at 5. As such, the Department proposed to add a new section related to the creation and tracking of a separate cap in its Proposed Net Metering Regulations. 220 CMR 18.07(1A). The Department sought comments on whether to transfer any existing net metering facilities into the SHP. D.P.U. 17-10, at 5. The Department also sought comments on whether the Department should use the System of Assurance or another process to track the aggregate capacity of Small Hydroelectric Net Metering Facilities for the purpose of ensuring that no more than 60 MW be permitted to participate in the SHP.

## 2. SHP Cap Comments

BSHA and NEHC argue that existing hydroelectric facilities that are net metering should be able to select the program in which they seek to participate, either the GP or the SHP (BSHA Comments at 4-6; BSHA Reply Comments at 4; NEHC Comments at 7).

BSHA contends that the decision should be up to the host customer, asserting that an arbitrary shift could cause economic harm (BSHA Comments at 5; BSHA Reply Comments at 4). NEHC adds that existing facilities were constructed and currently operate based on a different set of costs, revenue expectations, and capacity constraints, and that they should be able to select which program they want to participate in (NEHC Comments at 7).

Eversource maintains that the allocation of each Electric Distribution Company's share of the SHP cap should be according to each Electric Distribution Company's historic peak

load percentage (Eversource Comments at 5). National Grid and Unitil did not comment on the allocation of each Electric Distribution Company's share of the SHP cap.

### 3. SHP Cap Findings

The Department finds that the SHP must be a separate and distinct cap due to the fact that the SHP is an independent program, as discussed supra in Section II.C.3. For administrative efficiency and clarity, the Department resolves that a hydroelectric facility seeking to net meter must apply to the technology-specific SHP cap and cannot choose between the GP net metering caps and the SHP cap. As such, facilities seeking to participate in the SHP must apply for a cap allocation from the SHP cap pursuant to 220 CMR 18.07(1A). The Department retained language regarding the SHP cap from the Proposed Net Metering Regulations to the Final Net Metering Regulations. 220 CMR 18.07(1A). The Final Net Metering Regulations include changes in 220 CMR 18.07 to clarify the impact of facilities participating in the SHP as distinct from the GP.

The Act requires the Department to “determine an appropriate and proportionate method of allocating costs of small hydropower facilities to ensure that the costs of the program are shared collectively among all ratepayers of the distribution companies” G.L. c. 164, § 139A(b). The Department concludes that each Electric Distribution Company, (i.e., Eversource, National Grid, and Unitil) shall be allocated a share of the 60-MW SHP cap on the basis of each Electric Distribution Company's load measured in megawatt-hours for calendar year 2016. The Department finds allocating the capacity of the

SHP cap across the three Electric Distribution Companies balances the need to allocate costs proportionately across all ratepayers with the legislative intent of supporting existing hydroelectric facilities.<sup>12</sup> This allocation is consistent with the treatment of energy efficiency costs that are shared collectively among all ratepayers. See Three Year Plan, D.P.U. 09-121 through D.P.U. 09-128 at 166; Three Year Plan, D.P.U. 15-160 through D.P.U. 15-169 at 125-126, 128 (finding that an aggregated energy efficiency plan for NSTAR Electric Company (“NSTAR”) and Western Massachusetts Electronic Company (“WMECo”) may create opportunities for savings, with no negative impact on costs). Each Electric Distribution Company will propose its allocated share of the 60-MW SHP cap in its compliance filing. While the SHP is open, any Small Hydroelectric Net Metering Facility that seeks to net meter must participate in the SHP and generate net metering credits pursuant to 220 CMR 18.04(6A). 220 CMR 18.11(2). Once the an Electric Distribution Company’s allocated share of the 60-MW SHP cap is reached, a Small Hydroelectric Net Metering Facility shall: (a) apply for net metering services as a Class I net metering facility in the GP; (b) generate net metering credits pursuant to 220 CMR 18.04(2); and (c) apply for a cap allocation in the GP in the relevant Electric Distribution Company service territory pursuant to 220 CMR 18.07(1), if it is not a cap exempt facility and seeks to take service under the

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<sup>12</sup> We have found in this Order that the SHP is separate and distinct from the GP, and therefore conclude that it is not necessary to allocate the capacity of the 60-MW SHP cap across specific Electric Distribution Company service territories as is done in the GP. Capacity in the GP is allocated across five Electric Distribution Company service territories based on each service territory’s historical peak load measured in MW: National Grid, National Grid-Nantucket, NSTAR, WMECo, and Unitil.

net metering tariff. 220 CMR 18.11(3). The Department adds a new section to the Final Net Metering Regulations to detail the SHP. 220 CMR 18.11. In Section 18.11, the regulations clarify that the SHP shall remain open until the Department certifies that the aggregate capacity of Small Hydroelectric Net Metering Facilities participating in the program is equal to 60 MW. 220 CMR 18.11(1).

#### 4. Transfer of Existing Facilities into SHP Comments

Several commenters argue that existing hydroelectric facilities that are taking net metering services in the GP should be transferred to the SHP (DOER Comments at 3; Eversource Comments at 7-8; National Grid Comments at 6-7). DOER and Eversource maintain that these facilities should be transferred to the SHP to ensure that the maximum availability of cap space in the GP is available to net metering facilities without a technology specific capacity (DOER Comments at 3; Eversource Comments at 7-8). National Grid contends that a plain reading of the statute demonstrates that the Legislature intended to provide 60 MW of aggregated net metering capacity to small hydroelectric facilities and that all small hydroelectric facilities should be in the SHP (National Grid Comments at 6). National Grid asserts that there are two small hydroelectric facilities in the GP that are each less than 60 kW and maintains that it will not consume an unreasonable amount of time to transfer these facilities from the GP to the SHP (National Grid Comments at 6; National Grid and Unitil Reply Comments at 6).<sup>13</sup> National Grid and Unitil also contend that transferring

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<sup>13</sup> Eversource and Unitil state that they do not have any existing hydroelectric facilities interconnected to their distribution systems (Eversource Reply Comments at 1; National Grid and Unitil Reply Comments at 5, n.11).

the existing facilities from the GP to the SHP would be to the benefit of those host customers since they would be eligible for a higher rate of compensation (National Grid and Unitil Reply Comments at 6).

Other commenters argue against transferring hydroelectric facilities that are currently taking net metering services in the GP to the SHP (Cadmus Comments at 4). Cadmus asserts that there are currently no small hydroelectric facilities with a cap allocation in the System of Assurance (Cadmus Comments at 4). Furthermore, Cadmus maintains that moving a grandfathered facility into the SHP could require substantial effort on the part of the Administrator of the System of Assurance (“Administrator”) and the Electric Distribution Companies (Cadmus Comments at 4).

BSHA maintains that existing and functioning interconnected small hydroelectric facilities should be grandfathered for their interconnection status with the Electric Distribution Companies (BSHA Reply Comments at 4-5, 16).

#### 5. Transfer of Existing Facilities into SHP Findings

The Department acknowledges that there are two existing net metering facilities that are likely eligible to participate in the SHP located in National Grid’s service territory (National Grid Comments at 6; National Grid and Unitil Reply Comments at 6).<sup>14</sup> Pursuant to regulations and National Grid’s net metering tariff, these two facilities are generating net metering credits valued at 100 percent of the net excess kWh at the average monthly clearing

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<sup>14</sup> National Grid confirmed that it currently provides net metering services to two hydroelectric facilities in Massachusetts: one 5 kW system, and one 49 kW system. (National Grid and Unitil Reply Comments at 5, n.11).

price at ISO New England Inc. (“ISO-NE”). 220 CMR 18.04(2); Massachusetts Electric Company and Nantucket Electric Company d/b/a/ National Grid Net Metering Provision, M.D.P.U. No. 1331, § 1.06(1)(b)(i). If these facilities were to participate in the SHP, they would generate a higher credit value than they would through the GP, which is equal to 100 percent of the net excess kWh multiplied by the Electric Distribution Company’s basic service kWh charge in the ISO-NE load zone where the host customer is located.

220 CMR 18.04(6A). The Department concludes that National Grid and the Administrator shall work with the host customers of the existing facilities to support their transfer into the SHP. Department staff is available to assist with the transition process. Existing net metering facilities that transfer into the SHP will need to meet the Electric Distribution Company’s interconnection requirements.

#### 6. Tracking SHP Facilities Comments

BSHA, DOER, National Grid, and NEHC recommend using the System of Assurance to track net metering facilities that participate in the SHP since it is the system that currently tracks net metering facilities in the Commonwealth (BSHA Comments at 4; BSHA Reply Comments at 8-9; DOER Comments at 2; Eversource Comments at 4; National Grid Comments at 4-5; NEHC Comments at 3-4). Cadmus notes that the System of Assurance could accommodate Small Hydroelectric Net Metering Facilities, including their progress toward the 60-MW cap (Cadmus Comments at 2, 5-7).

#### 7. Tracking SHP Facilities Findings

The System of Assurance has been operational for more than four years. Net metering stakeholders are familiar with the System of Assurance and informally note to Department staff that it is easy to use. The Department appreciates Cadmus' role as the Administrator and acknowledges comments indicating that Cadmus could amend the existing System of Assurance to accommodate the SHP (Cadmus Comments at 2, 5-7). The Department concludes that the System of Assurance is the appropriate tracking tool for the SHP. The Department directs the Administrator to amend the System of Assurance to accommodate the SHP and to work with the Department to revise the System of Assurance as necessary to incorporate the SHP. The Department expects the amended System of Assurance, including the SHP cap, to be operational no later than the effective date of the Department-approved compliance tariffs pursuant to this Order.<sup>15</sup>

The Department will monitor the SHP in consultation with the Administrator. The Department directs the Administrator to notify the Department when it determines that each Electric Distribution Company's allocated share of the SHP cap is filled, based upon a determination that the amount of Small Hydroelectric Net Metering Facilities participating in the SHP are interconnected to the Electric Distribution Company's distribution system. If and when the Department receives notice from the Administrator that an Electric Distribution Company's allocated share of the SHP cap is filled, net metering facilities served by such

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<sup>15</sup> To the extent that a revision to the System of Assurance is necessary to incorporate the SHP, such revisions will be available for public comment through D.P.U. 15-32.

Electric Distribution Company that are Class I net metering facilities and use water to generate electricity may apply to participate in the GP. Upon notification from the Administrator that all three allocated shares are filled and that there are 60 MW of facilities interconnected in the SHP, the Department will issue an Order certifying closure of the SHP.

F. Technology-Specific Net Metering Credit Rate

1. Introduction

The Act is clear regarding the rate applicable to facilities in the SHP. The Department, however, observed when opening docket D.P.U. 17-10 that there are two different net metering credit values applicable to certain net metering facilities.

D.P.U. 17-10, at 6. The Department sought comments regarding whether the net metering credit value for an agricultural net metering facility should be based on the fact that the net metering facility is agricultural or based on the type of renewable energy technology.

D.P.U. 17-10, at 6.

2. Rate Applicability by Technology Comments

BSHA, DOER, MDAR, and NEHC contend that agricultural net metering facilities should have a net metering credit value based on the agricultural net metering facility definition under G.L. c. 164, § 138, and not because it is a hydroelectric facility under Section 10 of the Act (BSHA Comments at 5; DOER Reply Comments at 2; MDAR Reply Comments at 1-2; NEHC Comments at 8). BSHA and NEHC argue that agricultural net metering facilities should receive the agricultural rate, because it yields higher revenue and there would be significant negative economic impacts for agricultural net metering facilities if

they did not receive the higher rate (BSHA Comments at 5; NEHC Comments at 8). DOER and MDAR maintain that if net metering facilities can qualify as agricultural net metering facilities, they should be allowed to receive the standard net metering credit value valued at 100 percent multiplied by the four charges to help the often economically challenged agricultural sector (DOER Reply Comments at 2; MDAR Reply Comments at 2). MDAR argues that it will revise its guidance to state that solar facilities should be eligible for the standard net metering credit value if greater than 50 percent of the energy generated is used by the agricultural business (MDAR Reply Comments at 2).<sup>16</sup> DOER contends that the Department should continue to rely on MDAR to exercise its discretion both to determine if a business is an agricultural business and to determine whether the facility is operated as part of that business (DOER Reply Comments at 2).

Eversource argues that the credit value for agricultural facilities should be based on technology rather than customer class because Department precedent evaluates exemptions and definitions for net metering classes and facilities based on generation type (Eversource Comments at 10 citing D.P.U. 11-11-C (discussing specific “unit” definition for solar facilities based on technology type)).

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<sup>16</sup> MDAR has internal guidance that its staff uses to determine whether a business is an agricultural business (MDAR Reply Comments at 1-2). Entities seeking to serve as host customers of agricultural net metering facilities must complete an agricultural business status application for agricultural net metering, which is reviewed by MDAR. See <http://www.mass.gov/eea/agencies/agr/about/divisions/agricultural-business-status-form-for-net-metering.html>.

National Grid and Unitil maintain that the Legislature addressed the net metering provisions of state law twice in 2016 and that the compensation of agricultural net metering facilities should be considered in that context to prevent any circumvention of its intent (National Grid and Unitil Reply Comments at 7). National Grid and Unitil argue that new solar net metering facilities should be compensated as provided in G.L. c. 164, § 139(b½) and that Small Hydroelectric Net Metering Facilities in the SHP should be compensated as provided in Section 139A(a) rather than at the standard net metering credit (National Grid Comments at 11; National Grid and Unitil Reply Comments at 7-8).

### 3. Rate Applicability by Technology Findings

An agricultural net metering facility is a renewable energy generating facility operated as part of an agricultural business that generates electricity, does not have a generation capacity of more than two MW, is located on land owned or controlled by the agricultural business, and is used to provide energy to metered accounts of that business.<sup>17</sup> G.L. c. 164 § 138; 220 CMR 18.02. An agricultural net metering facility can be fueled by any renewable energy technology and it may be a Class I, Class II, or Class III facility. G.L. c. 164 § 138. The credit value that the facility receives depends upon the class size of the facility. G.L. c. 164 § 138; 220 CMR 18.04. The term “agricultural net metering facility” is incorporated into the Class I, Class II, and Class III net metering credit definitions by permitting a facility to be both agricultural and a specific class. G.L. c. 164 § 138; 220 CMR 18.02.

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<sup>17</sup> The GCA established the agricultural net metering facility definition. St. 2008, c. 169, § 78.

Two recent legislative actions may impact the credit value for agricultural net metering facilities: (1) An Act Relative to Solar Energy, St. 2016, c. 75 (“Solar Energy Act”); and (2) the Act, St. 2016, c. 188. The Department questions whether a new solar net metering facility that is also an agricultural net metering facility should receive the net metering credit value in 220 CMR 18.04(1)/(5) or in 220 CMR 18.04(3). Using the tools of statutory construction, when reading the GCA in partnership with the Solar Energy Act, there are several possible interpretations. An interpretation is necessary because the Solar Energy Act is silent on any specific treatment for agricultural net metering facilities as they relate to net metering credit values. Also, the Solar Energy Act created a 60-percent market net metering credit value for certain solar net metering facilities in addition to the previously existing 100-percent net metering credit value. St. 2016, c. 75, § 3.

A court’s task is to construe the statute in such a way as to make it an effective piece of legislation, and in that connection every phrase should be given some effect. Appleton v. Massachusetts Parking Authority, 340 Mass. 303, 309 (1960). The Solar Energy Act did not change the definition of agricultural net metering facility. The Solar Energy Act added sections to the existing net metering laws. G.L. c. 164, §§ 138, 139. The fact that the Legislature defined certain facilities, regardless of fuel type, as agricultural facilities in the GCA suggests an intent to grant agricultural facilities some benefit or designation that is different from other types of net metering facilities. Before the Solar Energy Act, agricultural net metering facilities did not earn a benefit that was different from other types of net metering facilities. Since the Solar Energy Act was enacted, there is now an

opportunity for the “agricultural” designation to result in a benefit. The market net metering credit, enacted through the Solar Energy Act, distinguishes between private facilities, which generate a net metering credit equivalent to 60 percent of the net excess kWh, and public facilities, which generate a net metering credit equivalent to 100 percent of the net excess kWh. The Department finds that in reading the GCA in partnership with the Solar Energy Act, new solar net metering facilities may also be designated as agricultural net metering facilities and benefit from receipt of the agricultural status. The benefit of a new solar net metering facility that is also designated as an agricultural net metering facility is that it may generate a net metering credit equivalent to 100 percent of the net excess kWh so long as it retains its designation as an agricultural facility. G.L. c. 164, §§ 138, 139. Further, where the Solar Energy Act integrated the solar provisions into the GP, this interpretation permitting a new solar net metering facility that is also an agricultural net metering facility to generate net metering credits pursuant to 220 CMR 18.04(1)/(5) is reasonable. Further, such facilities will be able to generate a net metering credit equivalent to 100 percent of the net excess kWh for 25 years from the date that it interconnected to the electric distribution system.

By contrast, the Act is not silent regarding the impact to Small Hydroelectric Net Metering Facilities that seek to also be identified as an agricultural net metering facility. St. 2016, c. 188, § 10. Wherever possible, statutes should be interpreted as a whole to constitute a consistent and harmonious provision. District Attorney for the Northwestern District v. Eastern Hampshire Division of the District Court Department, 452 Mass. 199,

210 (2008). The Department questions whether a Small Hydroelectric Net Metering Facility that also seeks to be an agricultural net metering facility should receive the net metering credit value in 220 CMR 18.04(1)/(5) or in 220 CMR 18.04(6A).

Using the tools of statutory construction, when reading the GCA in partnership with the Act, the Department finds that there is only one reasonable interpretation. The Act does not permit a Small Hydroelectric Net Metering Facility to choose between the GP and SHP. Since the SHP is independent from the GP, the Department finds that a Small Hydroelectric Net Metering Facility participating in the SHP may not also be identified as an agricultural net metering facility because a facility may only be designated as an agricultural net metering facility in the GP. As a result, a Small Hydroelectric Net Metering Facility participating in the SHP must obtain the rate available to the SHP and generate net metering credits pursuant to 220 CMR 18.04(6A). See Boston Gas Company v. Department of Public Utilities, 367 Mass. 92, 104 (1975) (parties have right to expect and obtain reasoned consistency in agency's decision); Tofias v. Energy Facilities Siting Board, 435 Mass. 340, 349 (2001) (party to a proceeding before a regulatory agency has a right to expect and obtain reasoned consistency in agency decision).

The Final Net Metering Regulations state that an agricultural net metering facility does not apply to a Small Hydroelectric Net Metering Facility participating in the SHP. 220 CMR 18.02. Further, the Final Net Metering Regulations articulate that a Class I net metering facility excludes a Small Hydroelectric Net Metering Facility participating in the SHP. However, once the SHP is closed, a Class I net metering facility can be designated as

a Small Hydroelectric Net Metering Facility that is not participating in the SHP.

220 CMR 18.02, 18.11. A Small Hydroelectric Net Metering Facility cannot be considered an agricultural facility while the SHP is open. A Small Hydroelectric Net Metering Facility could be considered an agricultural facility in the GP once the SHP is closed, if it meets the agricultural facility requirements. The Department expects that MDAR will continue its role of designating entities as an agricultural business and reviewing agricultural business status applications for agricultural net metering purposes. The Department's findings herein align with MDAR's comments. The Department will work collaboratively with MDAR to revise MDAR's guidance regarding how the agency determines that a facility should obtain the agricultural net metering facility designation.

#### G. SHP Payment

##### 1. Introduction

The Act states that an Electric Distribution Company "shall pay a small hydroelectric power net metering facility monthly for electricity it received from the facility based on the kWh of electricity that the distribution company received from the facility multiplied by the small hydroelectric tariff." G.L. c. 164, § 139A. A net metering facility generates net metering credits. G.L. c. 164, § 139(a), (b); 220 CMR 18.05. In the GP, an Electric Distribution Company has the option to offer to purchase net metering credits generated by Class III net metering facilities in lieu of allocating credits. G.L. c. 164, § 139(b)(1); 220 CMR 18.05(4). The Department must consider whether the Act requires similar treatment for facilities participating in the SHP. The Department sought comments generally

on the net metering credit value for facilities participating in the SHP. D.P.U. 17-10, at 5. Further, in defining the process for calculating net metering credits for the SHP in 220 CMR 18.04, the Department sought comments regarding whether the term “basic service” should be used rather than the term “default service.” D.P.U. 17-10, at 6.

1. Credit Versus Cash Out Comments

Multiple commenters assert that the Electric Distribution Companies are required to provide payment to host customers of net metering facilities in the SHP (BSHA Reply Comments at 16; L.P. Athol Comments at 2; Mr. Cox Comments at 1; Senator Gobi Comments at 2). Many commenters addressed the issue of whether host customers would be able to receive a payment (also known as a “cash out”) instead of net metering credits. National Grid and Unitil argue that cash outs should be allowed solely at the Electric Distribution Company’s discretion (National Grid Comments at 10-11; National Grid and Unitil Reply Comments at 6). National Grid asserts that Section 139A(b) does not use the term “net metering credit” but “an electric distribution company shall pay a small hydroelectric power net metering facility [...],” which is why an Electric Distribution Company should be able to cash out at its discretion (National Grid Comments at 10)

BSHA, L.P. Athol, Mr. Cox, and Senator Gobi argue that the Electric Distribution Companies should be required to provide cash outs to host customers of net metering facilities in the SHP (BSHA Reply Comments at 16; L.P. Athol Comments at 2; Mr. Cox Comments at 1; Senator Gobi Comments at 2). Representative Cahill and Thorndike Energy claim that a cash out should be allowed at the option of the facility host customer

(Representative Cahill Comments at 1; Thorndike Energy Comments at 1). BSHA, Representative Cahill, and Senator Gobi maintain that a cash out will ensure that net metered facilities receive the full value of the credits the Legislature intended for them to receive and does not violate federal law (BSHA Reply Comments at 16; Representative Cahill Comments at 1; Senator Gobi Comments at 2). BSHA claims that this approach will foster regulatory efficiency by avoiding revisions to the Schedule Z (BSHA Reply Comments at 16). Mr. Cox and Thorndike Energy maintain that it is difficult to find an end user to purchase net metering credits and that there would be less administrative burdens for the host customer if it could receive a cash out (Mr. Cox Comments at 1; Thorndike Energy Comments at 1). L.P. Athol contends that without a cash out, the value of the credits would be lower since the net metering credits would need to be assigned to a third party and sold at a discount (L.P. Athol Comments at 2).

## 2. Credit Versus Cash Out Findings

The Department acknowledges that the Act directs payment to facilities participating in the SHP. G.L. c. 164, § 139A(b). Several commenters request that the Department require the Electric Distribution Companies to cash out Small Hydroelectric Net Metering Facilities, while the Electric Distribution Companies request that the Department grant them the ability to cash out these facilities at their discretion similar to the cash out provision in the GP (BSHA Reply Comments at 16; L.P. Athol Comments at 2; Mr. Cox Comments at 1; National Grid Comments at 10-11; National Grid and Unitil Reply Comments at 6; Representative Cahill Comments at 1; Senator Gobi Comments at 2; Thorndike Energy

Comments at 1). The Department finds it appropriate for the Electric Distribution Companies to retain the discretion to provide cash outs. However, we recognize stakeholders' preference for and the potential benefits of cash outs, including administrative efficiency and ensuring that a Small Hydroelectric Net Metering Facility participating in the SHP receives the full value of the credits. The Department therefore expects the Electric Distribution Companies to make best efforts to provide cash outs for facilities in the SHP to those host customers requesting cash outs in lieu of bill credits.

In the Final Net Metering Regulations, the Department amends language to state that for a facility participating in the SHP, "a Distribution Company may elect to pay to the host customer net metering credits rather than allocating such credits pursuant to 220 CMR 18.05(1)." 220 CMR 18.05(4). The Department urges the Electric Distribution Companies to work collaboratively with host customers of facilities participating in the SHP to arrange for the purchase of net metering credits, when the host customer requests payment in lieu of bill credits.

### 3. Separate Credit Value Comments

Mr. Cox and Thorndike Energy request that the Department increase the value of the net metering credits. Mr. Cox and Thorndike Energy recommend including the transmission and transition components in the credit value calculation for facilities in the SHP (Mr. Cox Comments at 2; Thorndike Energy Comments at 2). In response, National Grid and Unitil argue that including the transmission and transition components would contravene the statute (National Grid and Unitil Reply Comments at 8).

National Grid and Unital recommend that the Department consider whether the basic service component of the credit should exclude the RPS (National Grid Comments at 12-14; National Grid and Unital Reply Comments at 8). National Grid notes that the RPS increases, which are statutorily required, are intended to increase the amount of renewable energy developed in the Commonwealth (National Grid Comments at 12). National Grid maintains that a net metering facility will benefit each year from rising electricity costs resulting from RPS compliance at the expense of electricity consumers (National Grid Comments at 13-14).

#### 4. Separate Credit Value Findings

When the statute's language is certain, we afford its ordinary meaning. 475 Mass. at 197. The Department finds that the Act is certain regarding the rate applicable to facilities participating in the SHP. The Act clearly requires the basic “service kilowatt-hour rate of the local distribution company.” G.L. c. 164, § 139A(a). The Act excludes reference to the transmission and transition components. By contrast, provisions of the net metering laws referencing the GP specify inclusion of the transmission and transition components. G.L. c. 164, § 138. The Act also specifies the basic service component, but does not detail that the credit should exclude the RPS. The Department does not have the legislative authority to add or remove rate components to the statute. See Dartt v. Browning-Ferris Industries, Inc. (Mass.), 427 Mass. 1, 8-9 (1998), citing Bronstein v. Prudential Insurance Company, 390 Mass. 701, 706 (1984) (Court will not add to a statute a word that the Legislature had the option to, but chose not to, include). Accordingly, the Department disagrees with several commenters about adding or excluding rate components.

The Department declines to add the transmission and transition components. Further, the Department declines to exclude the RPS component of the basic service rate. As such, facilities participating in the SHP will generate a net metering credit pursuant to 220 CMR 18.04(6A) that excludes the transmission and transition charges and includes the RPS component of the basic service rate.

5. Use of Basic Service in Credit Calculation Comments

Several commenters recommend replacing the term “default service” with “basic service” in defining the process for calculating net metering credits in 220 CMR 18.04, because it is the prevailing terminology in the Commonwealth (BSHA Comments at 6; Eversource Comments at 12; National Grid Comments at 12; NEHC Comments at 8).

6. Use of Basic Service in Credit Calculation Findings

The Department agrees with commenters and replaces the term “default service” with “basic service” in the Final Net Metering Regulations. 220 CMR 18.04(6A).

H. Tariff

1. Introduction

Each Electric Distribution Company has an existing net metering tariff. Fitchburg Gas and Electric Light Company d/b/a Unitil - M.D.P.U. No. 309; Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid – M.D.P.U. No. 1331; NSTAR Electric Company d/b/a Eversource Energy – M.D.P.U. No. 163D; Western Massachusetts Electric Company d/b/a Eversource Energy – M.D.P.U. No. 1048G. The Department sought comments regarding whether an Electric Distribution Company should be

required to revise its existing net metering tariff to incorporate the SHP or seek Department approval of a separate tariff related solely to Small Hydroelectric Net Metering Facilities.

2. Integrated or Separate Tariff Comments

Eversource states that it can implement a revised tariff or incorporate the SHP into its existing net metering tariff (Eversource Comments at 9). Eversource maintains that other tariffs that rely, reference, or incorporate the distribution companies' current net metering tariff, including the interconnection tariff, particularly with respect to Schedule Z, will likely need to be revised (Eversource Comments at 9).<sup>18</sup>

BSHA and NEHC argue that the distribution companies should create a separate tariff for the SHP (BSHA Comments at 5; NEHC Comments at 7). BSHA maintains that a separate tariff is better aligned with the statute, which creates a separate net metering program for Small Hydroelectric Net Metering Facilities (BSHA Comments at 5). BSHA claims that a revision to Schedule Z is unnecessary if the Department accepts the idea that net metering credits must be purchased by the Electric Distribution Company (BSHA Reply

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<sup>18</sup> Each electric distribution company has an interconnection tariff, known as Standards For Interconnection Of Distributed Generation. See Fitchburg Gas and Electric Light Company d/b/a Unitil - M.D.P.U. No. 269; Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid - M.D.P.U. No. 1320; NSTAR Electric Company d/b/a Eversource Energy - M.D.P.U. No. 162D; Western Massachusetts Electric Company d/b/a Eversource Energy - M.D.P.U. No. 1039G. Each interconnection tariff sets forth the process and requirements for an interconnecting customer to connect a generating facility to the Electric Distribution Company's electric power system, including discussion of technical and operating requirements, metering and billing options, and other matters. Schedule Z to the interconnection tariff, which is completed by or on behalf of a host customer, contains information regarding the host customer and the generating facility necessary to receive net metering services from the Electric Distribution Company.

Comments at 10). NEHC argues that the SHP should have its own tariff because there are other considerations such as the effect of inclining block rates on small hydroelectric facilities that are different than for other net metering facilities (NEHC Comments at 7).

National Grid and Unitil maintain that it would be easiest if the SHP was incorporated into the existing net metering tariff (National Grid Comments at 7; National Grid and Unitil Reply Comments at 6). National Grid argues that in the regulation revisions the Department already has linked hydroelectric facilities to the requirements that net metering facilities in the GP must follow and that amending the existing tariff would align with this change (National Grid Comments at 7).

### 3. Integrated or Separate Tariff Findings

The Department acknowledges that net metering rules and regulations are complicated. To maximize the opportunity for stakeholders to understand and locate net metering rules, the Department finds that it is most efficient and effective for the Electric Distribution Companies to revise the existing net metering tariffs, and other tariffs, as necessary, to incorporate the SHP. The Department directs the Electric Distribution Companies to file a revised model net metering tariff in a new docket incorporating the SHP within two months of the date of this Order. Upon receipt of that filing, the Department will conduct an adjudicatory proceeding allowing stakeholders the opportunity for comment and intervention. Upon approval of the revised model net metering tariff, the Department will direct each Electric Distribution Company to file a company-specific compliance filing for Department review and approval.

I. Applicability of Net Metering Rules

1. Introduction

The Department has multiple net metering rules that apply to most facilities operating in the GP. On August 24, 2012, the Department issued Net Metering and Interconnection of Distributed Generation, D.P.U. 11-11-C (2012), clarifying which facilities are eligible for net metering and which are not. D.P.U. 11-11-C at 23. The Department defined the terms “unit” and “facility” with respect to net metering (e.g., 220 CMR 18.00). An eligible net metering facility is defined as “the energy generating equipment associated with a single parcel of land, interconnected with the electric distribution system at a single point, behind a single meter” (“Single Parcel Rule”). D.P.U. 11-11-C at 23. In D.P.U. 11-11-C, the Department recognized that to adopt parcel boundaries as a factor for defining a net metering facility, the Department must set a date after which there would be a presumption against the further subdivision of parcels. For the sake of simplicity, the Department chose the same date that the DOER used for its solar carve-out program, January 1, 2010.<sup>19</sup> D.P.U. 11-11-C at 21-22. The Department’s Order, D.P.U. 11-11-C, requires that any customer who seeks to establish a net metering facility on a parcel of land that was subdivided after January 1, 2010, must file a petition with the Department demonstrating that the subdivision was not for the purpose of creating multiple parcels specifically to support multiple net metering facilities (the “Subdivision Rule”). D.P.U. 11-11-C at 21-22.

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<sup>19</sup> DOER employs a rebuttable presumption that a parcel of land may not be subdivided for solar carve-out purposes later than January 1, 2010. See 225 CMR 14.05(4)(a).

## 2. Applicability of Net Metering Rules Comments

National Grid requests that the Department clarify whether Small Hydroelectric Net Metering Facilities will be subject to the Single Parcel Rule (National Grid Comments at 9). No other commenter addressed the Single Parcel and Subdivision Rules.

## 3. Applicability of Net Metering Rules Findings

The Department determines in this Order that the SHP is separate and distinct from the GP. The Department notes that many existing small hydroelectric facilities that would seek to participate in the SHP may not comply with the net metering rules since they were built prior to 2012 when the Single Parcel and Subdivision Rules were established. As such, the Department finds it appropriate to exempt facilities participating in the SHP from the Single Parcel and Subdivision Rules. Once the Department certifies that the SHP is closed, facilities that use water to generate electricity and seek to participate in the GP will be subject to the Single Parcel and Subdivision Rules.

### III. ORDER

Accordingly, after notice, opportunity for comment, and due consideration it is

ORDERED: That promulgation of the Final Net Metering Regulations attached hereto and designated at 220 CMR 18.00 is necessary in accordance with G.L. c. 30A, § 2; and it is

FURTHER ORDERED: That the Administrator of the System of Assurance of Net Metering Eligibility shall work with the Department to revise the System of Assurance, as necessary, to incorporate the SHP; and it is

FURTHER ORDERED: That the Administrator of the System of Assurance of Net Metering Eligibility shall provide notice to the Department indicating when each Electric Distribution Company's allocated share of the SHP cap of Small Hydroelectric Net Metering Facilities are interconnected to the electric distribution system; and it is

FURTHER ORDERED: That Fitchburg Gas and Electric Light Company d/b/a Unitil, Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, NSTAR Electric Company and Western Massachusetts Electric Company, each d/b/a Eversource shall submit a revised model net metering tariff to implement the net metering regulations at 220 CMR 18.00 in accordance with G.L. c. 164, § 139A and determine its percent of the SHP cap; and it is

FURTHER ORDERED: That Fitchburg Gas and Electric Light Company d/b/a Unitil, Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, NSTAR Electric Company and Western Massachusetts Electric Company, each d/b/a Eversource shall comply with all other relevant directives contained in this Order; and it is

FURTHER ORDERED: That the Administrator of the System of Assurance of Net Metering Eligibility shall comply with all relevant directives contained in this Order; and it is



D.P.U. 17-10-A

**Appendix A**

**Red-Lined Final Net Metering Regulations**

**Comparison to Proposed Net Metering Regulations**

220 CMR: DEPARTMENT OF PUBLIC UTILITIES

220 CMR 18.00: NET METERING

Section

18.01: Purpose and Scope

18.02: Definitions

18.03: Net Metering Services

18.04: Calculation of Net Metering Credits

18.05: Allocation of Net Metering Credits

18.06: Eligibility for Net Metering

18.07: Net Metering Capacity

18.08: Net Metering Reports

18.09: Miscellaneous

18.10: Monthly Minimum Reliability Contribution

18.11: Small Hydroelectric Net Metering Program

18.01: Purpose and Scope

(1) Purpose. 220 CMR 18.00 governs how Distribution Companies are to provide Net Metering services to Customers consistent with the ~~net-Net metering~~Metering provisions of M.G.L. c. 164, §§ 138 through 140.

(2) Scope. 220 CMR 18.00 applies to all Distribution Companies subject to the jurisdiction of the Department.

18.02: Definitions

The terms set forth in 220 CMR 18.02 shall be defined as follows, unless the context otherwise requires.

Administrator. ~~means~~ † The qualified entity selected by the Department to facilitate the System of Assurance.

Agricultural Net Metering Facility. ~~means~~ a Renewable Energy generating facility that is operated as part of an agricultural business and is not participating in the Small Hydroelectric Net Metering Program, generates electricity, does not have a generation capacity of more than two megawatts, is located on land owned or controlled by the agricultural business, and is used to provide energy to metered accounts of the business. Agriculture has the same meaning as provided in M.G.L. c. 128, § 1A; provided that, when necessary, the Commissioner of the Department of Agricultural Resources shall determine if a business is an agricultural business and whether the facility is operated as part of that business.

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Anaerobic Digestion Net Metering Facility. ~~means a~~A facility that:

- (a) generates electricity from a biogas produced by the accelerated biodegradation of organic materials under controlled anaerobic conditions;
- (b) has been determined by the Department of Energy Resources, in coordination with the Department of Environmental Protection, to qualify under the Department of Energy Resources' regulations as a Class I renewable energy generating source under 225 CMR 14:00: *Renewable Energy Portfolio Standard – Class I* and M.G.L. c. 25A, § 11F; and
- (c) is interconnected to a Distribution Company.

Billing Period. ~~means the~~The period of time set forth in a Distribution Company's terms and conditions for which a Distribution Company bills a Customer for its electricity consumed or estimated to have been consumed.

Cap Allocation. ~~means an~~An assurance from the Administrator that a Host Customer will receive Net Metering services upon a Host Customer's receipt from a Distribution Company of notice of authorization to interconnect.

Cap Exempt Facility. ~~means a~~A Class I Net Metering Facility that is:

- (a) a renewable energy generating facility; and
- (b) has a nameplate capacity rating equal to or less than:
  - 1. ten kilowatts on a single-phase circuit; or
  - 2. 25 kilowatts on a three-phase circuit.

Class I Net Metering Facility. ~~means a~~A plant or equipment that is used to produce, manufacture, or otherwise generate electricity, ~~and~~ that has a design capacity of 60 kilowatts or less, ~~and that is not a Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program.~~

Class II Net Metering Facility. ~~means an~~An Agricultural Net Metering Facility, Anaerobic Digestion Net Metering Facility, ~~Small Hydroelectric Net Metering Facility~~, Solar Net Metering Facility, or Wind Net Metering Facility with a generating capacity of more than 60 kilowatts but less than or equal to one megawatt; provided, however, that a Class II Net Metering Facility of a Municipality or Other Governmental Entity may have a generating capacity of more than 60 kilowatts but less than or equal to one megawatt per unit. Each Municipality or Other Governmental Entity may have an aggregate generating capacity of not more than ten megawatts.

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Class III Net Metering Facility. ~~means an~~ An Agricultural Net Metering Facility, Anaerobic Digestion Net Metering Facility, ~~Small Hydroelectric Net Metering Facility~~, Solar Net Metering Facility, or Wind Net Metering Facility with a generating capacity of more than one megawatt but less than or equal to two megawatts; provided, however, that a Class III Net Metering Facility of a Municipality or Other Governmental Entity may have a generating capacity of more than one megawatt but less than or equal to two megawatts per unit. Each Municipality or Other Governmental Entity may have an aggregate generating capacity of not more than ten megawatts.

Customer. ~~means any~~ Any person, partnership, corporation, or any other entity, whether public or private, who obtains distribution service at a customer delivery point and who is a customer of record of the Distribution Company for its own electricity consumption.

Department. ~~means~~ Department of Public Utilities.

Distribution Company. ~~means a~~ A company engaging in the distribution of electricity or owning, operating or controlling distribution facilities; provided, however, that a Distribution Company shall not include any entity which owns or operates plant or equipment used to produce electricity, except for facilities provided in M.G.L. c. 164, § 1A(f), steam and chilled water, or an affiliate engaged solely in the provision of such electricity, steam and chilled water, where the electricity produced by such entity or its affiliate is primarily for the benefit of hospitals and non-profit educational institutions, and where such plant or equipment was in operation before January 1, 1986.

Governmental Cooperative. ~~means a~~ A cooperative, organized pursuant to M.G.L. c. 164, § 136, whose members or shareholders are all Municipalities or Other Governmental Entities.

Host Customer. ~~means a~~ A Customer with a Class I Net Metering Facility, Class II Net Metering Facility, ~~or~~ Class III Net Metering Facility, or Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program that generates electricity on the Customer's side of the meter.

ISO-NE. ~~means~~ ISO New England Inc., the independent system operator for New England, or its successor, authorized by the Federal Energy Regulatory Commission to operate the New England bulk power system and administer New England's organized wholesale electricity market pursuant to the ISO-NE Tariff and operation agreements with transmission owners.

Market Net Metering Credit. ~~means a~~ A Net Metering Credit provided by a Distribution Company for the net excess electricity generated and fed back to the

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Distribution Company by a New Solar Net Metering Facility and other Solar Net Metering Facilities that are not Cap Exempt Facilities after 25 years from the date that each Solar Net Metering Facility was first authorized to interconnect to the electric distribution system as provided by M.G.L. c. 164, § 139(k).

Municipality. ~~means a~~ city or town.

Neighborhood. ~~means a~~ geographic area within a Municipality, subject to the right of the Department to grant exceptions pursuant to 220 CMR 18.09(7), that:

- (a) is recognized by the residents as including a unique community of interests;
- (b) falls within the service territory of a single Distribution Company and within a single ISO-NE load zone; and
- (c) may encompass residential, commercial, and undeveloped properties.

Neighborhood Net Metering Facility. ~~means a~~ Class I Net Metering Facility, Class II Net Metering Facility, or Class III Net Metering Facility that:

- (a) is owned by, or serves the energy needs of, a group of ten or more residential Customers that reside in a single Neighborhood and are served by a single Distribution Company;
- (b) may also be owned by, or serve the energy needs of, other Customers who reside in the same Neighborhood and are served by the same Distribution Company as the residential Customers that own or are served by the facility; and
- (c) is located within the same Neighborhood as the Customers that own or are served by the facility.

Net Metering. ~~means the~~ The process of measuring the difference between electricity delivered by a Distribution Company and electricity generated by a Class I Net Metering Facility, Class II Net Metering Facility, ~~or~~ Class III Net Metering Facility, or Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program and fed back to the Distribution Company.

Net Metering Credit. ~~means any~~ Any credit, including a Market Net Metering Credit and a Neighborhood Net Metering Credit as defined in M.G.L. c. 164, § 138, provided by a Distribution Company for the net excess electricity generated and fed back to the Distribution Company by a Class I Net Metering Facility, Class II Net Metering Facility, Class III Net Metering Facility, ~~or~~ Neighborhood Net Metering Facility, or Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program.

Net Metering Facility of a Municipality or Other Governmental Entity. ~~means a~~ Class II Net Metering Facility or Class III Net Metering Facility:

- (a) that is owned or operated by a Municipality or Other Governmental Entity;  
or

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- (b) of which the Municipality or Other Governmental Entity is the Host Customer and is assigned 100% of the output.

New Solar Net Metering Facility ~~means:~~

- (a) A Solar Net Metering Facility that submits an application for a Cap Allocation to the System of Assurance after the Notification Date for the entire capacity of the Solar Net Metering Facility; or
- (b) A Solar Net Metering Facility that submits an application for a Cap Allocation to the System of Assurance before the Notification Date, but which is subsequently deemed complete by the Administrator and does not receive a Cap Allocation from the Administrator until after January 8, 2017; or
- (c) A Solar Net Metering Facility that submits an application for a Cap Allocation to the System of Assurance before the Notification Date, is subsequently deemed complete by the Administrator and receives a Cap Allocation before or on January 8, 2017, but that seeks to expand the generating capacity at a later date after the Notification Date such that the entire facility, including the expanded generating capacity, is a Class II Net Metering Facility or Class III Net Metering Facility.

Notification Date. ~~means the~~ The date established by Department order after which all New Solar Net Metering Facilities shall generate Market Net Metering Credits only as determined pursuant to M.G.L. c. 164, § 139(b½).

Other Governmental Entity. ~~means a~~ department or agency of the Federal government or of the Commonwealth, and any other entity as approved by the Department.

Renewable Energy. ~~means energy~~ Energy generated from any source that qualifies as a Class I or Class II Renewable Energy generating source under M.G.L. c. 25A, § 11F; provided, however, that after conducting administrative proceedings, the Department of Energy Resources, in consultation with the Department of Agricultural Resources, may add technologies or technology categories.

Small Hydroelectric Net Metering Facility. ~~means a~~ A facility for the production of electrical energy that uses water to generate electricity, with a nameplate capacity of two megawatts or less, and is interconnected to a Distribution Company.

Small Hydroelectric Net Metering Program. A distinct technology-specific Net Metering program wherein each Small Hydroelectric Net Metering Facility that seeks to net meter while the program is open participates in a separate cap and generates a Net Metering Credit pursuant to M.G.L. c. 164, § 139A.

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Solar Net Metering Facility. ~~means a~~A facility for the production of electrical energy that uses sunlight to generate electricity and is interconnected to a Distribution Company.

System of Assurance. ~~means the~~The Massachusetts System of Assurance of Net Metering Eligibility, as established by the Department pursuant to M.G.L. c. 164, § 139(g).

Wind Net Metering Facility. ~~means a~~A facility for the production of electrical energy that uses wind to generate electricity and is interconnected to a Distribution Company.

18.03: Net Metering Services

(1) Each Distribution Company shall provide services to Customers and Host Customers necessary to permit Net Metering, including those related to interconnection, metering, calculation, and billing of Net Metering Credits, as provided by 220 CMR 18.04 and as specified in a Distribution Company's Net Metering tariff pursuant to 220 CMR 18.09(2) and (3).

(2) No Distribution Company may impose a special fee on a Host Customer with a Class I Net Metering Facility, including a New Solar Net Metering Facility, such as backup charges and demand charges, or additional controls or liability insurance, except for a monthly minimum reliability contribution or other fee approved by the Department in a ratemaking proceeding, provided that the facility meets the other requirements of the interconnection tariff, and all relevant safety and power quality standards.

(3) Each Distribution Company shall calculate a Net Metering Credit as set forth in 220 CMR 18.04, and not bill a Host Customer for kilowatt-hour usage, for any Billing Period in which the kilowatt-hours generated by a Class I Net Metering Facility, Class II Net Metering Facility, Class III Net Metering Facility, ~~or a~~New Solar Net Metering Facility, or Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program exceed the kilowatt-hour usage of the Host Customer.

(4) Each Distribution Company shall bill a Host Customer for net excess consumption for any Billing Period in which the kilowatt-hours consumed by a Host Customer exceed the kilowatt-hours generated by a Class I Net Metering Facility, Class II Net Metering Facility, ~~or~~Class III Net Metering Facility, or New Solar Net Metering Facility, or Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program.

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18.04: Calculation of Net Metering Credits

(1) For a Class I Net Metering Facility that is a Wind Net Metering Facility, Class I Net Metering Facility that is a Solar Net Metering Facility, Class I Net Metering Facility that is an Agricultural Net Metering Facility, Class I Net Metering Facility that is an Anaerobic Digestion Net Metering Facility, Class II Net Metering Facility, ~~except those Class II Net Metering Facilities that are Small Hydroelectric Net Metering Facilities,~~ a Net Metering Facility of a Municipality or Other Governmental Entity, or a Solar Net Metering Facility that receives approval by Department order, except those Solar Net Metering Facilities governed by 220 CMR 18.04(3) and (4), each Distribution Company shall calculate for each Billing Period a Net Metering Credit equal to:

- (a) 100% of the net excess kilowatt-hours, by time-of-use, if applicable, multiplied by the sum of the following Distribution Company charges applicable to the rate class under which the Host Customer takes service:
  1. basic service kilowatt-hour charge in the ISO-NE load zone where the Host Customer is located;
  2. distribution kilowatt-hour charge;
  3. transmission kilowatt-hour charge; and
  4. transition kilowatt-hour charge;
- (b) Except that a Class I Net Metering Facility that is a Solar Net Metering Facility, Class II Net Metering Facility that is a Solar Net Metering Facility, or a Class III Net Metering Facility that is a Solar Net Metering Facility shall receive Market Net Metering Credits as provided in 220 CMR 18.04(3) or (4) after 25 years from the date on which the Solar Net Metering Facility was first authorized to interconnect to the distribution system.

(2) For a Class I Net Metering Facility other than a Class I Net Metering Facility that is a Wind Net Metering Facility, Class I Net Metering Facility that is an Agricultural Net Metering Facility, Class I Net Metering Facility that is an Anaerobic Digestion Net Metering Facility, ~~Class I Net Metering Facility that is a Small Hydroelectric Net Metering Facility,~~ or a Class I Net Metering Facility that is a Solar Net Metering Facility, each Distribution Company shall calculate a Net Metering Credit for each Billing Period as the product of the:

- (a) 100% of the net excess kilowatt-hours, by time-of-use, if applicable; and
- (b) average monthly clearing price at the ISO-NE.

(3) For a Class I Net Metering Facility that is a New Solar Net Metering Facility, Class II Net Metering Facility that is a New Solar Net Metering Facility, or Class III Net Metering Facility that is a New Solar Net Metering Facility, except for those Solar Net Metering Facilities governed by 220 CMR 18.04(4), each Distribution Company shall calculate for each Billing Period a Market Net Metering Credit equal

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to 60% of the net excess kilowatt-hours, by time-of-use, if applicable, multiplied by the sum of the Distribution Company's:

- (a) basic service kilowatt-hour charge in the ISO-NE load zone where the Host Customer is located;
- (b) distribution kilowatt-hour charge;
- (c) transmission kilowatt-hour charge; and
- (d) transition kilowatt-hour charge.

(4) For a New Solar Net Metering Facility that is a Cap Exempt Facility, or New Solar Net Metering Facility, of which the Municipality or Other Governmental Entity is the Host Customer and only allocates Net Metering Credits to the accounts of other customers that could also qualify as a Municipality or Other Governmental Entity, each Distribution Company shall calculate for each Billing Period a Market Net Metering Credit equal to 100% of the net excess kilowatt-hours, by time-of-use, if applicable, multiplied by the sum of the Distribution Company's:

- (a) basic service kilowatt-hour charge in the ISO-NE load zone where the Host Customer is located;
- (b) distribution kilowatt-hour charge;
- (c) transmission kilowatt-hour charge; and
- (d) transition kilowatt-hour charge.

(5) For a Neighborhood Net Metering Facility or a Class III Net Metering Facility other than a Net Metering Facility of a Municipality or Other Governmental Entity, and those Solar Net Metering Facilities governed by 220 CMR 18.04(3) or (6), ~~and those Small Hydroelectric Net Metering Facilities governed by 220 CMR 18.04(6A)~~, each Distribution Company shall calculate for each Billing Period a Net Metering Credit equal to:

- (a) 100% of the net excess kilowatt-hours, by time-of-use, if applicable, multiplied by the sum of the Distribution Company charges applicable to the rate class under which the Host Customer takes service:
  - 1. basic service kilowatt-hour charge in the ISO-NE load zone where the Host Customer is located;
  - 2. transmission kilowatt-hour charge; and
  - 3. transition kilowatt-hour charge;
- (b) Except that a Solar Net Metering Facility that is a Neighborhood Net Metering Facility shall receive Market Net Metering Credits, as provided in 220 CMR 18.04(6), after 25 years from the date on which it was first authorized to interconnect to the distribution system; and
- (c) Except those Class III Net Metering Facilities governed by 220 CMR 18.04(1)(b).

(6) For a New Solar Net Metering Facility that is a Neighborhood Net Metering

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Facility, each Distribution Company shall calculate for each Billing Period a Market Net Metering Credit equal to 60% of the net excess kilowatt-hours, by time-of-use, if applicable, multiplied by the sum of the Distribution Company's:

- (a) basic service kilowatt-hour charge in the ISO-NE load zone where the Host Customer is located;
- (b) transmission kilowatt-hour charge; and
- (c) transition kilowatt-hour charge.

(6A) For a ~~Class I Net Metering Facility that is a~~ Small Hydroelectric Net Metering Facility that is participating in the Small Hydroelectric Net Metering Program, ~~Class II Net Metering Facility that is a Small Hydroelectric Net Metering Facility, or Class III Net Metering Facility that is a Small Hydroelectric Net Metering Facility~~, each Distribution Company shall calculate for each Billing Period a Net Metering Credit equal to 100% of the net excess kilowatt-hours, by time-of-use, if applicable, multiplied by the Distribution Company's basic service kilowatt-hour charge in the ISO-NE load zone where the Host Customer is located.

(7) The calculation of Net Metering Credits under 220 CMR 18.04 shall not include the demand side management and renewable energy kilowatt-hour charges set forth in M.G.L. c. 25, §§ 19 through 20.

(8) For any Billing Period for which a Distribution Company calculates a Net Metering Credit for a Host Customer, the Distribution Company shall apply the Net Metering Credit to the Host Customer's account for the subsequent Billing Period, unless the Host Customer provides otherwise pursuant to 220 CMR 18.05.

18.05: Allocation of Net Metering Credits

(1) For a Class I Net Metering Facility, Class II Net Metering Facility, ~~or~~ Class III Net Metering Facility, including a New Solar Net Metering Facility, or Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program, each Distribution Company shall allocate Net Metering Credits, as designated in writing by the Host Customer, to other Customers who are in the Distribution Company's service territory and are located in the same ISO-NE load zone. The manner and form of credit designation shall be as specified in the Distribution Company's Net Metering Tariff pursuant to 220 CMR 18.09(2). Notwithstanding the foregoing, if the Host Customer of a Class I Net Metering Facility, Class II Net Metering Facility, or Class III Net Metering Facility is a Municipality or Other Governmental Entity, including a Governmental Cooperative, it may direct its Distribution Company to allocate Net Metering Credits only to other Customers that are Municipalities or Other Governmental Entities.

(2) For a Neighborhood Net Metering Facility, the Distribution Company may only allocate Net Metering Credits to residential or other Customers who reside in the

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same Neighborhood in which the Neighborhood Net Metering Facility is located and have an ownership interest in, or are served by, the Neighborhood Net Metering Facility.

(3) The Distribution Company shall carry forward, from Billing Period to Billing Period, any remaining Net Metering Credit balance.

(4) For a Class III Net Metering Facility, including a Class III Net Metering Facility that is a New Solar Net Metering Facility, and a Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program, a Distribution Company may elect to pay to the Host Customer Net Metering Credits rather than allocating such credits pursuant to 220 CMR 18.05(1).

18.06: Eligibility for Net Metering

(1) Distribution Companies shall not provide Net Metering services to a Host Customer who is an electric company, generation company, aggregator, supplier, energy marketer, or energy broker, as those terms are used in M.G.L. c. 164, §§ 1 and 1F and 220 CMR 11.00: *Rules Governing the Restructuring of the Electric Industry*.

(2) A Governmental Cooperative shall not be considered an electric company, generation company, aggregator, supplier, energy marketer or energy broker, as those terms are used in M.G.L. c. 164, §§ 1 and 1F and 220 CMR 11.00: *Rules Governing the Restructuring of the Electric Industry*.

18.07: Net Metering Capacity

(1) Each Distribution Company shall make Net Metering services available to Host Customers, except for Host Customers of a Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program, such that the aggregate capacity of:

- (a) Net Metering facilities that are not Net Metering Facilities of a Municipality or Other Governmental Entity does not exceed 7% of the Distribution Company's highest historical peak load; and
- (b) Net Metering Facilities of a Municipality or Other Governmental Entity does not exceed 8% of the Distribution Company's highest historical peak load.

(1A) Distribution Companies shall make an aggregate capacity of 60 megawatts statewide of Net Metering services available to Host Customers of Small Hydroelectric Net Metering Facilities. This aggregate capacity shall be in addition to that applicable to the Net Metering services available under 220 CMR 18.07(1).

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(2) The maximum amount of generating capacity eligible for Net Metering by a Municipality or Other Governmental Entity shall be ten megawatts, as determined by the sum of the nameplate ratings of Class II Net Metering Facilities and Class III Net Metering Facilities, including a Class II Net Metering Facility that is a New Solar Net Metering Facility and a Class III Net Metering Facility that is a New Solar Net Metering Facility, ~~but excluding a Small Hydroelectric Net Metering Facility,~~ for which the Municipality or Other Governmental Entity is the Host Customer, except as provided in 220 CMR 18.07(6).

(3) Each Distribution Company shall identify on an annual basis its highest historical peak load and post that data on its website by February 1<sup>st</sup> of the following year.

(4) For the purpose of calculating the aggregate capacity of Class I Net Metering Facilities, Class II Net Metering Facilities, ~~and~~ Class III Net Metering Facilities, including a New Solar Net Metering Facility, and Small Hydroelectric Net Metering Facilities participating in the Small Hydroelectric Net Metering Program, the capacity of ~~a~~:

- (a) A Solar Net Metering Facility shall be 80% of the facility's direct current rating at standard test conditions; and
- (b) All other non-solar Net Metering facilities shall be the facility's nameplate rating in alternating current.

(5) A Cap Exempt Facility shall be exempt from the calculation of the aggregate capacity of Net Metering facilities.

(6) A Municipality or Other Governmental Entity that is a member of a Governmental Cooperative may transfer any or all of the ~~net-Net metering-Metering~~ generating capacity associated with one or more Class II or III Net Metering Facilities, including a Class II Net Metering Facility that is a New Solar Net Metering Facility or a Class III Net Metering Facility that is a New Solar Net Metering Facility, to said Governmental Cooperative by providing written assent to the Governmental Cooperative and obtaining approval from the Department.

(7) A Governmental Cooperative may serve as a Host Customer for a Net Metering Facility of a Municipality or Other Governmental Entity for all capacity allocated pursuant to 220 CMR 18.07(6) and its own capacity as an Other Governmental Entity, provided that the Net Metering Credits for which such Governmental Cooperative serves as Host Customer shall only be allocated to that same Governmental Cooperative or its members.

(8) Notwithstanding the capacity limits set forth herein 220 CMR 18.07, a Class I Net Metering Facility shall be eligible for Net Metering if it qualifies under the Department of Energy Resources' regulations as a Class I renewable energy generating source under 225 CMR 14:00: *Renewable Energy Portfolio Standard* –

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*Class I* and M.G.L. c. 25A, § 11F and is a Cap Exempt Facility.

18.08: Net Metering Reports

- (1) Each Distribution Company shall track at least the following:
  - (a) the size, generation type, Net Metering class, fuel type, and the Municipality within which each Net Metering facility receives Net Metering services;
  - (b) the size, generation type, fuel type, and the Municipality within which each Net Metering facility has requested interconnection with the Distribution Company; and
  - (c) the aggregate capacity of Net Metering facilities that have interconnected, and that have requested interconnection, to the Distribution Company.
- (2) Each Distribution Company shall file with the Department information regarding the provision of Net Metering services to its Customers, in a format and according to a schedule as determined by the Department.
- (3) Each Distribution Company shall post data to a publicly accessible website tracking the aggregate capacity of eligible Net Metering facilities that have connected, and that have requested interconnection, relative to the Net Metering capacity set forth in 220 CMR 18.07. The data shall be updated on a monthly basis.

18.09: Miscellaneous

- (1) The provision of Net Metering services does not entitle Distribution Companies to ownership of, or title to, the renewable energy or environmental attributes, including renewable energy certificates, associated with any electricity produced by a Net Metering facility.
- (2) Each Distribution Company shall implement its responsibilities and obligations regarding the provision of Net Metering services to Customers and Host Customers pursuant to a Department-approved tariff.
- (3) Each Distribution Company shall implement its responsibilities and obligations regarding the provision of interconnection services to Customers and Host Customers pursuant to a Department-approved tariff.
- (4) Each Distribution Company shall be allowed to recover the aggregate of the distribution portion of any Net Metering Credits and the Distribution Company delivery charges displaced by a Class I Net Metering Facility, Class II Net Metering Facility, ~~or~~ Class III Net Metering Facility, including a New Solar Net Metering Facility, or a Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program through a uniform per kilowatt-hour surcharge

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or surcharges billed to all of its Customers on an annual basis.

(5) Nothing in 220 CMR 18.00 is intended in any way to limit eligibility for Net Metering services based upon a third-party ownership or financing agreement related to a Net Metering facility, where Net Metering services would otherwise be available.

(6) Unless otherwise indicated, all capacity and energy measurements referenced in 220 CMR 18.00 refer to alternating current.

(7) The Department may, where appropriate, grant an exception from any provision of 220 CMR 18.00.

18.10: Monthly Minimum Reliability Contribution

Distribution Companies may submit to the Department proposals for a monthly minimum reliability contribution to be included on electric bills for distribution utility accounts that receive Net Metering Credits provided that the Department receives a proposal from such Distribution Company and subsequently approves the monthly minimum reliability contribution pursuant to M.G.L. c. 164, § 139(j).

18.11: Small Hydroelectric Net Metering Program

(1) The Small Hydroelectric Net Metering Program shall remain open until the Department certifies that the aggregate capacity of Small Hydroelectric Net Metering Facilities participating in the program is equal to 60 megawatts.

(2) While the Small Hydroelectric Net Metering Program is open, any Small Hydroelectric Net Metering Facility that seeks to net meter must participate in the Small Hydroelectric Net Metering Program and generate Net Metering Credits pursuant to 220 CMR 18.04(6A).

(3) Once the Department certifies that the aggregate capacity of Small Hydroelectric Net Metering Facilities participating in the program is equal to 60 megawatts, a Small Hydroelectric Net Metering Facility shall:

- (a) apply for Net Metering services as a Class I Net Metering Facility;
- (b) generate Net Metering Credits pursuant to 220 CMR 18.04(2); and
- (c) apply for a Cap Allocation pursuant to 220 CMR 18.07(1), if it is not a Cap Exempt Facility.

REGULATORY AUTHORITY

220 CMR 18.00: M.G.L. c. 164, §§ 138 through 140.

D.P.U. 17-10-A

**Appendix B**

**Clean Final Net Metering Regulations**

220 CMR: DEPARTMENT OF PUBLIC UTILITIES

220 CMR 18.00: NET METERING

Section

- 18.01: Purpose and Scope
- 18.02: Definitions
- 18.03: Net Metering Services
- 18.04: Calculation of Net Metering Credits
- 18.05: Allocation of Net Metering Credits
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- 18.07: Net Metering Capacity
- 18.08: Net Metering Reports
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- 18.11: Small Hydroelectric Net Metering Program

18.01: Purpose and Scope

(1) Purpose. 220 CMR 18.00 governs how Distribution Companies are to provide Net Metering services to Customers consistent with the Net Metering provisions of M.G.L. c. 164, §§ 138 through 140.

(2) Scope. 220 CMR 18.00 applies to all Distribution Companies subject to the jurisdiction of the Department.

18.02: Definitions

The terms set forth in 220 CMR 18.02 shall be defined as follows, unless the context otherwise requires.

Administrator. The qualified entity selected by the Department to facilitate the System of Assurance.

Agricultural Net Metering Facility. A Renewable Energy generating facility that is operated as part of an agricultural business and is not participating in the Small Hydroelectric Net Metering Program, generates electricity, does not have a generation capacity of more than two megawatts, is located on land owned or controlled by the agricultural business, and is used to provide energy to metered accounts of the business. Agriculture has the same meaning as provided in M.G.L. c. 128, § 1A; provided that, when necessary, the Commissioner of the Department of Agricultural Resources shall determine if a business is an agricultural business and whether the facility is operated as part of that business.

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Anaerobic Digestion Net Metering Facility. A facility that:

- (a) generates electricity from a biogas produced by the accelerated biodegradation of organic materials under controlled anaerobic conditions;
- (b) has been determined by the Department of Energy Resources, in coordination with the Department of Environmental Protection, to qualify under the Department of Energy Resources' regulations as a Class I renewable energy generating source under 225 CMR 14:00: *Renewable Energy Portfolio Standard – Class I* and M.G.L. c. 25A, § 11F; and
- (c) is interconnected to a Distribution Company.

Billing Period. The period of time set forth in a Distribution Company's terms and conditions for which a Distribution Company bills a Customer for its electricity consumed or estimated to have been consumed.

Cap Allocation. An assurance from the Administrator that a Host Customer will receive Net Metering services upon a Host Customer's receipt from a Distribution Company of notice of authorization to interconnect.

Cap Exempt Facility. A Class I Net Metering Facility that is:

- (a) a renewable energy generating facility; and
- (b) has a nameplate capacity rating equal to or less than:
  - 1. ten kilowatts on a single-phase circuit; or
  - 2. 25 kilowatts on a three-phase circuit.

Class I Net Metering Facility. A plant or equipment that is used to produce, manufacture, or otherwise generate electricity, that has a design capacity of 60 kilowatts or less, and that is not a Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program.

Class II Net Metering Facility. An Agricultural Net Metering Facility, Anaerobic Digestion Net Metering Facility, Solar Net Metering Facility, or Wind Net Metering Facility with a generating capacity of more than 60 kilowatts but less than or equal to one megawatt; provided, however, that a Class II Net Metering Facility of a Municipality or Other Governmental Entity may have a generating capacity of more than 60 kilowatts but less than or equal to one megawatt per unit. Each Municipality or Other Governmental Entity may have an aggregate generating capacity of not more than ten megawatts.

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Class III Net Metering Facility. An Agricultural Net Metering Facility, Anaerobic Digestion Net Metering Facility, Solar Net Metering Facility, or Wind Net Metering Facility with a generating capacity of more than one megawatt but less than or equal to two megawatts; provided, however, that a Class III Net Metering Facility of a Municipality or Other Governmental Entity may have a generating capacity of more than one megawatt but less than or equal to two megawatts per unit. Each Municipality or Other Governmental Entity may have an aggregate generating capacity of not more than ten megawatts.

Customer. Any person, partnership, corporation, or any other entity, whether public or private, who obtains distribution service at a customer delivery point and who is a customer of record of the Distribution Company for its own electricity consumption.

Department. Department of Public Utilities.

Distribution Company. A company engaging in the distribution of electricity or owning, operating or controlling distribution facilities; provided, however, that a Distribution Company shall not include any entity which owns or operates plant or equipment used to produce electricity, except for facilities provided in M.G.L. c. 164, § 1A(f), steam and chilled water, or an affiliate engaged solely in the provision of such electricity, steam and chilled water, where the electricity produced by such entity or its affiliate is primarily for the benefit of hospitals and non-profit educational institutions, and where such plant or equipment was in operation before January 1, 1986.

Governmental Cooperative. A cooperative, organized pursuant to M.G.L. c. 164, § 136, whose members or shareholders are all Municipalities or Other Governmental Entities.

Host Customer. A Customer with a Class I Net Metering Facility, Class II Net Metering Facility, Class III Net Metering Facility, or Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program that generates electricity on the Customer's side of the meter.

ISO-NE. ISO New England Inc., the independent system operator for New England, or its successor, authorized by the Federal Energy Regulatory Commission to operate the New England bulk power system and administer New England's organized wholesale electricity market pursuant to the ISO-NE Tariff and operation agreements with transmission owners.

Market Net Metering Credit. A Net Metering Credit provided by a Distribution Company for the net excess electricity generated and fed back to the Distribution Company by a New Solar Net Metering Facility and other Solar Net Metering Facilities that are not Cap Exempt Facilities after 25 years from the date that each

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Solar Net Metering Facility was first authorized to interconnect to the electric distribution system as provided by M.G.L. c. 164, § 139(k).

Municipality. A city or town.

Neighborhood. A geographic area within a Municipality, subject to the right of the Department to grant exceptions pursuant to 220 CMR 18.09(7), that:

- (a) is recognized by the residents as including a unique community of interests;
- (b) falls within the service territory of a single Distribution Company and within a single ISO-NE load zone; and
- (c) may encompass residential, commercial, and undeveloped properties.

Neighborhood Net Metering Facility. A Class I Net Metering Facility, Class II Net Metering Facility, or Class III Net Metering Facility that:

- (a) is owned by, or serves the energy needs of, a group of ten or more residential Customers that reside in a single Neighborhood and are served by a single Distribution Company;
- (b) may also be owned by, or serve the energy needs of, other Customers who reside in the same Neighborhood and are served by the same Distribution Company as the residential Customers that own or are served by the facility; and
- (c) is located within the same Neighborhood as the Customers that own or are served by the facility.

Net Metering. The process of measuring the difference between electricity delivered by a Distribution Company and electricity generated by a Class I Net Metering Facility, Class II Net Metering Facility, Class III Net Metering Facility, or Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program and fed back to the Distribution Company.

Net Metering Credit. Any credit, including a Market Net Metering Credit and a Neighborhood Net Metering Credit as defined in M.G.L. c. 164, § 138, provided by a Distribution Company for the net excess electricity generated and fed back to the Distribution Company by a Class I Net Metering Facility, Class II Net Metering Facility, Class III Net Metering Facility, Neighborhood Net Metering Facility, or Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program.

Net Metering Facility of a Municipality or Other Governmental Entity. A Class II Net Metering Facility or Class III Net Metering Facility:

- (a) that is owned or operated by a Municipality or Other Governmental Entity;  
or
- (b) of which the Municipality or Other Governmental Entity is the Host Customer and is assigned 100% of the output.

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New Solar Net Metering Facility.

- (a) A Solar Net Metering Facility that submits an application for a Cap Allocation to the System of Assurance after the Notification Date for the entire capacity of the Solar Net Metering Facility; or
- (b) A Solar Net Metering Facility that submits an application for a Cap Allocation to the System of Assurance before the Notification Date, but which is subsequently deemed complete by the Administrator and does not receive a Cap Allocation from the Administrator until after January 8, 2017; or
- (c) A Solar Net Metering Facility that submits an application for a Cap Allocation to the System of Assurance before the Notification Date, is subsequently deemed complete by the Administrator and receives a Cap Allocation before or on January 8, 2017, but that seeks to expand the generating capacity at a later date after the Notification Date such that the entire facility, including the expanded generating capacity, is a Class II Net Metering Facility or Class III Net Metering Facility.

Notification Date. The date established by Department order after which all New Solar Net Metering Facilities shall generate Market Net Metering Credits only as determined pursuant to M.G.L. c. 164, § 139(b½).

Other Governmental Entity. A department or agency of the Federal government or of the Commonwealth, and any other entity as approved by the Department.

Renewable Energy. Energy generated from any source that qualifies as a Class I or Class II Renewable Energy generating source under M.G.L. c. 25A, § 11F; provided, however, that after conducting administrative proceedings, the Department of Energy Resources, in consultation with the Department of Agricultural Resources, may add technologies or technology categories.

Small Hydroelectric Net Metering Facility. A facility for the production of electrical energy that uses water to generate electricity, with a nameplate capacity of two megawatts or less, and is interconnected to a Distribution Company.

Small Hydroelectric Net Metering Program. A distinct technology-specific Net Metering program wherein each Small Hydroelectric Net Metering Facility that seeks to net meter while the program is open participates in a separate cap and generates a Net Metering Credit pursuant to M.G.L. c. 164, § 139A.

Solar Net Metering Facility. A facility for the production of electrical energy that uses sunlight to generate electricity and is interconnected to a Distribution Company.

System of Assurance. The Massachusetts System of Assurance of Net Metering Eligibility, as established by the Department pursuant to M.G.L. c. 164, § 139(g).

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Wind Net Metering Facility. A facility for the production of electrical energy that uses wind to generate electricity and is interconnected to a Distribution Company.

18.03: Net Metering Services

- (1) Each Distribution Company shall provide services to Customers and Host Customers necessary to permit Net Metering, including those related to interconnection, metering, calculation, and billing of Net Metering Credits, as provided by 220 CMR 18.04 and as specified in a Distribution Company's Net Metering tariff pursuant to 220 CMR 18.09(2) and (3).
- (2) No Distribution Company may impose a special fee on a Host Customer with a Class I Net Metering Facility, including a New Solar Net Metering Facility, such as backup charges and demand charges, or additional controls or liability insurance, except for a monthly minimum reliability contribution or other fee approved by the Department in a ratemaking proceeding, provided that the facility meets the other requirements of the interconnection tariff, and all relevant safety and power quality standards.
- (3) Each Distribution Company shall calculate a Net Metering Credit as set forth in 220 CMR 18.04, and not bill a Host Customer for kilowatt-hour usage, for any Billing Period in which the kilowatt-hours generated by a Class I Net Metering Facility, Class II Net Metering Facility, Class III Net Metering Facility, New Solar Net Metering Facility, or Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program exceed the kilowatt-hour usage of the Host Customer.
- (4) Each Distribution Company shall bill a Host Customer for net excess consumption for any Billing Period in which the kilowatt-hours consumed by a Host Customer exceed the kilowatt-hours generated by a Class I Net Metering Facility, Class II Net Metering Facility, Class III Net Metering Facility, New Solar Net Metering Facility, or Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program.

18.04: Calculation of Net Metering Credits

- (1) For a Class I Net Metering Facility that is a Wind Net Metering Facility, Class I Net Metering Facility that is a Solar Net Metering Facility, Class I Net Metering Facility that is an Agricultural Net Metering Facility, Class I Net Metering Facility that is an Anaerobic Digestion Net Metering Facility, Class II Net Metering Facility, a Net Metering Facility of a Municipality or Other Governmental Entity, or a Solar Net Metering Facility that receives approval by Department order, except those Solar Net Metering Facilities governed by 220 CMR 18.04(3) and (4), each Distribution Company shall calculate for each Billing Period a Net Metering Credit equal to:

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- (a) 100% of the net excess kilowatt-hours, by time-of-use, if applicable, multiplied by the sum of the following Distribution Company charges applicable to the rate class under which the Host Customer takes service:
    - 1. basic service kilowatt-hour charge in the ISO-NE load zone where the Host Customer is located;
    - 2. distribution kilowatt-hour charge;
    - 3. transmission kilowatt-hour charge; and
    - 4. transition kilowatt-hour charge;
  - (b) Except that a Class I Net Metering Facility that is a Solar Net Metering Facility, Class II Net Metering Facility that is a Solar Net Metering Facility, or a Class III Net Metering Facility that is a Solar Net Metering Facility shall receive Market Net Metering Credits as provided in 220 CMR 18.04(3) or (4) after 25 years from the date on which the Solar Net Metering Facility was first authorized to interconnect to the distribution system.
- (2) For a Class I Net Metering Facility other than a Class I Net Metering Facility that is a Wind Net Metering Facility, Class I Net Metering Facility that is an Agricultural Net Metering Facility, Class I Net Metering Facility that is an Anaerobic Digestion Net Metering Facility, or a Class I Net Metering Facility that is a Solar Net Metering Facility, each Distribution Company shall calculate a Net Metering Credit for each Billing Period as the product of the:
- (a) 100% of the net excess kilowatt-hours, by time-of-use, if applicable; and
  - (b) average monthly clearing price at the ISO-NE.
- (3) For a Class I Net Metering Facility that is a New Solar Net Metering Facility, Class II Net Metering Facility that is a New Solar Net Metering Facility, or Class III Net Metering Facility that is a New Solar Net Metering Facility, except for those Solar Net Metering Facilities governed by 220 CMR 18.04(4), each Distribution Company shall calculate for each Billing Period a Market Net Metering Credit equal to 60% of the net excess kilowatt-hours, by time-of-use, if applicable, multiplied by the sum of the Distribution Company's:
- (a) basic service kilowatt-hour charge in the ISO-NE load zone where the Host Customer is located;
  - (b) distribution kilowatt-hour charge;
  - (c) transmission kilowatt-hour charge; and
  - (d) transition kilowatt-hour charge.
- (4) For a New Solar Net Metering Facility that is a Cap Exempt Facility, or New Solar Net Metering Facility, of which the Municipality or Other Governmental Entity is the Host Customer and only allocates Net Metering Credits to the accounts of other customers that could also qualify as a Municipality or Other Governmental Entity, each Distribution Company shall calculate for each Billing

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Period a Market Net Metering Credit equal to 100% of the net excess kilowatt-hours, by time-of-use, if applicable, multiplied by the sum of the Distribution Company's:

- (a) basic service kilowatt-hour charge in the ISO-NE load zone where the Host Customer is located;
- (b) distribution kilowatt-hour charge;
- (c) transmission kilowatt-hour charge; and
- (d) transition kilowatt-hour charge.

(5) For a Neighborhood Net Metering Facility or a Class III Net Metering Facility other than a Net Metering Facility of a Municipality or Other Governmental Entity, and those Solar Net Metering Facilities governed by 220 CMR 18.04(3) or (6), each Distribution Company shall calculate for each Billing Period a Net Metering Credit equal to:

- (a) 100% of the net excess kilowatt-hours, by time-of-use, if applicable, multiplied by the sum of the Distribution Company charges applicable to the rate class under which the Host Customer takes service:
  - 1. basic service kilowatt-hour charge in the ISO-NE load zone where the Host Customer is located;
  - 2. transmission kilowatt-hour charge; and
  - 3. transition kilowatt-hour charge;
- (b) Except that a Solar Net Metering Facility that is a Neighborhood Net Metering Facility shall receive Market Net Metering Credits, as provided in 220 CMR 18.04(6), after 25 years from the date on which it was first authorized to interconnect to the distribution system; and
- (c) Except those Class III Net Metering Facilities governed by 220 CMR 18.04(1)(b).

(6) For a New Solar Net Metering Facility that is a Neighborhood Net Metering Facility, each Distribution Company shall calculate for each Billing Period a Market Net Metering Credit equal to 60% of the net excess kilowatt-hours, by time-of-use, if applicable, multiplied by the sum of the Distribution Company's:

- (a) basic service kilowatt-hour charge in the ISO-NE load zone where the Host Customer is located;
- (b) transmission kilowatt-hour charge; and
- (c) transition kilowatt-hour charge.

(6A) For a Small Hydroelectric Net Metering Facility that is participating in the Small Hydroelectric Net Metering Program, each Distribution Company shall calculate for each Billing Period a Net Metering Credit equal to 100% of the net excess kilowatt-hours, by time-of-use, if applicable, multiplied by the Distribution Company's basic service kilowatt-hour charge in the ISO-NE load zone where the Host Customer is located.

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(7) The calculation of Net Metering Credits under 220 CMR 18.04 shall not include the demand side management and renewable energy kilowatt-hour charges set forth in M.G.L. c. 25, §§ 19 through 20.

(8) For any Billing Period for which a Distribution Company calculates a Net Metering Credit for a Host Customer, the Distribution Company shall apply the Net Metering Credit to the Host Customer's account for the subsequent Billing Period, unless the Host Customer provides otherwise pursuant to 220 CMR 18.05.

18.05: Allocation of Net Metering Credits

(1) For a Class I Net Metering Facility, Class II Net Metering Facility, Class III Net Metering Facility, including a New Solar Net Metering Facility, or Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program, each Distribution Company shall allocate Net Metering Credits, as designated in writing by the Host Customer, to other Customers who are in the Distribution Company's service territory and are located in the same ISO-NE load zone. The manner and form of credit designation shall be as specified in the Distribution Company's Net Metering Tariff pursuant to 220 CMR 18.09(2). Notwithstanding the foregoing, if the Host Customer of a Class I Net Metering Facility, Class II Net Metering Facility, or Class III Net Metering Facility is a Municipality or Other Governmental Entity, including a Governmental Cooperative, it may direct its Distribution Company to allocate Net Metering Credits only to other Customers that are Municipalities or Other Governmental Entities.

(2) For a Neighborhood Net Metering Facility, the Distribution Company may only allocate Net Metering Credits to residential or other Customers who reside in the same Neighborhood in which the Neighborhood Net Metering Facility is located and have an ownership interest in, or are served by, the Neighborhood Net Metering Facility.

(3) The Distribution Company shall carry forward, from Billing Period to Billing Period, any remaining Net Metering Credit balance.

(4) For a Class III Net Metering Facility, including a Class III Net Metering Facility that is a New Solar Net Metering Facility, and a Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program, a Distribution Company may elect to pay to the Host Customer Net Metering Credits rather than allocating such credits pursuant to 220 CMR 18.05(1).

18.06: Eligibility for Net Metering

(1) Distribution Companies shall not provide Net Metering services to a Host Customer who is an electric company, generation company, aggregator, supplier,

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energy marketer, or energy broker, as those terms are used in M.G.L. c. 164, §§ 1 and 1F and 220 CMR 11.00: *Rules Governing the Restructuring of the Electric Industry*.

(2) A Governmental Cooperative shall not be considered an electric company, generation company, aggregator, supplier, energy marketer or energy broker, as those terms are used in M.G.L. c. 164, §§ 1 and 1F and 220 CMR 11.00: *Rules Governing the Restructuring of the Electric Industry*.

18.07: Net Metering Capacity

(1) Each Distribution Company shall make Net Metering services available to Host Customers, except for Host Customers of a Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program, such that the aggregate capacity of:

- (a) Net Metering facilities that are not Net Metering Facilities of a Municipality or Other Governmental Entity does not exceed 7% of the Distribution Company's highest historical peak load; and
- (b) Net Metering Facilities of a Municipality or Other Governmental Entity does not exceed 8% of the Distribution Company's highest historical peak load.

(1A) Distribution Companies shall make an aggregate capacity of 60 megawatts statewide of Net Metering services available to Host Customers of Small Hydroelectric Net Metering Facilities. This aggregate capacity shall be in addition to that applicable to the Net Metering services available under 220 CMR 18.07(1).

(2) The maximum amount of generating capacity eligible for Net Metering by a Municipality or Other Governmental Entity shall be ten megawatts, as determined by the sum of the nameplate ratings of Class II Net Metering Facilities and Class III Net Metering Facilities, including a Class II Net Metering Facility that is a New Solar Net Metering Facility and a Class III Net Metering Facility that is a New Solar Net Metering Facility for which the Municipality or Other Governmental Entity is the Host Customer, except as provided in 220 CMR 18.07(6).

(3) Each Distribution Company shall identify on an annual basis its highest historical peak load and post that data on its website by February 1<sup>st</sup> of the following year.

(4) For the purpose of calculating the aggregate capacity of Class I Net Metering Facilities, Class II Net Metering Facilities, Class III Net Metering Facilities, including a New Solar Net Metering Facility, and Small Hydroelectric Net Metering Facilities participating in the Small Hydroelectric Net Metering Program, the capacity of:

- (a) A Solar Net Metering Facility shall be 80% of the facility's direct current rating at standard test conditions; and

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- (b) All other non-solar Net Metering facilities shall be the facility's nameplate rating in alternating current.
- (5) A Cap Exempt Facility shall be exempt from the calculation of the aggregate capacity of Net Metering facilities.
- (6) A Municipality or Other Governmental Entity that is a member of a Governmental Cooperative may transfer any or all of the Net Metering generating capacity associated with one or more Class II or III Net Metering Facilities, including a Class II Net Metering Facility that is a New Solar Net Metering Facility or a Class III Net Metering Facility that is a New Solar Net Metering Facility, to said Governmental Cooperative by providing written assent to the Governmental Cooperative and obtaining approval from the Department.
- (7) A Governmental Cooperative may serve as a Host Customer for a Net Metering Facility of a Municipality or Other Governmental Entity for all capacity allocated pursuant to 220 CMR 18.07(6) and its own capacity as an Other Governmental Entity, provided that the Net Metering Credits for which such Governmental Cooperative serves as Host Customer shall only be allocated to that same Governmental Cooperative or its members.
- (8) Notwithstanding the capacity limits set forth herein 220 CMR 18.07, a Class I Net Metering Facility shall be eligible for Net Metering if it qualifies under the Department of Energy Resources' regulations as a Class I renewable energy generating source under 225 CMR 14:00: *Renewable Energy Portfolio Standard – Class I* and M.G.L. c. 25A, § 11F and is a Cap Exempt Facility.

18.08: Net Metering Reports

- (1) Each Distribution Company shall track at least the following:
  - (a) the size, generation type, Net Metering class, fuel type, and the Municipality within which each Net Metering facility receives Net Metering services;
  - (b) the size, generation type, fuel type, and the Municipality within which each Net Metering facility has requested interconnection with the Distribution Company; and
  - (c) the aggregate capacity of Net Metering facilities that have interconnected, and that have requested interconnection, to the Distribution Company.
- (2) Each Distribution Company shall file with the Department information regarding the provision of Net Metering services to its Customers, in a format and according to a schedule as determined by the Department.
- (3) Each Distribution Company shall post data to a publicly accessible website

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tracking the aggregate capacity of eligible Net Metering facilities that have connected, and that have requested interconnection, relative to the Net Metering capacity set forth in 220 CMR 18.07. The data shall be updated on a monthly basis.

18.09: Miscellaneous

- (1) The provision of Net Metering services does not entitle Distribution Companies to ownership of, or title to, the renewable energy or environmental attributes, including renewable energy certificates, associated with any electricity produced by a Net Metering facility.
- (2) Each Distribution Company shall implement its responsibilities and obligations regarding the provision of Net Metering services to Customers and Host Customers pursuant to a Department-approved tariff.
- (3) Each Distribution Company shall implement its responsibilities and obligations regarding the provision of interconnection services to Customers and Host Customers pursuant to a Department-approved tariff.
- (4) Each Distribution Company shall be allowed to recover the aggregate of the distribution portion of any Net Metering Credits and the Distribution Company delivery charges displaced by a Class I Net Metering Facility, Class II Net Metering Facility, Class III Net Metering Facility, including a New Solar Net Metering Facility, or a Small Hydroelectric Net Metering Facility participating in the Small Hydroelectric Net Metering Program through a uniform per kilowatt-hour surcharge or surcharges billed to all of its Customers on an annual basis.
- (5) Nothing in 220 CMR 18.00 is intended in any way to limit eligibility for Net Metering services based upon a third-party ownership or financing agreement related to a Net Metering facility, where Net Metering services would otherwise be available.
- (6) Unless otherwise indicated, all capacity and energy measurements referenced in 220 CMR 18.00 refer to alternating current.
- (7) The Department may, where appropriate, grant an exception from any provision of 220 CMR 18.00.

18.10: Monthly Minimum Reliability Contribution

Distribution Companies may submit to the Department proposals for a monthly minimum reliability contribution to be included on electric bills for distribution utility accounts that receive Net Metering Credits provided that the Department receives a proposal from such Distribution Company and subsequently approves the monthly minimum reliability contribution pursuant to M.G.L. c. 164, § 139(j).

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18.11: Small Hydroelectric Net Metering Program

- (1) The Small Hydroelectric Net Metering Program shall remain open until the Department certifies that the aggregate capacity of Small Hydroelectric Net Metering Facilities participating in the program is equal to 60 megawatts.
- (2) While the Small Hydroelectric Net Metering Program is open, any Small Hydroelectric Net Metering Facility that seeks to net meter must participate in the Small Hydroelectric Net Metering Program and generate Net Metering Credits pursuant to 220 CMR 18.04(6A).
- (3) Once the Department certifies that the aggregate capacity of Small Hydroelectric Net Metering Facilities participating in the program is equal to 60 megawatts, a Small Hydroelectric Net Metering Facility shall:
  - (a) apply for Net Metering services as a Class I Net Metering Facility;
  - (b) generate Net Metering Credits pursuant to 220 CMR 18.04(2); and
  - (c) apply for a Cap Allocation pursuant to 220 CMR 18.07(1), if it is not a Cap Exempt Facility.

REGULATORY AUTHORITY

220 CMR 18.00: M.G.L. c. 164, §§ 138 through 140.