The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 11-11-C August 24, 2012

Inquiry Into Net Metering and Interconnection of Distributed Generation, pursuant to An Act Relative to Green Communities, St. 2008, c. 169, §§ 138-140 and St. 2010, c. 359, §§ 25-30.

ORDER ON DEFINITIONS OF UNIT AND FACILITY

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I. INTRODUCTION AND PROCEDURAL HISTORY

On October 15, 2010, Governor Patrick signed into law 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 ("Act"). The Act requires, among other things, that the Department of Public Utilities ("Department") implement certain changes to the net metering provisions of G.L. c. 164, §§ 138 and 139. St. 2010, c. 359, §§ 25-30.[1]

The Act changes the net metering provisions of G.L. c. 164, §§ 138 and 139 in several ways. First, the Act creates two caps — one cap reserved for municipalities and other governmental entities (i.e., "public entities"), and another cap for the net metering facilities of all other entities (i.e., "private entities").[2] Second, G.L. c. 164, § 138 defines a net metering facility of a public entity as:

> a Class II or III net metering facility: (1) that is owned or operated by a municipality or other governmental entity; or (2) of which the municipality or other governmental entity is assigned 100 per cent of the output.

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[1] On August 3, 2012, Governor Patrick signed into law Chapter 209 of the Acts of 2012, An Act Relative to Competitively Priced Electricity in the Commonwealth, which made additional changes to G.L. c. 164, §§ 138 and 139. These changes will become effective on November 1, 2012. See Massachusetts General Court, Legislative Research and Drafting Manual, 5th Edition, Part 5A (2010). The amendments have a limited effect on our analysis of the terms unit and facility and, therefore, we will only review them here as necessary.

[2] Pursuant to G.L. c. 164, § 139(f), "[t]he aggregate net metering capacity of facilities that are not net metering facilities of a municipality or other governmental entity shall not exceed 1 per cent of the distribution company's peak load. The aggregate net metering capacity of net metering facilities of a municipality or other governmental entity shall not exceed 2 per cent of the distribution company's peak load." St. 2010, c. 359, § 29.

Third, the Act sets the maximum amount of net metering generating capacity eligible for net metering by a public entity at ten megawatts ("MW"). G.L. c. 164, § 139(f).

The statute defines three classes of net metering facilities, based upon their generating capacity. While the definitions of Class I, Class II and Class III net metering facilities within G.L. c. 164, § 138 contain the term facility, this term is not specifically defined in the statute. In addition, when describing the net metering facilities of public entities that are either Class II or Class III net metering facilities, the statute uses the term "unit" as well as the term "facility." G.L. c. 164, § 138 states:

> "Class II Net Metering Facility", means an agricultural 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 1 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 1 megawatt per unit.
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> "Class III Net Metering Facility", means an agricultural net metering facility, solar net metering facility, or wind net metering facility with a generating capacity of more than 1 megawatt but less than or equal to 2 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 1 megawatt but less than or equal to 2 megawatts per solar net metering or wind net metering unit.

On May 11, 2012, the Department solicited comments on whether to clarify the terms unit and facility from G.L. c. 164, § 138. Inquiry Into Net Metering and Interconnection of Distributed Generation, D.P.U. 11-11, Hearing Officer Memorandum (May 11, 2012) (hereinafter, "Memorandum"). Specifically, the Department sought comment on whether to clarify the definitions of net metering facilities and units and, if so, whether a facility's or unit's generating capacity ought to be associated with: (1) a single meter; (2) a single parcel of land; (3) a single interconnection point on an electric distribution system; or (4) some other criteria.

Memorandum at 2. Initial comments were filed on May 21, 2012,[3] and reply comments were filed on June 4, 2012.[4]

II. COMMENTS

A. Introduction

A majority of commenters recommended that the Department clarify the terms facility and unit,[5] but they were divided on how these terms should be clarified. Commenters addressed, among other things: (1) whether the Department should distinguish between the net metering facilities of public and private entities; (2) the criteria for determining what constitutes a unit, for the purposes of net metering; and (3) the criteria for determining what constitutes a net metering facility.

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3 Initial comments were submitted by the following thirteen commenters: Brightridge Solar; Broadway Electrical Co., Inc. and Broadway Renewable Strategies LLC, jointly (together, "BEC/BRS"); New England Clean Energy Council ("NECEC"); Cape Light Compact and Cape and Vineyard Electric Cooperative, jointly (together, "CLC and CVEC"); Department of Agricultural Resources ("MDAR"); Department of Energy Resources ("DOER"); Fitchburg Gas and Electric Light Company, d/b/a Unitil ("Unitil"), Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, NSTAR Electric Company ("NSTAR Electric"), and Western Massachusetts Electric Company ("WMECo"), jointly (together, "Distribution Companies"); EMI Dartmouth Solar, LLC ("EMIDS"); My Generation Energy, Inc. ("My Generation"); Renewable Resource Development Coalition ("RRDC"); True North Energy, LLC ("True North Energy"); UGT Renewable Energy 7, LLC ("UGT 7"); and Westford Solar Holdings, LLC and Westford Solar Holdings II, LLC (together, "Westford Solar").

4 Reply comments were submitted by the following seven commenters: CLC and CVEC; Distribution Companies; DOER; Klavens Law Group, P.C. ("Klavens"); My Generation; RRDC; and True North Energy.

5 One commenter claims that the creation of public and private net metering caps obviates any public policy need to define unit and facility (Klavens Comments at 1).

B. Net Metering Facilities of Public and Private Entities

DOER, the Distribution Companies, MDAR, and My Generation recommend that the Department clarify the terms unit and facility and apply them uniformly to all net metering projects (DOER Comments at 3, 5; DOER Reply Comments at 3; Distribution Companies Comments at 3; MDAR Comments at 1; My Generation Comments at 3). According to MDAR, any criteria to be applied to net metering projects should be consistent with the spirit of the statute (MDAR Comments at 1). Specifically, MDAR discourages the Department from allowing projects larger than two MW to net meter because doing so would consume a large amount of net metering capacity and exclude many residents and small businesses from net metering, including the agricultural community (MDAR Comments at 1).

DOER, CLC and CVEC, Klavens, and RRDC claim that the terms unit and facility are used differently with regard to the net metering facilities of public and private entities, and that these terms should be given adequate meaning as the Legislature intended (DOER Comments at 2; CLC and CVEC Reply Comments at 2-6; Klavens Reply Comments at 1-2; RRDC Comments at 7-8). CLC and CVEC argue that the facility types, sizes, and generating capacity outlined in the statute demonstrate that the Legislature intended for net metering benefits to differ for public and private entities (CLC and CVEC Reply Comments at 1-2, 5). According to RRDC, the statute contains a special incentive for the net metering projects of public entities by allowing them to connect multiple units at a facility behind a single meter and avoid the additional cost and complexity of multiple meters (RRDC Comments at 6-8). Klavens asserts that any new, more restrictive definitions of unit and facility will discourage public entities from jointly pursuing large net metering projects, and that such projects should be encouraged in order

to achieve economies of scale with regard to construction and equipment (Klavens Reply Comments at 1-2).

According to RRDC and My Generation, while the statute provides more flexibility to the net metering projects of public entities, its purpose is not to promote public projects only or to disadvantage private projects (RRDC Comments at 6-7; My Generation Reply Comments at 3).

C. Unit

DOER and the Distribution Companies recommend that the Department clarify that a unit is a subdivision of a public entity's net metering facility (DOER Comments at 3, 5; DOER Reply Comments at 3; Distribution Companies Comments at 3). Commenters who addressed the definition of unit for wind and agricultural generation facilities agreed that, for wind projects, a unit should be defined as a turbine, and for agricultural projects, a unit should be defined as a single power generating device (i.e., an engine or a turbine) (DOER Comments at 3-6; Distribution Companies Comments at 3; CLC and CVEC Comments at 6-7).

However, commenters were divided on whether and how to define unit for solar projects. DOER and the Distribution Companies encourage the Department to define the term unit as the amount of solar capacity behind a single inverter, whereas CLC and CVEC support a definition of unit as the capacity associated with either a single meter or a single inverter (DOER Comments at 3-6; CLC and CVEC Comments at 6-7; Distribution Companies Comments at 3). My Generation asserts that it would be inappropriate to define unit for solar technology as the amount of capacity behind an inverter because many solar projects now use micro-inverters or

string-inverters (My Generation Reply Comments at 3-4).[6] RRDC and My Generation argue that because the actual design and arrangement of solar projects can vary widely, applying a uniform definition of the term unit to solar projects would be inappropriate (RRDC Comments at 7-8; My Generation Reply Comments at 3). RRDC contends that solar technology does not conform easily to a definition of unit, and My Generation claims that a uniform definition of unit will not accommodate future solar technology changes (e.g., the increased deployment of micro-inverters) (RRDC Comments at 7; My Generation Reply Comments at 3).

Commenters were divided on whether to define unit for solar projects as synonymous with facility. My Generation argues that interpreting the terms unit and facility as synonymous for solar technology would not contravene the statute (My Generation Comments at 3). CLC and CVEC oppose this idea, arguing that if the Legislature had intended the same meaning, it would have used the same term (CLC and CVEC Reply Comments at 5).

D. Facility

1. Introduction

Commenters were divided on which approach the Department should use to determine what constitutes a net metering facility. Commenters addressed several single-factor approaches as well as two combined-factor approaches.

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6 Micro-inverters are small inverters that convert direct current ("DC") electricity from one or two photovoltaic panels into alternating current ("AC") electricity. Micro-inverters are different from central inverters, which convert DC electricity from several or many photovoltaic panels to AC electricity. The term string-inverters describes a certain wiring configuration of the photovoltaic panels that delivers DC electricity to the inverter (i.e., wired in series).

2. Single Meter Approach

RRDC argues that, for the last three years, a facility has customarily been considered as all generating capacity that is installed on the customer's side of a meter (i.e., the single meter approach) (RRDC Comments at 2-7). RRDC and EMIDS assert that the single meter approach to defining a facility is legally consistent with the statute, the Department's net metering regulations, and Department precedent (RRDC Comments at 3-7; RRDC Reply Comments at 2-3; EMIDS Comments at 1). RRDC and EMIDS claim that there is no basis for imposing any restrictions beyond the single meter approach (RRDC Comments at 3-7; RRDC Reply Comments at 2-3; EMIDS Comments at 1). According to several commenters, any deviation from the single meter approach now will make the Massachusetts renewable energy market seem unpredictable, unstable, and risky, which will disrupt existing and future net metering projects by increasing the cost of capital and decreasing economic efficiency (RRDC Comments at 10; RRDC Reply Comments at 3; Brightridge Solar Comments at 1; NECEC Comments at 1-2; True North Energy Reply Comments at 1).[7] RRDC, True North Energy, UGT 7, and Westford Solar urge the Department to endorse the single meter approach (RRDC Comments at 7; True North Energy Comments at 1-3; UGT 7 Comments at 1-3; Westford Solar Comments at 1-3).

According to the Distribution Companies, it is not accurate to describe the single meter approach as the customary way to define a net metering facility because only two companies have used it, NSTAR Electric and National Grid (Distribution Companies Reply Comments at 3). CLC and CVEC urge the Department to reject the single meter approach because it is

[7] True North Energy requests that the Department hold a public hearing if it modifies the single meter approach (True North Energy Reply Comments at 1). We find that it is not necessary to hold a public hearing.

inconsistent with G.L. c. 164, § 138, which limits the net metering capacity of facilities within the private cap to two MW each (CLC and CVEC Reply Comments at 2-3). CLC and CVEC claim that the single meter approach could result in project proponents "gaming the system" by separating a single large project into multiple facilities (CLC and CVEC Reply Comments at 2-3). My Generation acknowledges that the single meter approach has led to the successful development of numerous net metering projects to date, but it argues that the Department must view any artificial metering of projects as inconsistent with the statute and unfair (My Generation Reply Comments at 2).

3. Single Parcel Approach

DOER, BEC/BRS, and CLC and CVEC urge the Department to clarify that a facility constitutes the equipment located on a single parcel of land (i.e., the single parcel approach), which would be consistent with DOER's solar carve-out program, a program that allows up to six MW of solar generation on a single parcel of land, as authorized pursuant to G.L. c. 25A, § 11F(g)[8] (DOER Comments at 3, 5; BEC/BRS Comments at 1; CLC and CVEC Reply Comments at 4). DOER's regulations specify that, if a parcel is subdivided after January 1, 2010, a solar facility may only receive solar renewable energy certificates ("S-RECs") for up to six MW of capacity on the original parcel (DOER Comments at 3, 5).[9] 225 C.M.R. § 14.05(4)(a).

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[8] General Laws Chapter 25A, § 11F(g) authorizes the solar carve-out provision of the Massachusetts renewable portfolio standard in 225 C.M.R. § 14.00 et seq.

[9] DOER employs a rebuttable presumption that a parcel of land may not be subdivided for solar carve-out purposes later than January 1, 2010 (DOER Comments at 3, 5). See 225 C.M.R. § 14.05(4)(a).

Other commenters oppose the single parcel approach. RRDC argues that if the Legislature had intended to define the term facility using the single parcel approach, it would have stated so (RRDC Comments at 7). True North Energy argues that there is insufficient justification for the single parcel approach (True North Energy Reply Comments at 1). EMIDS claims that parcels of land are not relevant to facility design, and parcel boundaries can change over time (EMIDS Comments at 1). RRDC argues that if the Department adopts the single parcel approach, fewer cost-effective sources of renewable energy will be built in the Commonwealth because fewer facilities will be able to conform to both the Department's net metering policy and DOER's S-REC regulations (RRDC Reply Comments at 3-4). Instead of defining the term facility using the single parcel approach, My Generation recommends that the Department review any project that involves more than two MW on a single parcel of land (My Generation Reply Comments at 3).

4. Single Interconnection Point Approach

All commenters who addressed the notion of using a single interconnection point as the sole criterion to define a facility were opposed to it (BEC/BRS Comments at 1; RRDC Comments at 7, 9; True North Energy Comments at 3; CLC and CVEC Comments at 10-11; My Generation Reply Comments at 4). Commenters claimed that using an interconnection point as the sole factor to define a facility would be unreasonable, unjustified, imprecise, unnecessary, and unrelated to the intent of the statute (RRDC Comments at 7, 9; True North Energy

Comments at 3, n.4; CLC and CVEC Comments at 10-11; My Generation Reply Comments at 4).[10]

5. Combined Approaches

a. Multiple Factor Approach

Instead of adopting a fixed definition of facility, CLC and CVEC recommend that the Department consider multiple factors to prevent any project proponents from artificially qualifying their projects for net metering, including: (1) infrastructure; (2) financing; (3) development progress; and (4) location[11] (CLC and CVEC Comments at 4-5; CLC and CVEC Reply Comments at 4). My Generation contends that while CLC and CVEC's recommended approach is novel, it presents implementation problems, which could ultimately discourage project financing and development (My Generation Reply Comments at 4).

b. Single Meter/Single Interconnection Point Approach

According to the Distribution Companies, a facility should be defined as the generating capacity: (1) that is located behind a single meter; and (2) that has a single interconnection point[12] (Distribution Companies Comments at 2; Distribution Companies Reply Comments at 2). The Distribution Companies argue that this single meter/single interconnection point approach would be consistent with the statute and the Department's regulations, and that it should also

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10 As described further, below, some commenters supported the use of an interconnection point in conjunction with other factors to define the term facility.

11 For guidance on the location factor, CLC and CVEC refer the Department to DOER's regulations on the solar carve-out program (CLC and CVEC Comments at 4).

12 While the Distribution Companies use the term "point of common coupling," as used in the interconnection tariffs, they consider this term to be synonymous with the term interconnection point as used in the Memorandum (Distribution Companies Comments at 2, n.2; Distribution Companies Reply Comments at 2, n.4).

enhance the operation and reliability of their electric distribution systems (Distribution Companies Reply Comments at 3).[13] The Distribution Companies share the concerns expressed by others that large projects may seek to artificially qualify their projects for net metering and, in their view, the single meter/single interconnection point approach should help address such concerns (Distribution Companies Reply Comments at 3). True North Energy supports the comments of the Distribution Companies (True North Energy Reply Comments at 1).

E. Exemptions

All commenters who address the issue of exemptions from definitions of unit and facility recommend that the Department apply such definitions prospectively, and deem certain categories of projects to be exempt. However, commenters differed as to which types of projects should be exempt.

BEC/BRS, the Distribution Companies, EMIDS, RRDC, True North Energy, UGT 7, and Westford Solar all recommend that the Department exempt: (1) existing facilities; and (2) facilities that have already applied for interconnection (BEC/BRS Comments at 1; Distribution Companies Comments at 3; Distribution Companies Reply Comments at 3; EMIDS Comments at 2; RRDC Reply Comments at 4-6, 8; True North Energy Comments at 3; UGT 7 Comments at 3; Westford Solar Comments at 3).[14] To justify an exemption for all existing and planned projects, BEC/BRS argues that without an exemption financing might be jeopardized

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13 Specifically, the Distribution Companies state that having multiple high-voltage metering points behind a single interconnection point at one location presents serious operational and reliability concerns (Distribution Companies Reply Comments at 3).

14 To clarify their position further, True North Energy and UGT 7 propose that the interconnection applications must be deemed complete (True North Energy Comments at 3; UGT 7 Comments at 3).

(BEC/BRS Comments at 1). Similarly, RRDC asserts that a project proponent must invest substantial time, talent, and money to complete an interconnection application and, therefore, projects that have achieved this milestone should be exempt (RRDC Reply Comments at 5-6).[15] My Generation declares that the Department should exempt existing projects that were already or are about to come online and have used the single meter approach (My Generation Reply Comments at 2-3).

DOER recommends that the Department exempt from any definition of unit or facility all projects that have received a statement of qualification ("SQ") from DOER for participation in the renewable portfolio standard, pursuant to G.L. c. 25A, § 11F(g) (DOER Comments at 4-5; DOER Reply Comments at 2-3). DOER contends that a complete interconnection application is too low a threshold to justify an exemption, and that the Department should impose a higher standard, requiring a project to demonstrate that it has committed significant resources and is near completion (DOER Reply Comments at 2). DOER suggests that, to be exempt from any definitions of unit or facility, wind and agricultural projects should be required to have an SQ as of the effective date of an Order from the Department, and solar projects should be required to have an SQ within one year of the effective date of the Department's Order (DOER Reply Comments at 3).[16] RRDC rejects DOER's proposal for exempt projects, calling it unduly

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[15] In addition, RRDC argues that if the Department adopts definitions of unit and facility, any projects that are exempted from such definitions should be allowed to apply and qualify for the System of Assurance of Net Metering Eligibility as well (RRDC Reply Comments at 8).

[16] While DOER's initial comments suggested an exemption for projects that received an SQ by July 1, 2012, its reply comments proposed different effective dates for different technologies (c.f. DOER Comments at 4-5; DOER Reply Comments at 3).

disruptive to the solar industry and unfair to the private sector (RRDC Reply Comments at 7). True North Energy asserts that DOER's proposed deadlines fail to provide sufficient advance notice to affected stakeholders (True North Energy Reply Comments at 1).

CLC and CVEC assert that if the Department adopts definitions of unit and facility, this should not disrupt projects that are in operation or close to operation (CLC and CVEC Reply Comments at 7). CLC and CVEC claim that it would be excessive for the Department to exempt all projects that have submitted applications for interconnection (CLC and CVEC Reply Comments at 8). Instead, CLC and CVEC recommend prospective implementation of any definitions, and exempting existing projects that have: (1) a fully executed interconnection service agreement ("ISA"); or (2) an SQ from DOER (CLC and CVEC Reply Comments at 7, 8).

III. ANALYSIS AND FINDINGS

A. Introduction

In addition to Class I, Class II, and Class III net metering facilities, General Laws Chapter 164, § 138 defines many types of net metering facilities.[17] As stated above, the term unit is used in the definitions of Class II and Class III net metering facilities. G.L. c. 164, § 138. Nevertheless, the statute provides no additional guidance on the terms unit and facility.

While some commenters have discouraged the Department from developing fixed definitions of unit and facility, a majority of commenters have urged the Department to clarify these terms. Also, the commenters who endorsed clarification of the terms were sharply divided

[17] General Laws Chapter 164, § 138 defines the terms agricultural net metering facility, neighborhood net metering facility, net metering facility of a municipality or other governmental entity, solar net metering facility, and wind net metering facility.

on how the terms should be interpreted and applied. Therefore, we will consider each of the recommendations presented by commenters.

B. Net Metering Facilities of Public and Private Entities

General Laws Chapter 164, § 138 provides the following definitions:

> "Class II net metering facility", an agricultural 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 1 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 1 megawatt per unit.
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> "Class III net metering facility", an agricultural net metering facility, solar net metering facility, or wind-net-metering facility with a generating capacity of more than 1 megawatt but less than or equal to 2 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 1 megawatt but less than or equal to 2 megawatts per solar net metering or wind net metering unit.[18]

Elementary rules of statutory construction require that statutes be interpreted as enacted. Commonwealth v. Gove, 366 Mass. 351, 354 (1974), citing Davey Bros. Inc. v. Stop & Shop, Inc., 351 Mass. 59, 63 (1966). Further, each word or phrase in a statute is presumed to have its ordinary meaning. Davey Bros. Inc., at 63. Here, the statute draws a distinction between the net metering projects of public entities and private entities through its use of the terms unit and facility, without specifying how such terms should be defined. Nevertheless, even in the absence

[18] While the two provisions of the statute addressing the net metering projects of public entities are worded slightly differently, in promulgating the Department's net metering regulations, 220 C.M.R. § 18.00 et seq., we adopted identical wording for the relevant portions of the two provisions to simplify their implementation.

of clear statutory guidance, we are compelled to develop a reasonable interpretation of the statute's provisions.[19]

The statute unambiguously states that the generating capacity of a net metering facility may not exceed two MW. G.L. c. 164, § 138. However, the statute also creates an exception, stating that a public entity may include multiple units in a net metering facility as long as no single unit exceeds the two MW limit. G.L. c. 164, § 138. Thus, net metering projects of public entities are subject to a special rule and may exceed the maximum generating capacity limit established for Class II and Class III facilities, as long as they do not exceed ten MW, pursuant to G.L. c. 164, § 139(f).[20] Consequently, we find that any renewable energy project that is not the facility of a public entity and that exceeds two MW is ineligible for net metering, a finding which we will analyze further below, in conjunction with our analysis of the term facility and of potential exemptions.

C. Unit

Having found that the statute contemplates a special rule for the net metering projects of public entities, and that units will determine whether such projects exceed their generating capacity limit, we find it necessary to adopt a definition of unit. It stands to reason that for the net metering projects of public entities, a unit: (1) has a different meaning than facility, or the

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19 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 Corp., 533 U.S. 218, 227 (2001), citing Chevron U.S.A., Inc. v. Natural Res. Def. Council, 467 U.S. 837, 843-844 (1984); Middleborough v. Housing Appeals Comm., 449 Mass. 514, 523 (2007), citing Zoning Bd. Of Appeal of Wellesley v. Housing Appeals Comm., 385 Mass. 651, 654 (1982).

20 "The maximum amount of generating capacity eligible for net metering by a municipality or other governmental entity shall be 10 megawatts." G.L. c. 164, § 139(f).

statute would use the same word; and (2) a unit is a part or component of a facility. Accordingly, we must determine the meaning of unit for the various types of technology that are eligible for net metering.

For wind net metering facilities, commenters who addressed the issue unanimously favored defining a unit as a wind turbine. Similarly, these commenters recommended defining unit for agricultural net metering facilities as the capacity of a single piece of generating equipment (i.e., its engine or turbine). We agree, and we hereby adopt both of these definitions for the term unit.

In contrast, commenters were sharply divided over whether to define unit for solar projects as the capacity associated with an inverter (DOER Comments at 4; Distribution Companies Comments at 3; RRDC Comments at 7-8; My Generation Reply Comments at 3-4). Arguably, an inverter could be used to define the term unit for solar projects because: (1) inverters are universally required for solar systems that are interconnected with the electric distribution system;[21] and (2) relatively large solar projects often include more than one inverter, which suggests that an inverter is an appropriate way to distinguish units within a larger facility. However, commenters assert that if the definition of unit were extended to micro-inverters, a very small amount of capacity could be associated with a single unit, which could illogically exclude solar projects with micro-inverters from the definitions of Class II and Class III net metering facilities of a public entity. Also, commenters claim that while an inverter may be a

[21] Currently, all photovoltaic solar systems generate electricity in DC. However, the electric distribution system operates in AC. An inverter converts the DC from the photovoltaic solar system into AC in order for the system to operate compatibly with the electric distribution system.

suitable unit for some solar projects, solar projects can be configured in a multitude of ways, and establishing a single configuration for eligibility for net metering would place an unreasonable restriction on such projects. We address both of these issues in turn.

Commenters have correctly noted that, for the net metering projects of public entities, the units of a Class II net metering facility must be at least 60 kilowatts ("kW") each and the units of a Class III net metering facility must be more than one MW each. G.L. c. 164, § 138. If an inverter or a micro-inverter in a public entity's solar project were associated with less than the minimum amount of generating capacity, it could not qualify for Class II or Class III status. We find it unreasonable to conclude that micro-inverter technology should be excluded from the solar projects of public entities for net metering purposes.[22] As a result, we could: (1) use another means to define unit for solar projects altogether; or (2) use inverters to define units, but modify the definition to maintain adequate flexibility. Commenters presented no other means of defining unit, and we see no obvious alternative. Accordingly, we will use an inverter to define the term unit for solar projects and modify our definition to maintain adequate flexibility.

We agree with the comments that a prescriptive definition could unreasonably restrict the configurations that are available to solar projects. Accordingly, for solar projects, we will define a unit as an inverter, but instead of examining the capacity associated with each inverter, we will allow developers of solar projects of public entities to self-designate whether they are Class II or Class III net metering facilities, as long as the number of inverters equals or exceeds the number

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[22] While micro-inverters for solar projects are an important issue in this proceeding, we expect that there will be additional advances with regard to renewable energy technologies, and that the future development of net metering facilities may include more micro-technologies and systems. We do not wish to implement policies that could restrict the use or advancement of such technologies.

of units of the net metering facility. For example, if a six MW solar project of a public entity seeks to qualify as a Class II net metering facility, it would need at least six inverters, whereas to qualify as a Class III net metering facility, it would need at least three inverters.

Accordingly, we adopt the following definitions for unit: (1) for wind net metering facilities, a unit is a wind turbine; (2) for agricultural net metering facilities, a unit is a single piece of generating equipment (e.g., an engine or a turbine); and (3) for solar net metering facilities, a unit is an inverter, provided that a solar project proponent may self-designate whether a project is a Class II or Class III net metering facility as long as the project includes the minimum number of inverters required to qualify as such a facility.[23]

D. Facility

1. Introduction

Having interpreted the term unit, we now turn to the term facility, which will apply to all net metering projects, whether public or private. In the Memorandum, the Department proposed several independent criteria for the definition of the term facility. Specifically, a facility could be defined as the amount of capacity associated with: (1) a single meter; (2) a single parcel of land; (3) a single interconnection point; or (4) some other criteria. In general, commenters were divided on which approach to use, and some commenters proposed additional criteria for consideration. In light of the differing views reflected in the comments, we deem it appropriate

[23] While the statutory amendments enacted in 2012 include anaerobic digestion as an eligible technology for Class II and Class III net metering facilities, these provisions will not take effect until November 1, 2012. See note 1, above. Nonetheless, for the purpose of defining the term unit, as for agricultural net metering facilities, an anaerobic digestion unit will be defined as a single piece of generating equipment (e.g., an engine or a turbine).

to clarify the definition of a facility in order to eliminate confusion or doubt regarding a project's eligibility for net metering.

2. Single Meter Approach

Many commenters encourage the Department to adopt the single meter approach (Brightridge Solar Comments at 1; EMIDS Comments at 1; Klavens Reply Comments at 1; NECEC Comments at 1; RRDC Comments at 2-5, 7; RRDC Reply Comments at 2-3; True North Energy Comments at 1-3; True North Energy Reply Comments at 1; UGT 7 Comments at 1-3; Westford Solar Comments at 1-3). Alternatively, CLC and CVEC and the Distribution Companies discourage the Department from adopting the single meter approach (CLC and CVEC Reply Comments at 2-3; Distribution Companies Reply Comments at 3).

We seek to interpret the statute's use of the term facility in a meaningful way. In addition, it is our longstanding precedent to consider whether our adoption of policies or rules will allow or encourage artificial and unfair manipulations of a regulatory system. See, e.g., Pricing and Procurement of Default Service, D.T.E. 99-60-B at 5-6, 10 (2000). The single meter approach would define a facility as the amount of generating capacity behind a single meter. If adopted, this approach would provide a customer with substantial flexibility and discretion for the design and development of a renewable energy project. For example, while the statute prohibits any facility with a generating capacity in excess of two MW from net metering unless it is the facility of a public entity, a private entity customer could develop a project with a maximum generating capacity in excess of two MW and divide the capacity among multiple meters. As long as no single meter was associated with more than two MW, the single meter criterion for the term facility would have been met, even if the project were considerably larger.

The plain language of the statute permits private entity net metering facilities with generating capacity up to two MW, and it prohibits facilities that are any larger. We find that the single meter approach would provide excessive flexibility and that it would undermine the clear intent of the statute. Accordingly, we reject the single meter approach.

3. Single Interconnection Point Approach

All commenters who addressed the issue of using a single interconnection point as the sole criterion to define a net metering facility were opposed to it. We are persuaded by commenters that it should not be used as the sole criterion for defining a net metering facility.

4. Single Parcel Approach

Several commenters advocated for the single parcel approach, based on its successful implementation in DOER's solar carve-out program (DOER Comments at 3, 5; BEC/BRS Comments at 1; CLC and CVEC Reply Comments at 4). To determine project eligibility for the solar carve-out program, DOER's regulation, 225 C.M.R. § 14.05(4)(a), states:

> [t]he maximum capacity of a Unit shall be 6 MW, as measured on a nameplate capacity basis in direct current and shall be determined based on the total capacity located on a single parcel of land. For any parcel of land for which a Solar Carve-out Generation Unit has submitted a Statement of Qualification Application, if its current boundaries are the result of a subdivision recorded after January 1, 2010 [the effective date of the regulations], the Owner or Operator shall make a demonstration to [DOER] that the subdivision was not for the purpose of eligibility in the Solar Carve-out Program. If [DOER] is not satisfied by such showing, the 6 MW limit shall apply to the metes and bounds of the parcel as recorded prior to the subdivision. Any subsequent additional solar photovoltaic Units that would result in excess of 6 MW of capacity installed on the same parcel of land and meeting all other requirements under 225 CMR 14.00 may qualify only for RPS Class I Renewable Generation Attributes.

Thus, DOER's solar carve-out program uses the single parcel approach to determine project eligibility.

Several commenters oppose the single parcel approach to define a net metering facility, citing various reasons. One commenter alleges that: (1) if the Legislature intended to limit the amount of renewable energy generating capacity on a single parcel of land, it would have done so; and (2) the single parcel approach will result in the development of less renewable energy in the Commonwealth than the single meter approach (RRDC Comments at 7; RRDC Reply Comments at 3-4). Another commenter claims that the property boundaries for a parcel of land are irrelevant to facility design, and that property boundaries can change over time (EMIDS Comments at 1). Finally, another commenter discourages the Department from adopting an approach similar to DOER's approach to its solar carve-out program, arguing that there is inadequate justification for doing so (True North Energy Reply Comments at 1).

We do not agree that, under the single parcel approach, less renewable energy capacity will be developed in the Commonwealth. Net metering is a renewable energy incentive program that is subject to an overall cap and, ultimately, the same amount of generating capacity will be built, regardless of how we define the term facility. In addition, before constructing and operating solar, wind, and agricultural projects, a project proponent must obtain site control and all necessary permits, which will depend in part upon the zoning and land use requirements that apply to the parcel of land. Accordingly, we find that the boundaries of a parcel of land are integral to a renewable energy project. Therefore, because a parcel is an important constituent element of a renewable energy project, we accept the single parcel of land approach as an appropriate component of the definition of a net metering facility.

To adopt parcel boundaries as a factor for defining a net metering facility, we must select a date after which there would be a presumption against the further subdivision of parcels. For

simplicity's sake, we will adopt the same date used by DOER for its solar carve-out program, January 1, 2010. See, e.g., 225 C.M.R. § 14.05(4)(a). Also, property boundaries can change over time for legitimate reasons and we are inclined to allow such changes without eliminating a parcel's eligibility for net metering as long as the subdivision is not for the purpose of net metering eligibility. Therefore, any customer who seeks to have new parcel boundaries recognized for net metering must file a request with the Department, along with evidence of the relevant filing with the registry of deeds.

Accordingly, we accept the single parcel of land as an appropriate element of the definition of a net metering facility. However, we also consider the other combined approaches suggested by commenters.

5. Combined Approaches

a. Multiple Factor Approach

Instead of adopting a fixed definition of facility, one commenter recommends that the Department look at multiple factors, including: (1) infrastructure; (2) financing; (3) development progress; and (4) location (CLC and CVEC Comments at 4-5; CLC and CVEC Reply Comments at 4). If the Department were to analyze these criteria on a project-by-project basis, it would involve considerable time, as would reviewing all projects with more than one net metering application per parcel. In comparison, adopting a definition of facility that is reasonably objective and unambiguous would provide greater clarity and regulatory certainty, and make for a more expeditious process.

b. Single Meter/Single Interconnection Point

The Distribution Companies propose a single meter/single interconnection point approach to define a net metering facility (Distribution Companies Comments at 2; Distribution Companies Reply Comments at 2-3). We agree that the single meter/single interconnection point approach improves upon both the single meter approach and the single interconnection point criterion. However, like the single meter approach described above, the single meter/single interconnection point approach could allow a customer to design and develop renewable energy projects that would undermine the language of the statute. Accordingly, we decline to adopt the single meter/single interconnection point approach.

c. Three-Factor Approach

Based on the considerations noted above, we find that the most objective and unambiguous test is a three-factor approach. Accordingly, we will combine the single parcel approach with the Distribution Companies' recommended single meter/single interconnection point approach. As a result, we define a net metering facility, whether it is powered by agricultural, wind, or solar means, 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. Each of these criteria must be met. For instance, a private net metering project cannot have: (1) more than two MW installed on a single parcel of land; (2) more than two MW interconnected at a single interconnection point; and (3) more than two MW installed behind a single meter. These definitions are effective immediately for all net metering facilities, unless an exemption applies.

E. Exemptions

All commenters who addressed the issue of exemptions recommended that the Department make certain projects exempt from restrictions on net metering eligibility due to new definitions of unit and facility, but they were divided on who should be the beneficiaries of such exemptions. BEC/BRS, the Distribution Companies, EMIDS, RRDC, True North Energy, UGT 7, and Westford Solar all recommend that, in any definition it adopts, the Department should exempt all facilities that are currently net metering or that have submitted an application for an ISA (BEC/BRS Comments at 1; Distribution Companies Comments at 3; Distribution Companies Reply Comments at 3; EMIDS Comments at 2; RRDC Reply Comments at 4-6, 8; True North Energy Comments at 3; UGT 7 Comments at 3; Westford Solar Comments at 3). DOER urges the Department to make any project with an SQ from DOER before a specified date exempt from any new definitions of unit and facility (DOER Comments at 4-6; DOER Reply Comments at 2-3). CLC and CVEC urge the Department to exempt a project if it has either: (1) an executed ISA; or (2) an SQ from DOER (CLC and CVEC Reply Comments at 8).

We recognize that some customers and developers already have invested resources into net metering projects without guidance or clarity on the definitions of unit and facility. Accordingly, we will exempt from our definitions of unit and facility those projects that are either already operating as net metering facilities or that are at an advanced stage of development.[24] To identify what constitutes an advanced stage of project development, we

[24] Although the Department prefers to adopt a uniform rule of general application, in these unique circumstances, we find that it is appropriate to allow for a narrowly tailored exemption for net metering facilities that are already operating or that are at an advanced stage of development.

examine the three proposals put forth by commenters, which would exempt projects with: (1) an application for an ISA that has been deemed complete by a Distribution Company; (2) an SQ from DOER; or (3) either an SQ from DOER, or an executed ISA.

One commenter asserted that an application for an ISA demonstrates that a project is at an advanced stage of development (RRDC Reply Comments at 4-6). We disagree. The mere submission of an application for an ISA, even if deemed complete by a Distribution Company, represents a relatively early stage of project development, which would not be appropriate for granting an exemption from the definitions of unit and facility that we have adopted here.

Another commenter proposed that an applicant's receipt of an SQ from DOER would be an appropriate means to identify projects that are at an advanced stage of project development (DOER Comments at 4-6; DOER Reply Comments at 2-3). Because a project proponent may seek an SQ at any time, we decline to use this factor as the sole test for identifying projects that are at an advanced stage of development.

Finally, one commenter proposed to exempt projects that have either: (1) an SQ from DOER; or (2) an executed ISA (CLC and CVEC Reply Comments at 8). In D.P.U. 11-11-A at 24, we held that an ISA demonstrates an advanced stage of project development, and we required applicants to the System of Assurance of Net Metering Eligibility to possess an ISA. Similarly, we find that an executed ISA would be more helpful in determining whether an exemption should apply than the mere receipt of an SQ. Accordingly, as of the date of this Order, an entity must have an executed ISA to be exempt from the Department's definitions of unit and facility.

IV. ORDER

Accordingly, after due notice, comment, and consideration, it is hereby

ORDERED: That the definitions of the terms unit and facility as described herein are adopted, effective as of the date of this Order.

By Order of the Department,

/s/
Ann G. Berwick, Chair

/s/
Jolette A. Westbrook, Commissioner

/s/
David W. Cash, Commissioner

An appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of the twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. G.L. c. 25, § 5.