The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 11-75-F July 31, 2014

Investigation by the Department of Public Utilities on its own Motion into Distributed Generation Interconnection.

ORDER ON A TIMELINE ENFORCEMENT MECHANISM

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I. INTRODUCTION[1]

On September 14, 2012, the distributed generation working group[2] ("Working Group") submitted to the Department of Public Utilities ("Department") its final report, Proposed Changes to the Uniform Standards for Interconnecting Distributed Generation in Massachusetts ("Report").[3] On March 13, 2013, the Department issued Distributed Generation Interconnection, D.P.U. 11-75-E ("Interconnection Order"). In the Interconnection Order, the Department directed the Working Group to submit to the Department the Working Group's final proposal for an interconnection timeline enforcement mechanism by October 1, 2013.[4] D.P.U. 11-75-E at 37-39. On October 1, 2013, certain members of the Working Group filed with the Department a timeline enforcement mechanism proposal ("Proposal").[5] On

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1 For a more complete procedural history, see the Department's Order in D.P.U. 11-75-D (2012).

2 On January 23, 2012, the Department convened the Working Group and tasked it with (1) determining what issues should be resolved regarding the current distributed generation interconnection standards and application procedure to ensure an efficient and effective interconnection process; and (2) deliberating with the goal, to the extent possible, of reaching a consensus on a resolution of such issues for Department review and approval. Distributed Generation Interconnection, D.P.U. 11-75-A at 4, 7 (2012).

3 The Working Group members are listed in Appendix A of the Report (Report at 34).

4 The Legislature has directed the Department to "develop an enforceable standard interconnection timeline for the interconnection of distributed generation facilities." St. 2012, c. 209, § 49.

5 The Proposal was filed by the Department of Energy Resources; 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; Western Massachusetts Electric Company; Borrego Solar Systems, Inc.; the Northeast Clean Heat and Power Initiative; Prime Solutions, Inc.; SourceOne, Inc.; Spire Solar Systems; and Veolia Energy North America (see Cover Letter at 1 (October 1, 2013)).

December 5, 2013, the Department held a technical conference to discuss various issues related to the Proposal. On December 6, 2013, the Department requested public comments on the Proposal. On December 20, 2013, the Department received comments from the Interstate Renewable Energy Council, Inc. ("IREC"); the Cape Light Compact ("CLC") and the Cape & Vineyard Electric Cooperative, Inc. ("CVEC"); and joint comments from the Massachusetts Department of Energy Resources ("DOER"), and Fitchburg Gas and Electric Light Company d/b/a Unitil ("Unitil"), Massachusetts Electric Company and Nantucket Electric Company each d/b/a National Grid ("National Grid"), NSTAR Electric Company ("NSTAR") and Western Massachusetts Electric Company ("WMECO"), (the companies individually "Distribution Company" and collectively "Distribution Companies") ("Joint Comments").

II. TIMELINE ENFORCEMENT MECHANISM PROPOSAL

A. Introduction

The Proposal details a mechanism to measure each Distribution Company's performance in meeting interconnection timelines established in each Distribution Company's respective Standards for Interconnection of Distributed Generation tariff ("Interconnection Tariff").[6] The Proposal contains the following elements: annual reporting by each Distribution Company of its aggregate performance in meeting established interconnection time frames; penalties or offsets based on the annual reporting; a deadband and caps to limit

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[6] See Interconnection Tariff, Sections 3.5 through 3.8. Each Distribution Company has an Interconnection Tariff approved by the Department: Fitchburg Gas and Electric Light Company, M.D.P.U. No. 227; Massachusetts Electric Company and Nantucket Electric Company, M.D.P.U. No. 1219; NSTAR Electric Company, M.D.P.U. No. 162C; and Western Massachusetts Electric Company, M.D.P.U. No. 1039F.

penalties and offsets; and a method for calculating penalties and offsets. Each element is discussed below.

B. Annual Reporting

As set forth in the Proposal, each Distribution Company will report annually by April 1 to the Department and to DOER on the Distribution Company's compliance with the interconnection timeframes, as established in the Distribution Company's Interconnection Tariff (Proposal at 1, 5). Each Distribution Company's performance in meeting interconnection timeframes will be measured from January 1 through December 31 (the "Reporting Year")[7] (Proposal at 1). Each Distribution Company's performance for a Reporting Year will be measured through the following process:

1. calculating the aggregate average time measured in business days necessary to execute an early Interconnection Service Agreement or final Interconnection Service Agreement (as appropriate), commencing from the date an application is received, for each track ("Aggregate Necessary Tariff Time Frames"); and comparing this performance to

2. the total aggregate number of business days allowed by its Interconnection Tariff to execute an early Interconnection Service Agreement or final Interconnection Service Agreement (as appropriate), commencing from the date an application is received ("Aggregate Allowed Tariff Time Frames") (Proposal at 1).

In other words, this process calculates the actual time that the Distribution Company takes to interconnect projects and compares this to the time that the Interconnection Tariff

[7] On November 21, 2013, the Hearing Officer issued a memorandum that directed the Distribution Companies to begin collecting this data so that 2014 would be the first Reporting Year. See Memorandum RE: Interconnection Timeline Enforcement Mechanism (2013). We hereby ratify and affirm that directive.

allows the Distribution Company to interconnect projects. The metric calculated through this process is then used as the basis to calculate penalties and offsets, subject to a deadband and caps, as discussed below (Proposal at 1, 3-5).

C. Penalties and Offsets

A Distribution Company shall incur penalties or earn offsets only after Department review and approval (Proposal at 5). For the purpose of calculating penalties, each Distribution Company will separate projects into their respective interconnection tracks, Simplified, Expedited and Standard[8] (Proposal at 1-2). The Proposal uses the following weighting to reflect the challenges associated with meeting timelines for more complicated projects, and to provide additional incentives for the Distribution Companies to meet those timelines: 20 percent for the Simplified Process, 40 percent for the Expedited Process, and 40 percent for the Standard Process (Proposal at 1-2).

Penalties would be assessed if a Distribution Company's Aggregate Necessary Tariff Time Frames (the actual time it takes the Distribution Company to interconnect each project) are greater than its Aggregate Allowed Tariff Time Frames (Proposal at 3-4). Offsets would be earned if a Distribution Company's Aggregate Necessary Tariff Time Frames are less than its Aggregate Allowed Tariff Time Frames (Proposal at 3-4). Under the Proposal, a

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[8] The Simplified Process is the fastest and least costly interconnection path, intended for relatively small and simple projects; the Expedited Process is for projects that require additional study; the Standard Process accommodates the most complex projects and has the longest maximum time period and the highest potential costs. See Interconnection Tariff -- Simplified, Section 3.1; Expedited, Section 3.3; and Standard, Section 3.4.

Distribution Company will pay its penalty to the Department or to DOER (Proposal at 5). Offsets are not a monetary payment (Proposal at 4). Instead, offsets allow a Distribution Company to reduce a penalty earned in one Reporting Year by the amount of the offset earned in the prior Reporting Year (Proposal at 4). If a Distribution Company cannot use offsets in the Reporting Year that follows the Reporting Year in which the offsets were earned, those offsets cannot be carried forward and they expire.

D. Deadband and Caps

The Proposal employs a deadband of plus or minus five percent to limit penalties and offsets (Proposal at 4). The effect of the deadband is that a penalty is assessed, or an offset is earned, only when performance deviates by more than five percent from the Aggregate Allowed Tariff Time Frames (Proposal at 4). The Proposal also includes a cap for each Distribution Company, which is the maximum amount of penalty that can be assessed or offset that can be earned in any Reporting Year (Proposal at 3). The cap for each Distribution Company is set forth in Table 1, below.

E. Calculations of Penalties and Offsets

If a Distribution Company fails to meet its Aggregate Allowed Time Frames, in excess of the deadband, a monetary penalty will be assessed (Proposal at 4). The value of that penalty will increase for each tenth of a percent that the Distribution Company's Aggregate Necessary Time Frames are greater than its Aggregate Allowed Time Frames (Proposal at 4). Likewise, a monetary value offset will be earned if a Distribution Company's performance is faster than required by its Aggregate Allowed Time Frames, in excess of the deadband (Proposal at 4).

The value of that offset will increase for each tenth of a percent that the Distribution Company's Aggregate Necessary Time Frames are less than its Aggregate Allowed Time Frames (Proposal at 4). The monetary value for each tenth of a percent ("Tenth of a Percent Value") for each Distribution Company is set forth in Table 1, below. The Tenth of a Percent Value is the same for both penalties and offsets. The Tenth of a Percent Value for each Distribution Company starts at a five percent deviation from the Aggregate Allowed Time Frames. The maximum amount of penalties may be incurred, or offsets earned, once a Distribution Company's performance deviates by 15 percent from the Aggregate Allowed Time Frames (Proposal at 4). For any deviations from the Aggregate Allowed Time Frames that fall between five and 15 percent, penalties or offsets would be calculated with a linear sliding scale based on performance to the nearest tenth of a percent (Proposal at 4). Table 1 also shows the "total proxy application fee pool" for each Distribution Company, which is the amount used to determine the Tenth of a Percent Value.[9]

[9] The total proxy application fee pool for each Distribution Company is determined by using the following calculation: (1) counting each Distribution Company's 2012 interconnection applications; (2) multiplying the result of step one by the application fees approved in Table 6 of each Distribution Company's Interconnection Tariff, in effect as of May 1, 2013; and (3) multiplying the result of step 2 by a factor of two (Proposal at 3-4).

Table 1

Distribution Company	**Total Proxy Application Fee Pool**	**Cap**[10]	**Tenth of a Percent Value**[11]
National Grid	$1,960,000	$1,500,000	$19,600
NSTAR	$1,412,000	$1,080,603	$14,120
Unitil	$10,709	$8,196	$107
WMECO	$646,000	$494,383	$6,460

F. Comments

The Department received comments from IREC, CLC & CVEC, and joint comments from DOER and the Distribution Companies. These comments are summarized below.

1. IREC

IREC offers general support for the Proposal (IREC Comments at 3-4). IREC contends that the metrics for defining penalties and offsets should not exclude those interconnection applications that require supplemental review (IREC Comments at 4-5). In addition, IREC maintains that, although not addressed in the Proposal, any penalties should be paid by a

[10] The cap for National Grid was determined through negotiation between National Grid and DOER. The caps for the remaining Distribution Companies were calculated by multiplying their respective total proxy application fee pools by a factor of 76.53 percent. The factor of 76.53 percent was derived by determining the ratio between $1,500,000 and National Grid's total proxy application fee pool of $1,960,000.

[11] The Tenth of a Percent Value is each 0.1 percent step increment between five percent and 15 percent, and is equal to one percent of the Distribution Company's total proxy application fee pool. This incremental scale is used to determine the amount of a penalty or offset.

Distribution Company's shareholders, and not the Distribution Company's ratepayers (IREC Comments at 7-8). Finally, IREC proposes that the Department review the enforcement mechanism after three years, but sooner if circumstances require (IREC Comments at 8-9).

2. CLC & CVEC

CLC & CVEC offer general support for the Proposal but also express some reservations (CLC & CVEC Comments at 2). Specifically, CLC & CVEC are concerned that the penalty amounts are too low to motivate utility behavior (CLC & CVEC Comments at 3). CLC & CVEC contend that the Department should consider penalties for delays associated with individual projects, in addition to penalties for delays in aggregate (CLC & CVEC Comments at 3). CLC & CVEC maintain that the proposed deadbands should be lowered or removed entirely (CLC & CVEC Comments at 3-4). Finally, CLC & CVEC assert that the Department also should consider reviewing the performance mechanism sooner than three years from enactment (CLC & CVEC Comments at 4).

3. DOER and Distribution Companies

DOER and the Distribution Companies state that the Proposal is the product of substantial and lengthy negotiations, and that the Proposal carefully balances the interests of the stakeholders (Joint Comments at 1). DOER and the Distribution Companies urge the Department to approve the Proposal as filed (Joint Comments at 2).

G. Analysis and Findings

The Department recognizes the complexity of creating an enforcement mechanism, and we commend the significant work undertaken by all parties to the Proposal. However, there

are several requirements and clarifications necessary to finalize the enforcement mechanism. Therefore, the Department adopts the Proposal subject to the following requirements and clarifications.

First, although it is not stated in the Proposal, any penalty owed by a Distribution Company shall be borne by that Distribution Company's shareholders, and not by the Distribution Company's ratepayers. Second, although the Proposal excludes certain types of projects from the calculation of penalties and offsets, the Distribution Companies still must report on their compliance with all applicable timeframes associated with these projects.[12] Third, the Proposal provides for potential use of the penalty funds by DOER for customer education or by the Department for the ombudsperson function (Proposal at 5). Revenue payable to the Commonwealth must be paid into the Commonwealth's General Fund, unless law requires the funds to be paid elsewhere. G.L. c. 29, § 2. In St. 2012, c. 209, § 49, the Legislature did not authorize the Department or DOER to hold, spend, or otherwise make use of any penalties collected under the enforcement mechanism. Accordingly, any penalties approved by the Department and assessed against a Distribution Company under the interconnection timeline enforcement mechanism shall be paid by the Distribution Company to the Department, and the Department will transfer the penalty funds to the Commonwealth's

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[12] The Proposal excludes (1) Expedited Projects requiring a Supplemental Review; (2) Simplified Spot and Area Network Applications; and (3) Applications with Time Frames negotiated by mutual agreement, including but not limited to projects that are part of a group study.

General Fund, as the Department does with other penalties collected.[13] Fourth, although it is not stated in the Proposal, any offset earned in one Reporting Year will be applied to a penalty incurred in the following Reporting Year before applying the cap.[14]

The Department hereby approves the Proposal as the interconnection timeline enforcement mechanism, as modified and clarified herein. Attached hereto as Appendix A is a redlined version of the Proposal that reflects the Department's requirements and clarifications. Attached hereto as Appendix B is a clean version of the Proposal that reflects the Department's requirements and clarifications, and which is now approved as the interconnection timeline enforcement mechanism.

We share the concerns of commenters that the Proposal may not sufficiently motivate the Distribution Companies to complete each interconnection in a timely manner. Because of these concerns, the Department will review this performance mechanism and timelines after the first Reporting Year, or otherwise as it deems appropriate. As a part of that review, we will investigate the appropriateness of offsets, the deadband, caps, whether penalties should be assessed based on performance associated with specific projects, the exclusion of certain projects from the calculation of penalties and offsets, and any other appropriate matters. We

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[13] When specifically authorized by statute, the Department returns penalty funds to ratepayers. See, e.g., G.L. c. 164, § 1K.

[14] For example, if National Grid earned a $1,000,000 offset in one Reporting Year, and incurred a $1,960,000 penalty the following Reporting Year, the Department would calculate the penalty by applying the $1,000,000 offset to the $1,960,000 penalty, and then apply the cap, resulting in a penalty if $960,000.

expect to be in a better position to further assess the enforcement mechanism with the benefit of historical data.

III. OMBUDSPERSON

A. Introduction

In D.P.U. 11-75-E, the Department instituted the role of an interconnection ombudsperson on a trial basis, for a period of not more than twelve months. D.P.U. 11-75-E at 30. The ombudsperson role is to hear the complaints of parties that reach the end of the "Good Faith Negotiation" provision of the Interconnection Tariff (Interconnection Tariff, § 9.1). The Department appointed as ombudsperson the Director of the Consumer Division, or such person as she or he may designate. D.P.U. 11-75-E at 30. The role of the ombudsperson is to (1) be easily accessible; (2) review the written documentation from the Good Faith Negotiation process provided in Section 9.1 of the Interconnection Tariff; (3) conduct independent interviews and investigations as she or he deems necessary; and (4) offer independent problem-solving assistance. D.P.U. 11-75-E at 30.

B. Analysis and Findings

Since the inception of the ombudsperson role, the ombudsperson has resolved over 25 interconnection-related disputes. The Department has received positive feedback from many stakeholders on the ombudsperson role and process. We see the ombudsperson role and process to be an unqualified success, and hereby extend the interconnection ombudsperson role indefinitely. In addition, for the purpose of clarity, the Department notes that the ombudsperson process takes place after the process provided in Section 9.1 a) of the

Interconnection Tariff and before the process provided in Section 9.1 b). Should any party be dissatisfied with the resolution reached by the ombudsperson, that party may initiate the Mediation/Non-binding Arbitration process set forth in Section 9.2 of the Interconnection Tariff.

IV. PENETRATION TEST

A. Introduction

In D.P.U. 11-75-E, the Department approved a number of interconnection screens that help determine which interconnection track a project will use. D.P.U. 11-75-E at 32-33. Among those approved screens was a penetration test[15] with an interim penetration level of 67 percent of minimum load. D.P.U. 11-75-E at 34. In that Order, we directed the technical standards review group[16] to consider the possibility of using a higher penetration level and the relevant experience with penetration screens in other jurisdictions in order to submit to the Department a new proposal for a penetration test by February 28, 2014. D.P.U. 11-75-E at 34-35. In addition, the Department directed the Distribution Companies to investigate, via the technical standards review group, the potential of allowing a higher penetration level for any distributed generation technologies that only generate electricity at times approximately coincident with feeder or system peak demand. D.P.U. 11-75-E at 35.

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[15] The penetration test provides a measure of the acceptable level of distributed generation capacity that can be interconnected to a circuit, as compared against the minimum demand level (for example 67 percent or 100 percent) of the circuit. The penetration test is used to determine the capacity of distributed generation that can be interconnected without adversely impacting the distribution system, within the relevant interconnection track and timelines.

[16] For a full description of the technical standards review group, refer to the Report at 30.

On February 27, 2014, the Distribution Companies filed a proposal for a new penetration test ("Penetration Test Proposal"). See Compliance Report Regarding Penetration Test Screening (February 27, 2014). The Penetration Test Proposal increases the minimum load screen from 67 percent of minimum load to 100 percent of minimum load, provided that the voltage/power quality and safety/reliability screens are defined by and conducted at each Distribution Company's discretion. See Penetration Test Proposal at 2. The non-utility parties to the Working Group do not oppose this new formulation of the penetration test. See Penetration Test Proposal at 2.

B. Analysis and Findings

In our initial analysis of the penetration test, we acknowledged the importance of distributed generation in the Commonwealth, but stated that "it must not jeopardize the reliability of the electric distribution system, the distribution equipment itself, or the safety of customers and those who maintain the system." D.P.U. 11-75-E at 34. Given the novelty of the penetration test to the Commonwealth, and the paramount importance of safety and reliability, we elected a conservative, interim standard of a 67 percent minimum load penetration level. D.P.U. 11-75-E at 35. Since adopting that interim standard, the Distribution Companies have had over a year to become familiar with the penetration test. Given this experience, the unanimous recommendation of the technical standards review group, and the support of the Distribution Companies and the non-utility parties to the Working Group, we are persuaded that a 100 percent of minimum load penetration level is both safe and appropriate. Therefore, we approve the use of a penetration test increasing the supplemental

review minimum load screen from 67 percent to 100 percent, provided that the voltage/power quality and safety/reliability screens are defined by and conducted at each Distribution Company's discretion. We direct each Distribution Company to file an Interconnection Tariff consistent with this directive. In order for the Department to further evaluate the penetration test, we direct each Distribution Company to track the following information on a project-by-project basis: (1) whether the project interconnected at the 67 percent minimum load penetration level or at the 100 percent minimum load; (2) any unexpected consequences of using the100 percent level; (3) any actions taken by the Distribution Company to mitigate such consequences; and (4) any actions taken by the interconnecting customer to mitigate such consequences. Each Distribution Company shall make such information available to the Department upon request. The Department recognizes the efforts of the technical standards review group, and we encourage the ongoing research into the potential of allowing a higher penetration level for distributed generation technologies -- including but not limited to solar photovoltaic -- that generate electricity only at times approximately coincident with feeder or system peak demand.[17] We direct the Distribution Companies to report to the Department on the results of this ongoing research no later than December 31, 2015.

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[17] The Department originally tasked the technical standards review group with this research in D.P.U. 11-75-E at 35.

V. ORDER

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

ORDERED: That the proposal for an interconnection timeline enforcement mechanism filed with the Department on October 1, 2013, as modified herein and as set forth in Appendix B hereto, be and hereby is APPROVED pursuant to St. 2012, c. 209, § 49; and it is

FURTHER ORDERED: That the interconnection timeline enforcement mechanism approved hereby shall apply to Fitchburg Gas and Electric Light Company d/b/a Unitil, Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid, NSTAR Electric Company, and Western Massachusetts Electric Company; and it is

FURTHER ORDERED: That within 30 days of the date of this Order, Fitchburg Gas and Electric Light Company d/b/a Unitil, Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid, NSTAR Electric Company, and Western Massachusetts Electric Company shall each file with the Department an interconnection tariff that is consistent with the directives contained herein; and it is

FURTHER ORDERED: That Fitchburg Gas and Electric Light Company d/b/a Unitil, Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid, NSTAR Electric Company, and Western Massachusetts Electric Company shall comply with all other directives contained herein.

By Order of the Department,

/s/
Jolette A. Westbrook, Commissioner

/s/
Kate McKeever, 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.