



**The Commonwealth of Massachusetts**  
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**DEPARTMENT OF  
TELECOMMUNICATIONS AND ENERGY**

ISSUED: February 16, 2007

D.T.E. 02-38-D

Investigation by the Department of Telecommunications and Energy on its own motion into Distributed Generation.

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ORDER ON REVISED MODEL DISTRIBUTED GENERATION INTERCONNECTION  
STANDARDS AND PROCEDURES TARIFF

## I. INTRODUCTION

On June 13, 2002, the Department of Telecommunications and Energy (“Department”) issued an Order opening a Notice of Inquiry into distributed generation.<sup>1</sup> Distributed Generation, D.T.E. 02-38 (2002). On October 3, 2002, the Department directed the Massachusetts electric distribution companies to commence a collaborative process to propose, for Department approval, interconnection standards, policies, and procedures for distributed generation. Distributed Generation, D.T.E. 02-38-A at 3-4 (2002). Consequently, the distribution companies, distributed generation providers, government and quasi-governmental agencies, consumers, and public interest groups formed the Massachusetts Distributed Generation Interconnection Collaborative (“DG Collaborative”).<sup>2</sup>

On May 15, 2003, the DG Collaborative filed a document with the Department entitled “Tariff to Accompany Proposed Uniform Standards for Interconnecting Distributed Generation in Massachusetts” (“Model Interconnection Tariff”). On February 24, 2004, the Department approved the Model Interconnection Tariff and authorized a two-year continuation of the DG Collaborative in order to review and refine the interconnection process. Distributed Generation, D.T.E. 02-38-B (2004). On December 27, 2005, at the request of the DG

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<sup>1</sup> Distributed generation is a “generation facility or renewable energy facility connected directly to distribution facilities or to retail customer facilities which alleviate or avoid transmission or distribution constraints or the installation of new transmission facilities or distribution facilities.” G.L. c. 164, § 1.

<sup>2</sup> See Distributed Generation, D.T.E. 02-38-B at n.2 (2004) for a list of members and participants in the DG Collaborative.

Collaborative, the Department approved certain amendments to the Model Interconnection Tariff. Distributed Generation, D.T.E. 02-38-C (2005).

On June 30, 2006, the DG Collaborative submitted to the Department its annual report for 2006 (“2006 Report”). The 2006 Report proposes additional revisions to the Model Interconnection Tariff, provides an overview of remaining distributed generation interconnection issues, and suggests possible areas for further investigation. The signatories to the 2006 Report include the Massachusetts electric distribution companies, 16 participants in the distributed generation cluster, and 13 other stakeholders (2006 Report at 1).<sup>3</sup>

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<sup>3</sup> The following entities were signatories to the 2006 Report: Fitchburg Gas and Electric Light Company d/b/a Unitil, Massachusetts Electric Company and Nantucket Electric Company, d/b/a National Grid, NSTAR Electric and Gas Corporation, Western Massachusetts Electric Company, AmericanDG Energy Inc., Beacon Power Corporation, Boreal Renewable Energy Development, Climate Energy, LLC, Commonwealth Resource Management Corp., Conservation Services Group, ConsumerPowerLine, CoEnergy America, Inc., The E Cubed Company, LLC, Energy Program Consulting, Ingersoll Rand Company, Neighborhood Power Plug Power, Inc., Solar Energy Business Association of New England, SourceOne, Inc., UTC Power, Associated Industries of Massachusetts, Cape Light Compact, City of Boston, Conservation Law Foundation, Electric Power Research Institute, International Brotherhood of Electrical Workers, Local 103, Massachusetts Department of Correction, Massachusetts Division of Capital Asset Management, Massachusetts Division of Energy Resources, Massachusetts Public Interest Research Group, Massachusetts Energy Consumers Alliance, Northeast Energy and Commerce Association, and The Energy Consortium.

The Department solicited comments on the 2006 Report.<sup>4</sup> The majority of the comments addressed proposals for further investigation of distributed generation, such as additional investigation of standby rates and the proper allocation of costs and benefits of distributed generation. No entity commented on the proposed tariff revisions.

This Order addresses the proposed revisions to the Model Interconnection Tariff and certain data tracking requirements. The Department will address the DG Collaborative's and commenters' recommendations regarding further investigation of distributed generation in a separate Order.

## II. PROPOSED CHANGES TO MODEL INTERCONNECTION TARIFF

The DG Collaborative proposes 18 agreed-upon changes to the Model Interconnection Tariff (2006 Report at 12–15). The more significant proposed changes include the following:

- Establishing a twelve-month deadline to complete construction after receiving interconnection approval (id., att. C, Change Request 3).
- Providing an option for the interconnection applicant to submit generator data for up to three different equipment suppliers for review so that interconnection requirements and associated costs can be evaluated for each generator option prior to preparing a final interconnection agreement (id., Change Request 4).
- Expanding the size limit for systems eligible for the simplified interconnection process from 10 kilowatts to 25 kilowatts for three-phase facilities (id., Change Request 9).

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<sup>4</sup> The following entities submitted comments on the 2006 Report: Conservation Law Foundation, Low Income Weatherization and Fuel Assistance Program Network, Attorney General of the Commonwealth, Massachusetts Division of Energy Resources, National Grid, NSTAR Electric Company, and The Energy Consortium, Inc.

- Eliminating the 10 kilowatt cap for the simplified network interconnection process and establishing a requirement that the aggregate generating facility capacity be less than 1/15th of the customer's minimum load (daytime minimum load, in the case of photovoltaic-based distributed generation facilities) (id., Change Request 16).
- Clarifying the exemption of most public facilities from indemnification requirements and establishing provisions to address special issues related to insurance for public distributed generation projects (id., Change Requests 17, 20).<sup>5</sup>

### III. ANALYSIS AND FINDINGS

The proposed amendments to the Model Interconnection Tariff clarify the tariff language and enhance the interconnection process and technical interconnection requirements. There was no opposition to the recommended tariff changes either from the signatories to the 2006 Report or other interested persons. The Department finds that the proposed changes are in the public interest. See Street Restoration Standards, D.T.E. 98-22, at 4 (1999); The Berkshire Gas Company, D.P.U. 96-92, at 8 (1996); Boston Gas Company, D.P.U. 96-50 (Phase I) at 7 (1996); Massachusetts Electric Company, D.P.U. 96-59, at 7 (1996). Moreover, we find no evidence that the proposed tariff changes would create any technical, economic, and regulatory barriers to distributed generation. See D.T.E. 02-38-B at 18; D.T.E. 02-38, at 2; see Competitive Market Initiatives, D.T.E. 01-54, at 11 (2001); Electric Industry Restructuring, D.P.U./D.T.E. 96-100, at 23 (1998). Therefore, the Department approves the proposed amendments to the Model Interconnection Tariff.

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<sup>5</sup> The DG Collaborative indicates that the insurance-related changes were supported as a consensus measure but that certain related issues will be the subject of continuing good faith discussions (2006 Report at 19).

#### IV. DATA TRACKING

In D.T.E. 02-38-B at 8, the Department directed the DG Collaborative to track statewide distributed generation interconnection activity. The DG Collaborative completed a two-year data tracking census of 332 projects, from the second quarter of 2004 through the first quarter of 2006 (2006 Report, att. D at 1). One reason that the Department requested the DG Collaborative to track interconnection activity was to evaluate the interconnection process timelines. The data revealed no problems with the existing timelines (2006 Report at 32).

The Department's regulations at 220 C.M.R. § 8(7) require each distribution company to file with the Department, by April 1st of each year, a report of new, on-site generating facility activity in the previous calendar year ("QF Report"). QF Rulemaking, D.T.E. 99-38, at 10-11 (1999). Because various entities require information about the amount of distributed generation being installed, the DG Collaborative recommends that the QF Reports be modified to include certain distributed generation-related data (2006 Report at 33).<sup>6</sup>

The Department finds that the proposed modification to the QF Report to include distributed generation-related data furthers the purposes of the reporting requirements of 220 C.M.R. § 8(7). Therefore, the Department directs each distribution company to

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<sup>6</sup> Specifically, the DG Collaborative requests that the QF Reports contain the following information: (1) name and address; (2) the fuel type; (3) prime mover; (4) estimated on-line date; (5) the amount of lost transition revenue expected as a result of the QF being installed; (6) ZIP Code of all new distributed generation facilities interconnected; (7) date interconnection application received; (8) date interconnection application deemed complete, only for the expedited and standard process; (9) date interconnection agreement sent; and (10) amount of uncollected distribution revenue expected as a result of the distributed generation being installed (2006 Report at 33).

incorporate distributed generation-related data in all future QF Reports. In order to ensure that these reports are uniform and comparable, the Department directs the companies to develop a common reporting template that incorporates the required changes.

#### IV. OTHER ISSUES

In D.T.E. 02-38-C at 11–12, the Department accepted the DG Collaborative’s recommendation to have it monitor and study the complexities associated with interconnecting and operating distributed generation on a distribution system network and to test the general hypothesis that distributed generation provides value to the distribution system in the form of distribution planning deferral. To test this hypothesis, the DG Collaborative engaged a consultant to construct a cost-benefit model designed to include all costs and benefits associated with distributed generation. The resulting analysis (“Navigant Report”), which was included as part of the 2006 Report, identified areas of potential customer and societal benefit from distributed generation other than distribution deferral (2006 Report, att. G).

Based on the results of the Navigant Report, the DG Collaborative recommends that any analysis of the value of distributed generation should not be limited to analyzing distribution deferral but also should encompass areas such as the effect of distributed generation on constrained areas, market prices, and the environment, as well as economic benefits to the customer and to the economy as a whole (id. at 37–38). To this end, the DG Collaborative proposed a number of actions, some of which it contends could be undertaken as

part of a continued collaborative effort<sup>7</sup> or as part of a new Department investigation (id. at 38). These activities include: (1) continuing and expanding the Massachusetts Technology Collaborative congestion relief pilots in order to study how distributed generation and other demand resources may achieve distribution system efficiencies; (2) investigating whether distribution companies may install and own distributed generation; and (3) using other initiatives to develop a regulatory framework that equitably allocates the costs and benefits of distributed generation in order to capture any identifiable, tangible, and quantifiable net benefits. These issues, and other issues related to the appropriate ratemaking treatment of distributed generation,<sup>8</sup> will be addressed in a subsequent Order.

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<sup>7</sup> The DG Collaborative notes that its members believe that the current formal structure of the collaborative will not be necessary or appropriate to complete the proposed activities, unless the Department were to order a formal collaborative process to develop recommendations on a particular topic (2006 Report at 47–48). Instead, its members suggest continuing under a voluntary committee structure, coordinating various work groups, such as the Massachusetts Technology Collaborative congestion relief pilots and the Electric Power Research Institute/State Technologies Advancement Collaborative project, under the aegis of a “Distributed Energy Coordinating Committee” (id.).

<sup>8</sup> See, e.g., NSTAR Electric, D.T.E. 03-121, at 50–51 (2004); see also NSTAR Electric, D.T.E. 06-40, at 117–19 (2006); NSTAR Electric, D.T.E. 06-108, at 4–5 (2006).

V. ORDER

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

ORDERED: That the proposed revisions to the Model Interconnection Tariff submitted by the Massachusetts Distributed Generation Interconnection Collaborative on June 30, 2006 are APPROVED; and it is

FURTHER ORDERED: That, no later than fourteen (14) days following the issuance 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 submit individual interconnection standards tariffs consistent with this Order; 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 include distributed generation-related data in their annual QF Reports consistent with this Order; and it is



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.