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July 1, 2007

William F. Welch  
Clerk of the Senate  
State House, Room 335  
Boston, MA 02133

Steven James  
Clerk of the House of Representatives  
State House, Room 145  
Boston, MA 02133

Re: Annual Report Concerning Self-Generation

Dear Clerks Welch and James:

Pursuant to Section 193 (1G)(g) of the Electric Restructuring Act ("Act"), Chapter 164 of the Acts of 1997, the Massachusetts Department of Public Utilities ("Department") hereby submits its report concerning installations of cogeneration, renewable energy, fuel cell, and on-site generation facilities (collectively "self-generation") for the year 2006. This report evaluates the effects of self-generation on sales of electricity and recovery of transition costs during the year 2006.

I. INTRODUCTION

The Act recognizes that self-generation, if implemented at a significant level, may lead to higher costs being borne by non-generating customers. St. 1997, c. 164, § 193 (1G)(g). Accordingly, the Act requires that the Department monitor and report on the cost effects attributable to self-generation.

The Act states:

The department shall issue a report on July 1, 1999 and every year thereafter, for the period of transition cost recovery, relative to degree of impact on the aggregate reduction of the electricity and impact on transition charges due to implementation or use of cogeneration systems, fuel cell and renewable energy technologies.

To a large extent, the common costs of an electric company, and in particular transition costs, operate as a closed system. That is, transition costs not recovered from one group of customers must be recovered from the other customers of an electric company. Because transition costs are collected as an attachment to every kilowatt-hour sold, reductions in electric company sales result in reductions to transition cost recovery. Because a self-generating customer takes fewer kilowatt-hours from the electric company, transition costs are shifted from self-generating customers to non-self-generating customers. Under the Act, if self-generation decreases an electric company's gross revenues by ten percent, the Act permits the Department to assess that company's self-generating customers with an "exit charge." This exit charge would be designed to recover transition costs that the self-generating customers would have paid, so that these transition costs would no longer shift to an electric company's non-self-generating customers.

In preparing this report, the Department relied on self-generation data from the following electric companies: Boston Edison Company, Commonwealth Electric Company, Cambridge Electric Light Company, Fitchburg Gas and Electric Light Company, Massachusetts Electric Company (including Nantucket Electric Company), and Western Massachusetts Electric Company.

## II. INSTALLATIONS OF SELF-GENERATION FACILITIES

Although the number of small photovoltaic systems installed more than doubled in 2006, installations of self-generation facilities did not have a significant impact on transmission and distribution revenue and/or transition cost recovery. Electric companies reported a total of 295 self-generation installations. The majority, or 256 of the 295 installations, were small

photovoltaic systems ranging in size from 0.23 to 121 kilowatts. Two-hundred-seventy-two of the 295 self-generating customers chose net metering.<sup>1</sup>

### III. AGGREGATE REDUCTION OF ELECTRICITY SALES

Because the number of self-generation installations was not significant during 2006, the aggregate reduction in electricity sales was not significant either. Based on the self-generation installations reported for 2006, the reduction in sales is estimated as 76,096 megawatthours (“MWH”) out of 38,984,388 MWH, or less than 0.2 percent of aggregate electric company sales for the year 2006. There was a negligible effect on the sales of any particular electric company.

During the March 1, 1998 to December 31, 2006 segment of the transition cost recovery period, aggregate reductions in electricity sales due to self-generation have amounted to about 132,682 MWH out of 282,136,419 MWH, which is less than 0.1 percent.

### IV. IMPACT ON TRANSITION CHARGES

Because the reduction of aggregate electricity sales was not significant in 2006, the effect on transition cost recovery was not significant either. Based on the self-generation installations reported for 2006, the effect on transition cost recovery of any particular electric company is estimated to be no more than a few thousandths of one percent of electric company transition costs for that year.

### V. CONCLUSION

Based upon the self-generation information provided to the Department, the Department concludes that for the period January 1, 2006 through December 31, 2006, self-generation had

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<sup>1</sup> Net metering is a policy that allows a customer to supply some of their own power with a small generator while selling any surplus to the electric company. Because a net metering customer is both buying and selling electricity, their bill is based on a monthly netting of the purchases and sales.

no significant effect on the aggregate level of electricity sales or on the transition cost recovery of the electric companies operating in Massachusetts.

Sincerely,

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Paul J Hibbard, Chairman

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W. Robert Keating , Commissioner

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Tim Woolf, Commissioner

cc: Sen. Therese Murray, Chair, Senate Committee on Ways and Means  
Rep. Robert A. Deleo, Chair, House Committee on Ways and Means  
Sen. Michael W. Morrissey, Chair, Joint Committee on Government Regulations  
Rep. Brian S. Dempsey, Chair, Joint Committee Telecommunications, utilities and Energy