



**THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC UTILITIES**

DEVAL L. PATRICK
GOVERNOR

ONE SOUTH STATION
BOSTON, MA 02110
(617) 305-3500

ANN G. BERWICK
CHAIR

TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR

JOLETTE A. WESTBROOK
COMMISSIONER

RICHARD K. SULLIVAN, JR.
SECRETARY OF ENERGY
AND ENVIRONMENTAL AFFAIRS

DAVID W. CASH
COMMISSIONER

July 1, 2011

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 of the Electric Restructuring Act ("Act"), Chapter 164 of the Acts of 1997, as amending G. L. c. 164, § 1G (g), 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 2010. This report evaluates the effects of self-generation on sales of electricity and recovery of transition costs during the year 2010.

I. INTRODUCTION

The Act recognizes that self-generation, if implemented at a significant level, may lead to the shifting of costs to non-generating customers. St. 1997, c. 164, § 193. Accordingly, the Act requires that the Department monitor and report on the cost effects attributable to self-generation.

Mass. Gen. Law., c. 164, § 1G (g) 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 remaining customers of the same electric company. Transition costs are collected as an attachment to every kilowatt-hour sold. Therefore, reductions in electric company sales result in reductions to transition cost recovery. If self-generating customers consume 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 not 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: NSTAR (Boston Edison Company, Commonwealth Electric Company and Cambridge Electric Light Company), Unitil d.b.a. Fitchburg Gas and Electric Light Company, National Grid (Massachusetts Electric Company and Nantucket Electric Company), and Western Massachusetts Electric Company.

II. AGGREGATE REDUCTION OF ELECTRICITY SALES

Electric companies reported a total of 896 self-generation installations during 2010. Of this total, 789 installations (88%) were equal to or less than 60 kilowatts. 875 of the installations (97.6%) are eligible for net metering. The majority of the installations (843) were photovoltaic systems ranging in size from 0.19 to 1,474 kilowatts.

Electric companies reported estimated reductions in sales due to 2010 self-generation installations equal to 126,941 megawatt-hours ("MWh"), an approximate 0.338 percent reduction of total electric company sales for the year 2010. The percent reduction in electricity sales ranged from a low of 0.020 percent for Fitchburg Gas and Electric Light Company, to a high of 0.436 percent for NSTAR. For the period March 1, 1998 to December 31, 2010, electric companies have reported estimated reductions in electricity sales due to self-generation equal to approximately 402,981 MWh, approximately 0.091 percent of total electric companies' sales for that period.

III. IMPACT ON TRANSITION CHARGES

Electric companies reported an estimated *increase*¹ of approximately \$407,984 in transition cost recovery due to 2010 self-generation installations, equal to an approximate increase of 0.261 percent of total transition cost recovered during 2010. The percent change in transition charge revenue ranged from an increase of 0.369 percent for NSTAR, to a decrease of 0.167 percent for National Grid.

¹ Some of NSTAR's rate classes have a negative transition charge per kilowatt-hour pursuant to NSTAR Electric Company, D.P.U. 10-124 (2010). As a result of reduced sales to several customers with negative transition charges and large self-generation units in NSTAR's service territory, the total collection of transition charges for all four electric distribution companies increased as a result of self-generation units.

IV. CONCLUSION

Based upon the self-generation information reported by the electric companies, the Department concludes that for the period January 1, 2010 through December 31, 2010, self-generation did not have a significant effect on the level of electricity sales or on the transition cost recovery of the electric companies operating in Massachusetts.

Sincerely,

/S/

Ann G. Berwick, Chair

/S/

Jollette Westbrook, Commissioner

/S/

David W. Cash, Commissioner

cc: Sen. Stephen M. Brewer, Chair, Senate Committee on Ways and Means
Sen. Benjamin B. Downing, Chair, Joint Committee on Telecommunications, Utilities and Energy
Rep. Brian S. Dempsey, Chair, House Committee on Ways and Means
Rep. John D. Keenan, Chair, Joint Committee Telecommunications, Utilities and Energy