# Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs and Department of Environmental Protection

**Background Document on Proposed Regulatory Amendments to:** 

310 CMR 7.74 Reducing CO<sub>2</sub> Emissions from Electricity Generating Facilities

December, 2022

**Regulatory Authority:** 

M.G.L. c. 21A, §§ 2, 8, and 16 M.G.L. c. 21N, §§ 2(a)(5), 3(b)-(d), 4, and 7 and M.G.L. c. 111, §§ 2C and 142A – 142E

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## I. INTRODUCTION

The Massachusetts Executive Office of Environmental Affairs (EEA) and the Massachusetts Department of Environmental Protection (MassDEP) are proposing to amend 310 CMR 7.74: *Reducing CO<sub>2</sub> Emissions from Electricity Generating Facilities*. The proposed amendment is responsive to stakeholder input received during the 2021 Program Review regarding the treatment of useful thermal energy under the regulation. Instructions for commenting on this proposed amendment are provided at the end of this Background Document.

## II. BACKGROUND AND PURPOSE

On August 11, 2017, EEA and MassDEP promulgated 310 CMR 7.74 to assist in reducing emissions of greenhouse gases associated with the electricity generation sector. This regulation establishes an allowance trading program that initially allocated allowances to the applicable large power plants in Massachusetts and transitioned to requiring these large power plants to purchase carbon dioxide (CO<sub>2</sub>) allowances at auctions to comply with an annually declining limit on CO<sub>2</sub> emissions each year until 2050. The transition to auctions was done through a rulemaking that was completed in 2018 and was informed by a public stakeholder process. Additional information about 310 CMR 7.74 is available on the program web page at:

https://www.mass.gov/guides/electricity-generator-emissions-limits-310-cmr-774.

In 2021, MassDEP completed a program review of 310 CMR 7.74 that included opportunities for public comment, as required by 310 CMR 7.74(11). Information about the program review, including two rounds of comments received and considered by MassDEP, is posted in the Stakeholder Input section of the program web page (see link above). After considering comments, MassDEP revised the 310 CMR 7.74 auction schedule to include advance auctions of future compliance year allowances. This change was implemented successfully in two auctions in 2022 and will occur in future auctions.

MassDEP also received comment on the treatment of useful thermal energy production under the program asking MassDEP to "amend 310 CMR 7.74 to create a retirement account that the Department may use to hold GWSA allowances corresponding to the emissions notionally allocated to beneficially used waste steam." According to the commenter, "This will demonstrate that those allowances have been retired and are not available for sale to third parties – exactly as is already

done under 310 CMR 7.70 . . . customers are in need of assurance that those adjustments are being retired and that all of the carbon emissions notionally attributed to the capture and beneficial use of the waste steam are fully accounted for." <sup>1</sup> The Kendall Green Energy facility, which generates electricity and also sells steam (i.e., "useful thermal energy") to buildings in Boston, is the only such facility regulated under 310 CMR 7.74.

Currently, 310 CMR 7.74 requires facilities to report the same quantity of CO<sub>2</sub> emissions that they report under 310 CMR 7.70 (MassDEP's Regional Greenhouse Gas Initiative regulation); these emissions determine the compliance obligation under both regulations. The regulations allow facilities to subtract the amount of CO<sub>2</sub> emissions "attributable to the production of useful net thermal energy" from their total CO<sub>2</sub> emissions (and compliance obligation).<sup>2</sup> Emissions subtracted under this provision of 310 CMR 7.74 have ranged from approximately 160,000 – 240,000 metric tons annually over the last few years.

In response to this comment, EEA and MassDEP are proposing to amend 310 CMR 7.74 so that allowances are removed from the auctions and retired each year to address useful thermal energy production, making of 310 CMR 7.74 more similar to 310 CMR 7.70. EEA and MassDEP are interested in comments on all aspects of this proposal, including comments regarding potential implications for the treatment of useful net thermal energy under a clean heat standard.<sup>3</sup>

## **III. DESCRIPTION OF THE PROPOSED AMENDMENTS**

Under the proposed amendments, when CO<sub>2</sub> emissions attributable to the production of useful net thermal energy are subtracted from emissions totals, an equivalent quantity of CO<sub>2</sub> allowances would be removed from the allowance auctions and retired. This retirement approach is supported by the commenter and is how useful thermal energy is addressed under 310 CMR 7.70. This is accomplished in the regulation through the addition of 310 CMR 7.74(6)(i): *Useful Net Thermal Energy Retirement* and the corresponding addition of references to 310 CMR 7.74(6)(i) in 310 CMR 7.74(6)(a)1. and (h)1.d.

## IV. IMPACTS OF PROPOSED AMENDMENTS

### **Economic Impacts**

Removing allowances from the allowance auction could in theory have an impact on allowance prices. However, the number of allowances (160,000 - 240,000) is small compared to the annual allowance limit (approximately 8 million allowances in 2022) and compared to the number of allowances that are banked each year because these allowances are not needed for compliance (more than 2.5 million in 2022). Therefore, any impacts of the changes are not expected to be significant compared to other factors that affect allowance prices, such as weather and relative fuel prices. The amendments will not have any negative impact on small businesses as any impacts are not expected to be significant, and no small businesses are regulated under 310 CMR 7.74.

<sup>&</sup>lt;sup>1</sup> See pp. 16-22 of the file titled *Electricity Sector Program Review Comments, December 2021* on the program web page, available at <u>https://www.mass.gov/doc/electricity-sector-program-review-comments-december-2021/download</u>.

<sup>&</sup>lt;sup>2</sup> See 310 CMR 7.70(6)(e)2.a. and the definition of Annual CO<sub>2</sub> Emissions in 310 CMR 7.74(2).

<sup>&</sup>lt;sup>3</sup> See <u>https://www.mass.gov/doc/2050-clean-energy-and-climate-plan/download</u>, p. 56.

#### **Impacts on Massachusetts Municipalities**

The amendments will not have any impacts on Massachusetts municipalities.

#### Massachusetts Environmental Policy Act (MEPA)

Pursuant to 301 CMR 11.03(12) (MEPA Regulations), EEA and MassDEP are not required to file an Environmental Notification Form (ENF) regarding the proposed amendments. The proposed amendments will not reduce standards for environmental protection, nor do they reduce opportunities for public participation in review processes or public access to information generated or provided in accordance with these regulations.

## V. PUBLIC PARTICIPATION

EEA and MassDEP are providing the opportunity to review the proposed amendments to 310 CMR 7.74, the background document, and any technical information. A public hearing will be held in accordance with the procedures of M.G.L. Chapter 30A. The hearing notice and proposed amendments are available on MassDEP's website at <a href="http://www.mass.gov/eea/agencies/massdep/news/comment/">www.mass.gov/eea/agencies/massdep/news/comment/</a>. Questions about this document may be addressed to climate.strategies@mass.gov.