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

Technical Support Document on Proposed Regulatory Amendments to:

310 CMR 7.74 Reducing CO₂ Emissions from Electricity Generating Facilities

October 13, 2017

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 CO₂ Emissions from Electricity Generating Facilities*. The amendments are minor technical corrections that affect two (2) of the twenty one (21) existing facilities subject to the regulation. Instructions for commenting on this proposed regulation are provided at the end of this technical support document (TSD).

II. BACKGROUND AND PURPOSE

In August 2017, EEA and MassDEP finalized 310 CMR 7.74, which creates an allowance trading program that requires large power plants in Massachusetts to comply with an annually declining limit on carbon dioxide (CO₂) emissions.¹ EEA and MassDEP are proposing to amend 310 CMR 7.74 because, due to an oversight, errors that were identified by commenters during the public comment process were not addressed in the final regulation. Specifically, the following incorrect electricity generation data for two facilities was used to calculate individual facility CO₂ emission limits for 2018:

- For the Fore River Energy Center power plant:
 - o 2013: 3,818,127 MWh (should have been 3,830,556 MWh)
 - o 2014: 3,576,401 MWh (should have been 3,968,808 MWh)
 - o 2015: 2,315,369 MWh (should have been 3,801,336 MWh)

¹ Additional information about 310 CMR 7.74 is available at

<u>http://www.mass.gov/eea/agencies/massdep/air/climate/section3d-comments.html</u>. Posted documents include Appendix B of the response to comments document, which includes the calculation discussed in this TSD.

- For the Millennium Power Partners power plant:
 - o 2015: 1,867,107 MWh (should have been 2,095,394 MWh)

The limits that were determined using this data were used to calculate allowance allocations for 2018. Because allowance trading is allowed, the regulation does not directly limit individual facilities' emissions; however, the allowances do have financial value for facilities. Therefore, it is necessary and appropriate to correct these errors as soon as possible so the facilities have certainty before the start of the program on their 2018 CO_2 allowance allocations. The amendments accomplish this in a way that avoids impacts to other regulatory requirements, such as other facilities' 2018 allocations or emissions in any year other than 2018.

III. DESCRIPTION OF THE PROPOSED AMENDMENTS

A spreadsheet showing how facilities' emissions limits were calculated from electricity generation data was published as Appendix B of the response to comments document that was published with the final regulation in August, 2017. Replacing the data with the corrected data in that spreadsheet yields the following corrected 2018 emissions limits for the two facilities (in millions of metric tons of carbon dioxide):

- Fore River Energy Center: 1,433,568 tons (was finalized as 1,243,593 tons)
- Millennium Power Partners: 667,082 tons (was finalized as 662,129 tons)

The proposed amendments to the regulation will correct these two facilities' emission limits.

In order to make these corrections without unfairly reducing other facilities' limits, it is also necessary to increase the 2018 total aggregate emissions limit (total allowable emissions across all regulated facilities) to 9,149,979 tons (was finalized as 8,955,051 tons). This increase in the 2018 limit is appropriate because:

- The 2020 emissions limit is unchanged; therefore, EEA's and MassDEP's analysis of the contribution of 310 CMR 7.74 limits, along with other regulations and policies, to meet the statewide greenhouse gas emissions reductions goal of 25 % by 2020 is unaffected.
- The amended 2018 aggregate limit is only 2.2% higher than the 2018 limit that was finalized in August 2017, and is less than 1% different than the 2018 limit that was proposed in December 2017. This small percentage change in the 2018 limit will not affect the ability of regulated electricity generating facilities to meet the 2020 limit.
- The amendments do not affect any year other than 2018. This is possible because 2018 is the only year for which the regulation includes individual facility limits (i.e., allowance allocations) that must equal the aggregate limit. (Auctions will be used to allocate allowances in all later years.)
- Of note, this is consistent with the approach taken in 2004 when amendments to 310 CMR 7.28 were made to increase some of the facilities' annual NO_x allocations due to an error in the final regulation.

Because the regulation also specifies the existing facility aggregate limit for 2018 (total allowable emissions across all of the 21 existing facilities), that value is also being changed by the same amount as the total aggregate limit.

IV. ECONOMIC IMPACTS

The amendments are technical corrections that will have minimal economic impacts.

V. SMALL BUSINESS IMPACT STATEMENT

The amendments are technical corrections that will not have any negative impact on small businesses.

VI. AGRICULTURAL IMPACTS

The amendments are technical corrections that will not have any negative impacts on agricultural production.

VII. IMPACT ON MASSACHUSETTS MUNICIPALITIES

The amendments are technical corrections that will not negatively affect cities or towns.

VIII. MASSACHUSETTS ENVIRONMENTAL POLICY ACT (MEPA)

Pursuant to 301 CMR 11.03(12) (MEPA Regulations), these proposed regulatory amendments will not reduce standards for environmental protection, opportunities for public participation in permitting or other review processes, or public access to information generated or provided in accordance with these regulations. Promulgation of these regulatory amendments, therefore, does not require the filing of an Environmental Notification Form under MEPA.

IX. IMPACTS ON OTHER PROGRAMS – AIR TOXICS

Air toxics are a group of chemical air contaminants that are associated with significant environmental impacts or adverse health effects such as cancer, reproductive effects and birth defects. The federal Clean Air Act requires EPA to promulgate source-specific controls based on Maximum Achievable Control Technologies (MACT) for air toxics. MassDEP implements MACT standards as EPA promulgates them. In addition, MassDEP controls air toxics through reductions of criteria pollutants and through its Toxics Use Reduction Program. Toxics use reduction is a MassDEP priority. Toxics use reduction is defined as in-plant practices that reduce or eliminate the total mass of contaminants discharged to the environment. The amendments to the regulations will not affect toxics.

X. 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

<u>www.mass.gov/eea/agencies/massdep/news/comment/.</u> Questions about this document may be addressed to Will Space at 617-292-5610 or william.space@state.ma.us.