February 22, 2017

Commissioner, Martin Suuberg
Massachusetts Department of Environmental Protection
One Winter Street
Boston, MA 02108
Submitted via DEP email to: climate.strategies@state.ma.us

RE: Comments on Proposed Regulation 310 CMR 7.74 Reducing Greenhouse Gas Emissions from Electricity Generating Facilities

Dear Commissioner Suuberg:

The Alliance for Industrial Efficiency (the “Alliance”) appreciates the opportunity to comment on the Massachusetts Department of Environmental Protection’s (“MassDEP”) proposed regulation 310 CMR 7.74 “Reducing Greenhouse Gas Emissions from Electricity Generating Facilities” (the “Proposed Regulation”). The Alliance is a diverse coalition that includes representatives from the business, environmental, labor and contractor communities. Our national membership includes 259 electrical, mechanical, and sheet metal contractors in Massachusetts. We are committed to enhancing manufacturing competitiveness and reducing emissions through industrial energy efficiency, particularly through the use of clean and efficient power generating systems such as combined heat and power (CHP) and waste heat to power (WHP).

The Alliance strongly believes that the Proposed Regulation should be amended to recognize the contribution made by CHP units towards the Commonwealth’s goal of reducing greenhouse gases (GHG). CHP is widely recognized on both a state and federal level as a technology which contributes to GHG reductions, but as currently written the Proposed Regulation does not distinguish between large CHP units and other fossil-fired electric generating units (EGUs). Absent modifications to the Proposed Regulation, we believe that the most likely outcome would be a reduction in large CHP output and a net increase in Massachusetts GHG emissions - the exact opposite outcome the Proposed Regulation is targeting.

We appreciate the Commonwealth’s historic support of CHP and its recognition of the important benefits CHP can provide to the environment and the economy. We urge MassDEP to consider changes to the Proposed Regulation that will allow large CHP to continue to be a key contributor to the Commonwealth’s GHG reduction targets.

**About CHP**

CHP is a sustainable and efficient energy solution that recycles waste heat from power generation and converts it into useful thermal energy. By generating both heat (thermal energy) and electricity from a single fuel source, CHP dramatically lowers emissions and increases overall fuel efficiency...
– allowing utilities and companies to effectively “get more with less.” CHP can operate using more than 70 percent of fuel inputs. As a consequence, CHP can produce electricity with roughly one-quarter the emissions of an existing coal power plant. Due to its scale, a single CHP investment can achieve significant emission reductions.

When considering how the Proposed Regulation applies to CHP it is important to recognize that electricity generation is not the sole purpose of CHP and therefore it needs to be differentiated from conventional electric generation.

**Impact of Proposed Regulation on CHP**

The Proposed Regulation is designed to reduce GHG emissions by significantly reducing the run time of large fossil fuel EGU (including large CHP units). While this may be an effective strategy for achieving in-state GHG reductions with regard to conventional electrical generation, it will have unintended consequences with regard to CHP.

As currently written, the Proposed Regulation would significantly reduce the electrical and thermal output of existing large CHP units and likely impact future investment in large CHP. The impact would be an increase in Massachusetts’s GHG emissions due to the need to run less efficient in-state standalone boilers and conventional electrical generation to serve load previously met by CHP.

**Modifications to Proposed Regulation**

The Alliance believes that the Proposed Regulation should be modified to include an EGU’s useful thermal energy in the calculations of its initial 2018 emissions limit as well as in all subsequent calculations of emissions limits.

MassDEP acknowledges the applicability of including the value of useful thermal energy in setting emissions limits for future years in Section 5(c)(4) of the Proposed Regulation. However, useful thermal energy is not incorporated into the calculations setting the 2018 emission limits. To ensure CHP is treated fairly, useful thermal energy should be incorporated into all emission limit calculations.

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1 Section 5 (c) (4) states “The owner or operator of a facility that reports net steam output pursuant to 310 CMR 7.70(8)(h) may petition the Department to convert the facility’s net steam output into an equivalent amount of net electrical output using an appropriate emission factor for the purpose of including net steam output in the calculation of the facility’s GHG emissions limit pursuant to 310 CMR 7.74(5)(c)3. Such owner or operator shall submit a petition and shall have the burden of proof to establish the appropriateness of any proposed emissions factor”
An alternative approach would be to exempt emissions associated with a CHP’s useful thermal energy from the Proposed Regulation’s emissions limits. This would be consistent with MassDEP’s currently pending proposed amendments to Massachusetts’s CO₂ Emissions and Budget Trading Program (310 CMR 7.70). These amendments would exclude emissions associated with useful thermal emissions from a CHP’s Regional Greenhouse Gas Initiative compliance obligation.

In summary, CHP is different than conventional electric generation because power generation is not its sole purpose. By delivering efficient and reliable thermal and electrical energy, CHP units provide benefits to Massachusetts in the form of lower GHG emissions, lower fuel cost, and enhanced reliability. Unfortunately, as currently written, the Proposed Regulation will have the unintended consequence of reducing the run time of large CHP units, resulting in an increase in in-state GHG emissions. To address this issue, we urge MassDEP to modify the Proposed Regulation to recognize the contribution made by CHP units towards the Commonwealth’s goal of reducing GHG emissions.

Thank you for the opportunity to provide comments on this important issue.

Sincerely,

Jennifer R. Kefer
Executive Director
Alliance for Industrial Efficiency