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May 17, 2019

Ms. Ona Papageorgiou, P.E. New York Department of Environmental Conservation (NYDEC) Division of Air Resources 625 Broadway Albany, NY 12233-3255

Via email: <u>Air.Regs@dec.ny.gov</u>

Re: Comments on 6 NYCRR Part 227-3 "Ozone Season Oxides of Nitrogen Emission Limits for Simple Cycle and Regenerative Combustion Turbines"

Dear Ms. Papageorgiou:

The Connecticut Department of Energy & Environmental Protection (DEEP) is pleased that the New York Department of Environmental Conservation (NYDEC) has formally proposed a rule to limit nitrogen oxide (NOx) emissions from simple cycle and regenerative combustion turbines. Excessive and unnecessary levels of air pollution from these units contribute to unhealthy ozone levels in Connecticut, particularly on days most conducive to high ozone levels in the region resulting in unfair and unacceptable impacts to millions of people. We provide these comments to strongly support NYDEC's efforts to reduce the environmental impact from these units, and we further encourage NYDEC to strengthen the proposed rule as described below.

Connecticut cannot attain the ozone standards without further emission reductions occurring in the New York metropolitan area. Connecticut currently exceeds the 70 parts per billion (ppb) ozone standard with design values of 82 ppb at the Stratford and Westport monitors. Ozone precursor emissions from New York contribute more to Connecticut's ongoing nonattainment than any other state – including Connecticut. Modeling has shown that approximately 20 ppb ozone at monitor locations in southwest Connecticut can be attributed to sources located in New York. ¹ By comparison, Connecticut's own statewide contributions to critical monitors in southwest Connecticut have been determined to be less than 6 ppb ozone. While Connecticut continues to seek emission reductions within its boundaries, it is clear that Connecticut will not attain the ozone standards without further emission reductions from within the New York metropolitan area.

As indicated in the *Regulatory Impact Statement* supporting the proposed rule, combustion turbines in New York contribute nearly 5 ppb ozone to downwind nonattainment monitors.² This amounts to seven percent of the ozone standard being consumed by this source group alone – far more than the one percent significant contribution threshold EPA uses to link sources and source groups to ozone exceedances caused by interstate

¹ CTDEEP, "8-Hour Ozone Attainment Demonstration for the Connecticut Portion of the New York- Northern New Jersey – Long Island (NY-NJ-CT) Nonattainment Area Technical Support Document, Chapter 9, August 2017 at https://www.ct.gov/deep/lib/deep/air/ozone/ozoneplanningefforts/SouthwestConnecticutAttainmentSIPFINAL.pdf

² The proposed rule and supporting documents can be found at: https://www.dec.ny.gov/regulations/116131.html

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transport. NYDEC points out that the majority of ozone precursor emissions from this source group are due to older, less efficient units and that newer units are available to produce the same amount of electricity while emitting less than two percent of the pollutants emitted by older combustion turbines.³ The inefficiency of the older units, leads to the reasonable expectation that operators will generally choose to shut down or replace older units rather than invest in controls to meet the proposed emission limits. However, the proposal allows the option for these older units to continue operating by averaging emissions with cleaner units. The availability of emissions averaging will likely prolong the use of many of these outdated units. DEEP is therefore concerned the rule does not assure New York will meet its obligation to prevent these sources from significantly contributing to nonattainment in downwind states. Resultantly, DEEP cautions NYDEC that this rule may not preclude the need for Clean Air Act petitions against these sources.

In that NYDEC has proposed a rule to include emissions trading, DEEP recommends that NYDEC assure that the rule prevents trading with existing units. There would be no additional benefit accrued by the rule if combustion turbine emissions are averaged with clean sources that would operate regardless of the rule. NYDEC should amend the proposal to require that 'renewable generation resources' and 'electric storage resources' available for averaging must be units that began construction after the date of rule adoption.

Additionally, under the rule as proposed, energy storage devices may be charged by non-zero emitting generators. DEEP encourages the inclusion of energy storage in this rule given the potential benefits of reducing peak demand, making renewable energy smoothly dispatchable and improving reliability. However, additional mechanisms must be added to the proposal so that storage will result in reduced NOx emissions. While the storage devices themselves are expected to be zero-emitting, the charging of storage devices shortly before ozone conducive days may do little to alleviate ozone episodes triggered by high electric demand. We recommend that the charging of storage devices be limited to 'renewable generation resources' or, at very least, that the emissions from charging be attributed to the storage device for averaging as it is discharged. Charging of batteries from barely compliant turbines or other high emitting units in the days or hours prior to an ozone episode will do little to alleviate emissions of critical ozone precursors and may worsen a high ozone episode by increasing the elevated reservoir of ozone.

Originally designated "marginal" nonattainment for the 2008 standards, the New York - New Jersey - Connecticut (NY-NJ-CT) nonattainment area is currently facing its second failure to attain and a reclassification to "serious" nonattainment. Each reclassification carries with it additional administrative and regulatory burdens. This currently pending reclassification requires the NY-NJ-CT area to attain the 2008 ozone standard by the end of the 2020 ozone season. The current design value of 82 ppb ozone indicates that it is unlikely this extended attainment date will be met. Failure to attain the 2008 ozone standard by 2020 will result in a reclassification to "severe" nonattainment. This will cause New Haven and Middlesex counties to be subject to rulemakings and more stringent requirements than have previously been in effect in those portions of the nonattainment area. DEEP is concerned that these more stringent requirements and additional efforts would do little to advance attainment in the NY-NJ-CT area and prefers efforts be directed to timely regulation of critical high-emitting and inefficient sources such as the combustion turbines in the New York metropolitan area. Therefore, DEEP encourages NYDEC to finalize this rule, and others proposed in its August 2018 state implementation plan to reduce interstate pollution transport, without further delay.

While there is little remaining time to affect attainment of the 2008 standard, the NY-NJ-CT area is required to attain the more protective 2015 standards by the end of the 2023 ozone season. The proposed rule will not

³ NYDEC. Proposed Part 227-3 Regulatory Impact Statement. "Needs and Benefits." Available at: https://www.dec.ny.gov/regulations/116175.html

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begin its first phase until May of 2023 and allows for compliance extensions of up to four years. Delaying requirements for emissions reductions from some of the most inefficient and dirtiest units in the region only helps to assure extended nonattainment of the standards. The timeframe for implementation of the rule should be condensed to be more consistent with the attainment dates for the nonattainment area.

Connecticut has long awaited this proposal and has withheld pursuit of Clean Air Act petitions for adequate control of these sources based on assurances that NYDEC would take the necessary steps to move this regulation forward.⁴ We appreciate the hard work NYDEC staff has put into this proposal and recognize NYDEC shares our goal to end the prolonged nonattainment of the ozone standards in the region. DEEP appreciates the opportunity to comment on this proposed rule and will continue to monitor the process in New York to ensure that the outcome of this rule will benefit the health and well-being of New York and Connecticut residents alike by reducing emissions and addressing the public health concerns inherent in not attaining the ozone standard.

Thank you for the opportunity to provide these comments, if you have any questions, please contact Kiernan Wholean at (860) 424-3425.

Sincerely,

Tracy/Babbidge, Chief

Bureau of Air Management

c: Steven Flint / NYDEC Francis Steitz / NJDEP

⁴ Letter from CTDEEP Commissioner Robert Klee to NYDEC Commissioner Basil Segos dated December 19, 2016.