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STATEMENT PURSUANT TO SECTION 22a-6(h) OF THE CONNECTICUT GENERAL STATUTES

Pursuant to the provisions of section 22a-6(h) of the Connecticut General Statutes (CGS), the Commissioner of the Department of Energy and Environmental Protection (DEEP) is authorized to adopt regulations pertaining to activities for which the federal government has adopted standards or procedures. At the time of public notice, the Commissioner must distinguish clearly all provisions of a regulatory proposal that differ from applicable federal standards or procedures (i.e., federal standards and procedures that apply to the same persons under the proposed state regulation). The Commissioner must distinguish any such provisions either on the face of such proposed regulation or through supplemental documentation accompanying the proposed regulation. In addition, the Commissioner must provide an explanation for all such provisions in the regulation-making record required under CGS Title 4, Chapter 54 and make such explanation publicly available at the time of the publication of the notice of intent required under CGS section 4-168.

In accordance with the requirements of CGS section 22a-6(h), the following statement is entered into the public administrative record in the matter of the proposed repeal of section 22a-174-22 of the Regulations of Connecticut State Agencies (RCSA) and adoption of sections 22a-174-22e and 22a-174-22f, which together replace RCSA section 22a-174-22:

RCSA section 22a-174-22 currently regulates nitrogen oxide (NO_x) emissions from fuel-burning equipment. Proposed section 22a-174-22e applies to fuel-burning equipment at major sources of NO_x while proposed RCSA section 22a-174-22f applies to fuel-burning equipment at non-major sources of NO_x if the equipment emits a high rate of NO_x over a short time period. The proposed sections apply across industrial, institutional and commercial facilities to regulate boilers, turbines and engines. The following analysis concludes that there are no analogous federal standards to those of proposed RCSA sections 22a-174-22e and 22a-174-22f, although there are a number of federal standards that apply to NO_x emissions.

The purpose of this action is to satisfy in part the U.S. Environmental Protection Agency's (EPA's) reasonably available control technology (RACT) requirement under the 2008 ozone national ambient air quality standard (NAAQS). Connecticut continues to be in nonattainment of the ozone NAAQS, which triggers a number of Clean Air Act (CAA) requirements such as performing a review of the state's NO_x emission limits for major sources of NO_x every time the ozone NAAQS is revised. The review of the NO_x emission limits determines whether or not the existing limits define a reasonable level of control, termed "RACT." The RACT standard requires the state to impose the "lowest NO_x emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility." 44 FR 53762 (1979). The proposed repeal and adoption addresses the required review for the 2008 ozone NAAQS and may assist in satisfying RACT for the 2015 ozone NAAQS. Both federal NO_x emission limits and emission limits required in other states are used to designate RACT at a particular time. However, the federal government does not adopt RACT-based standards. EPA does approve or disapprove RACT emission limits, which each subject state submits to EPA as a State Implementation Plan demonstrating how the state will attain a NAAQS.

Compared to other air quality standards such as "best available control technology," which applies to new source permitting, and "lowest achievable emission rate," which applies to new major source permitting in nonattainment areas, RACT is a less stringent standard, meaning that some of Connecticut standards required of particular equipment in permitting are more stringent than the RACT NO_x emission limits. Generally, RACT is the emission rate that a particular type of equipment achieves after the application of pollution controls that are in widespread use for that type of equipment.

EPA has multiple air quality regulations that impose NO_x emission limits on the equipment that is regulated by this proposal. It is difficult to state in a given instance whether the proposed emission limits are more or less stringent than the federal air quality standards given that the emission limits are developed for different purposes under different sections of the CAA, and these federal emissions limits vary with emission unit age, date of construction, size, fuel type and geographic location. Furthermore, an air quality standard consists of both a level and an averaging time, and emissions limits with different averaging times are generally not comparable. For instance, an emission standard that applies to a daily (24 hour) average of emissions cannot be compared to a standard that applies to an average of 30 days.¹ Furthermore, some regulatory programs, including the proposal, allow for alternative means of compliance that may be equivalent environmentally to meeting a particular emission limit but may achieve that result in a different manner. In general, by definition, the proposed RACT limits will be less stringent than the more recent federal new source performance standards (NSPS) or MACT (maximum achievable control technology) standards for a type of emission limit, but may be more stringent than older NSPS or MACT emission limits.

To provide as full a general comparison as possible, the following discussion provides an overview of the federal CAA programs and emission limits that regulate NO_x emissions from boilers, turbines and engines:

CAA Title I regulates criteria pollutants including NO_x by requiring local governments to adopt State Implementation Plans (SIPs) that set forth their strategy for achieving reductions in the particular criteria pollutant(s) for which they are out of attainment. The SIP requirements include Reasonably Available Control Technology (RACT) requirements. Title I also imposes NSPS on specified categories of new and modified large stationary sources including boilers, turbines and engines. Using boilers as an example, in 1986, EPA codified the NSPS for industrial boilers (40 CFR part 60, subparts Db and Dc). Subpart Db applies to fossil fuel-fired ICI units greater than 100 MMBTU per hour that were constructed or modified after June 19, 1984. Subpart Dc applies to fossil fuel-fired ICI units from 10 to 100 MMBTU per hour that were constructed or modified after June 9, 1989. EPA revises the NSPS from time to time to reflect improvements in control methods. EPA promulgated revised NSPS for SO₂, NO_x, and PM for subparts Db and Dc on February 27, 2006. In 2012, EPA promulgated several minor amendments, technical clarifications, and corrections to existing NSPS provisions for large and small ICI boilers. A similar layering of NSPS apply to EGU boilers, turbines and engines.

In addition, Title I subjects new and modified large stationary sources that increase their emissions to permitting requirements of varying levels of stringency (known as New Source Review, or NSR). NSR prescribes control technologies for new emission units and modifications that result in a significant increase in emissions. Control strategies that constitute BACT and LAER evolve over time and are reviewed on a case-by-case basis in State permitting proceedings.

Title I addresses the regional haze issue. In 1999, EPA published a final rule to address a type of visibility impairment known as regional haze. The regional haze rule required States to submit implementation plans to address regional haze visibility impairment in 156 Federally-protected parks and wilderness areas. As required by the CAA, EPA included in the final regional haze rule a requirement for best available retrofit technology (BART) for certain large stationary sources, including large boilers and EGUs, that were built between 1962 and 1977.

Title I also addresses the interstate transport of air pollution, particularly ozone, for which NO_x is a precursor. Various allowance trading programs have been in effect to address transport. The current program is known as the Cross-State Air Pollution Rule (CSAPR), and, more recently, the CSAPR update, that requires 28 states to reduce power plant emissions that contribute to ozone and/or fine

¹ If the level of the two standards is the same, the emission limit with the shorter averaging time would be the more stringent emission limit. However, if both the level and averaging times are different, it is difficult to determine which emission limit is the more stringent.

particle pollution in other states. Rather than applying a particular emission rate to each participating emission unit, CSAPR and the CSAPR update impose a statewide cap on a group of EGU boilers and large ICI boilers. An individual emission unit may emit at a high NO_x emission rate if the owner procures sufficient NO_x allowances for the resulting mass of NO_x emitted. Thus, CSAPR, and the predecessor trading programs, are difficult to compare with the emission limits adopted as RACT.

EPA has also adopted MACT (Maximum Achievable Control Technology) standards under Title II and III of the CAA. There are many options for complying with the MACT standards, ranging from continued use of existing control systems to fuel switching to the installation of a fabric filter and wet scrubber technologies. While MACT standards are designed to limit toxic air pollutants, the control technologies also limit NO_x, to a lesser extent. MACT based standards have been adopted for boilers, turbines and engines used in various processes.

The above discussion generally applies to RCSA section 22a-174-22e, which assigns NO_x emission rates to boilers, turbines and engines at major sources of NO_x. RCSA section 22a-174-22f only limits the mass of NO_x emitted per summer day. An emission unit that emits less than that daily NO_x threshold is not required to meet any new emission limit or rate. However, the owner must conduct an annual tune-up to maintain the unit in proper operating condition and thereby maintain fuel efficiency, which is associated with lower NO_x emissions. EPA does not regulate the mass of NO_x emitted by fuel-burning equipment per summer day, as NO_x allowance trading programs such as CSAPR regulate the mass of NO_x emitted in a state by many such emission units over a 5-month period. The focus on daily summer NO_x emissions is a regional initiative to assist states in the Northeast and Mid-Atlantic to attain the ozone NAAQS. Therefore, no federal standards are comparable to the requirements of RCSA section 22a-174-22f, although NO_x emissions from the regulated emission units are regulated by EPA in the form of permitting programs, NSPS and MACT-based requirements, as discussed above.

In sum, while there are many federal standards that regulate NO_x and other pollutant emissions from fuel-burning equipment, none of these Federal standards are analogous to the RACT emissions limits proposed.

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Date