

REGULATING CARBON

THE U.S. EPA HAS DETERMINED AN “ENDANGERMENT FINDING” THAT COULD TRIGGER THE CLEAN AIR ACT ON CO₂ EMISSIONS

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The U.S. Environmental Protection Agency (EPA) has issued a proposal to make an official determination that greenhouse gases from motor vehicles endanger public health and welfare by causing global warming — the first official recognition of its kind. Once finalized, the determination will compel EPA to regulate greenhouse gases under the Clean Air Act, something the previous EPA was reluctant to do. If EPA begins regulating greenhouse gases under existing law, it could increase exponentially the difficulties associated with environmental permitting for turbine operators.

Argument concluded

For years, the Bush Administration EPA declined to make an “endangerment finding,” as it is called, because it believed that the Clean Air Act was the wrong tool for the job. Greenhouse gases were the proverbial square peg to the round hole of the Clean Air Act. Past-EPA Administrator Johnson would later remark in an official agency statement that the Clean Air Act is an “outdated law” that is “ill-suited for the task of regulating global greenhouse gases.”

However, in 2007, the U.S. Supreme Court rejected EPA’s initial refusal to regulate greenhouse gases under the Clean Air Act and asked it to re-analyze whether such regulation is necessary. EPA responded in July of last year with an initial proposal but, although it took a detailed look at the issue (the response was over 500 pages long), it stopped short of proposing to issue the all-important “endangerment finding” that greenhouse gases threaten the health and welfare of Americans.

Under the leadership of Lisa Jackson, the new Obama EPA Administrator, EPA has reversed course completely. On April 17th, Jackson proposed an “endangerment finding” for greenhouse gases, indicating her willingness to use the Clean Air Act to combat global warming, regardless of its shortcomings. To justify her proposal, she pointed to studies published by the Intergovernmental Panel on Climate Change (IPCC) and the U.S. Climate Change Science Program. She

cited those studies as proof that “decades of research by thousands of scientists ... point ineluctably to the conclusion that climate change is upon us as a result of greenhouse gas emissions.” In fact, she said it was not even a close case.

Once finalized, this new “endangerment finding” will trigger a cascade of requirements in the statute that will eventually compel EPA to regulate greenhouse gas emissions from a wide variety of sources. Although Administrator Jackson’s proposal focuses on motor vehicles (given that the Supreme Court case prompting her decision did so as well), it is likely that she will move on to stationary sources soon. This is because the Clean Air Act contains similar if not identical language that applies to stationary sources. And that is where the rubber will meet the road for turbine operators.

Until Congress passes new laws, the Clean Air Act may be the only game in town — a game that turbine operators may have a hard time playing

Turbine operators are major sources of greenhouse gases, primarily CO₂. In fact, all combustion processes (whether coal, oil, gas, or otherwise) emit more CO₂ than just about anything else — whereas most pollutants from large stationary sources are measured in “pounds per hour,” CO₂ can often be more easily measured in “tons per hour.”

EPA’s proposal also notes that, while motor vehicles are the number two source of greenhouse gas emissions in the U.S., electric utilities are number one. That makes turbine operators a prime target for future greenhouse gas regulations, whether under the Clean Air Act or some other law that Congress may pass in the near future. But under the Clean Air Act, the requirements could be overwhelming and unworkable, unless EPA fundamentally alters the way those programs function

as they are applied to greenhouse gases.

For instance, once EPA finalizes an “endangerment finding” for stationary sources, as it almost certainly will do, EPA will most likely begin by regulating greenhouse gases under the New Source Performance Standards, which can apply to turbine operators. Those standards would be based on a level of control technology that EPA deems to be available and appropriate to require of new and newly-modified sources.

Unfortunately, there are few options for controlling CO₂ or any of the other five greenhouse gases cited in EPA’s proposal. Although sequestering the gases in underground formations is being studied and may be a potential alternative in the future, the technology is still in its infancy. Without any currently-available controls, implementing a new standard now that is meaningful will be difficult.

Although EPA will most likely begin by focusing on New Source Performance Standards as the most realistic way to address greenhouse gas emissions, its proposed “endangerment finding” will also require it to entertain other, less-realistic options as well. For example, EPA may also be forced to establish a “national ambient air quality standard,” or “NAAQS,” for greenhouse gases — essentially a maximum concentration limit for the entire country.

The problem with setting a single nationwide concentration limit is that, unlike most other currently regulated pollutants, greenhouse gases are considered “well-mixed” gases that exist in a uniform concentration around the world. For example, according to EPA, the world-wide concentration of CO₂ is currently 386 ppm. Because greenhouse gases are well-mixed, EPA’s standard will determine whether the entire nation meets the standard or violates it. Basically, if EPA sets the standard higher than 386 ppm, the whole nation will meet the standard; if EPA sets the standard lower than 386 ppm, the whole nation will violate it.

It seems unlikely that EPA would consider the entire country to be in compliance, as that would render the standard essentially meaningless. However, declaring the entire country to be in violation of the Clean Air Act would be extreme — and would have extremely

burdensome consequences for new turbine projects and projects on existing turbines, given that permits are hard to come by in areas that violate a national air quality standard.

Applying existing tools

In addition, once EPA passes any new greenhouse gas regulations (even if solely for motor vehicles), many will argue, as many already have, that the New Source Review (NSR) program should kick in. NSR is the pre-construction permitting program that requires anyone constructing a new stationary source, or modifying an existing one, to get a permit and install state-of-the-art emission controls. The burden imposed by the program is significant — obtaining a permit often takes eighteen months or more to complete and preparing the application can cost hundreds of thousands of dollars, not to mention the cost of installing new control equipment, which can easily run into the millions, or hundreds of millions for large sources like base-loaded power plants.

Dealing with greenhouse gases under NSR could also result in significant permitting delays as well, because many sources never before regulated under the Clean Air Act would have to apply for permits by the thousands, which could overwhelm state and federal resources.

Without some form of relief, even the gas furnaces used to heat large buildings, such as office buildings and shopping malls, would need a permit. For turbine operators, applying NSR to greenhouse gases would likely mean that increasing heat input by any amount could trigger permitting requirements.

The EPA's "endangerment finding" proposal was published in the federal register on April 24, 2009 to allow potentially affected parties (including all turbine operators) an opportunity to comment on the decision to begin the process of regulating greenhouse gases under existing law. Two public hearings have also been proposed — one in Arlington, Virginia and another in Seattle, Washington, the details of which are provided in EPA's notice.

Several EPA representatives and environmental organizations have sought to downplay the burdens that will be imposed as a result of the greenhouse gas endangerment finding and the new regulations that will certainly follow. However, the agency's proposal does little to specifically address the dire warnings of the prior EPA Administrator regarding the potential consequences associated with regulating greenhouse gases under the existing Clean Air Act.

Some have surmised that perhaps EPA is using its proposed "endangerment find-

ing" as a threat in order to spur Congress into action on a climate change bill that would more appropriately and rationally address greenhouse gas emissions. The strategy may work, particularly since the Obama Administration has already expressed a preference for new legislation over regulating under existing law.

Based on the activity in Congress thus far, such new legislation would likely involve a "cap and trade" program — widely considered to be one of the most promising strategies for effectively reducing greenhouse gas emissions. Dozens of cap and trade bills have already been introduced, with varying ranges of scope and stringency. But until one passes, the Clean Air Act may be the only game in town, a game that turbine operators may have a hard time playing. **T**

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