

## New Source Review

### Background

EPA's New Source Review (NSR) program requires pre-construction permitting for new major stationary emission sources and major modifications to existing sources that produce an annual increase in emissions.

In late 1999 and 2000, the Department of Justice and the Environmental Protection Agency (EPA) launched a series of lawsuits against electric utilities, including a suit against Duke Energy, regarding alleged violations of NSR. EPA alleged that certain repairs and component replacement activities at coal-fired power plants constituted "major modifications" and required pre-construction permits under NSR. Duke, and other utilities, maintain that the projects did not trigger NSR because they did not increase the hourly emissions rate of the unit; they did not violate any permit requirements; and, they are not subject to NSR under a longstanding regulatory exclusion for routine maintenance, repair and replacement (RMRR) activities. Moreover, industry maintains that the enforcement actions constitute a re-interpretation of NSR rules compared to how they were implemented and enforced by EPA for more than 20 years prior to the lawsuits. In April 2007, in the *Duke Energy* case, the Supreme Court determined that under current NSR regulations an increase in emissions is determined on an annual—not hourly—basis.

In May 2007, EPA proposed to adopt an hourly emissions increase test for existing electric generating units, when determining whether projects at these facilities trigger permitting requirements under the NSR programs. The proposed rule would provide electric generators with greater clarity on when projects, to maintain or upgrade power plant efficiency and reliability, will trigger NSR. The proposal is consistent with the Supreme Court's decision in *Duke Energy*, which notes that EPA retains "customary agency discretion" to adopt any emission increase test that falls "within the limits of what is reasonable" under the Clean Air Act. EPA is expected to finalize this rule by early 2008 and environmental groups have already threatened a challenge.

### NSR and Energy Efficiency

Even for projects that are intended simply to maintain or improve the efficiency and reliability of an existing source, pre-construction permit review can end up requiring a source to install additional emission control technology—at costs ranging up to hundreds of millions of dollars. Because the rules for permit reviews under NSR are complex and have been implemented inconsistently by EPA and the states, NSR serves as a major impediment to many environmentally-beneficial projects, such as efficiency upgrades at an emission unit. Industrial facilities also may avoid undertaking

environmentally beneficial projects because of lengthy time delays in obtaining a permit, costly permitting and analyses, and excessively stringent restrictions in revised operating permits.

As a result, NSR introduces a perverse disincentive to operating our nation's industrial facilities in the most fuel-efficient manner. In its 2002 report to the President on NSR, EPA concluded that changes to NSR "will improve the program by reducing the unintended consequences of discouraging worthwhile projects that are in fact outside the scope of NSR."

Since 2002, EPA has attempted to implement several new NSR regulations that would more clearly define specific activities that trigger NSR, while eliminating the current disincentives to efficiency improvements. EPA's efforts have been met with staunch legal opposition from some states and environmental advocacy groups. As a result, the U.S. Court of Appeals for the D.C. Circuit has vacated the very provisions of EPA's NSR reform rules that would allow efficiency improvement projects to avoid NSR permitting.

### **NSR and Greenhouse Gas Emissions**

Amending the NSR program in a way that eliminates the need to obtain a permit for efficiency upgrades could yield substantial near-term reductions in greenhouse gas (GHG) emissions from power plants and other large stationary sources. The Coal Utilization Research Council (CURC) estimates that improving the efficiency of an existing coal-fired emissions unit can result in carbon dioxide (CO<sub>2</sub>) reductions up to 10-16 percent. In addition, a fleetwide efficiency improvement of 5 percent in coal units could reduce CO<sub>2</sub> emissions by more than 100 million tons per year. To put this in perspective, according to CURC, an improvement of only 1 percent (in absolute terms) in the average coal-fired power plant efficiency (from 33 to 34 percent at existing units) would generate about the same amount of electricity as all non-hydro renewable electricity in 2005 (60 billion KWH).

### **Congress Can Reform NSR, Improve Plant Efficiency and Reduce Emissions**

Congress can eliminate the NSR program's disincentives to making energy-efficiency improvements that can yield cost-effective GHG emission reductions within the electric utility industry and other major industries that operate large stationary sources. This can be accomplished through the codification of EPA's NSR reform regulations, or legislation that excludes certain types of efficiency projects from NSR.

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