Fact Sheet - New Source Review: Emission Increases for Electric Generating Units

ACTION

- On April 25, 2007, the Environmental Protection Agency (EPA) proposed further options to change the emissions increase test used to determine if the New Source Review (NSR) permitting program would apply when an existing power plant makes a physical or operational change.

- The proposed changes would affect only the application of the NSR program to existing electric generating units at power plants. The units generally are fossil fuel-fired and produce electricity for sale.

- On October 20, 2005, EPA proposed to replace the annual emissions increase test with an hourly emissions test. The hourly emissions increase test would be used to determine whether planned changes at an existing power plant would be subject to emissions control requirements under the major NSR program. The proposed hourly emissions test was similar to the hourly emissions test in the New Source Performance Standards (NSPS) program.

- The October 2005 proposal included three alternatives to the annual emissions test.

- This action builds upon the October 2005 proposal by:
  - refining the originally proposed test options;
  - proposing a new test option;
  - analyzing the impacts on control device installation, emissions, and air quality that would result were we to finalize either of the proposed options; and
  - including proposed rule language.

Refining Test Options Proposed in October 2005

- The October 2005 proposal requested comment on three alternatives for the hourly test to determine if a change at an existing unit would cause an emissions increase including:
  - a maximum *achievable* hourly emissions test,
  - a maximum *achieved* hourly emissions test, and
  - an output-based hourly emissions test.

- This supplemental proposal recasts these proposed alternatives so that the output-based test, instead of being an alternative to the maximum achievable or maximum achieved hourly tests, is a way to measure the hourly emission rate.

- EPA requests comment on whether the regulations should include an input-based test – one that sets emission limits based on the amount of fuel burned – or an output-based test – emission limits per unit of electricity produced. The output-based emissions increase test encourages fuel efficiency and pollution prevention, which are key Agency goals.

Proposing a New Test Option

- EPA is now requesting comment on two options to be used when determining if NSR requirements would apply to an existing EGU making a physical or operational change, including a new option that was not included in the October 2005 proposed rule.

- In its October 2005 proposal, EPA proposed an hourly emissions increase test alone, where EPA would remove the annual emissions increase test in the current regulations and an EGU would be subject to NSR if the hourly emissions would increase.

- In this supplemental, EPA is including a new (and preferred) option. Under the new option (referred to as Option 1 in this Supplemental Proposal) the current annual emissions increase test that is presently used is retained and applied in those situations where an EGU's hourly emissions would increase.

- In other words, under the new option, if a physical or operational change would not increase an EGU's hourly emission, major NSR would not apply. If an EGU's hourly emissions would increase, then projected annual emissions would be reviewed using the annual emissions increase provisions in the current rules and an EGU would be subject to major NSR if the annual emissions would increase but not if annual emissions do not increase.

- Under both options EPA is proposing several alternatives for measuring hourly emissions.

- These proposed modifications to the NSR program would promote the safety, reliability, and efficiency of EGUs. The proposed hourly emissions test for EGUs would allow changes that improve facility safety, reliability, and efficiency while maintaining national and local air quality.

Analyses

- The analyses compare expectations for EGUs to install pollution control equipment to comply with EPA's Clean Air Interstate Rule, Clean Air Mercury Rule, and Clean Air Visibility Rule

(CAIR/CAMR/CAVR) in 2020 with the proposed hourly emissions tests. The analyses also compare emissions and air quality impacts under these two scenarios.

- These analyses show that by 2020, either of the proposed options would result in:
  - more EGUs installing emissions control equipment than they would to comply with CAIR/CAMR/CAVR. The hourly emissions test would allow units to operate more hours each year. The more hours a unit operates, the more likely it will be to control emissions.
  - essentially no changes in national emissions of the major pollutants emitted by coal-fired power plants – sulfur dioxide and nitrogen oxides.

- The analyses project very little impact on local emissions. There would be a shift in where local emission increases and decreases would occur compared to what EPA project's without the proposed rule. These shifts would be small and widely distributed. The small shifts would not affect local air quality compared to what EPA projects under CAIR/CAMR/CAVR for 2020.

- EPA will accept comment on this supplemental proposal for 60 days after this notice is published in the *Federal Register*. See below for more details on how to comment.

BACKGROUND

- Congress established the NSR program as part of the 1977 Clean Air Act Amendments and modified it in the 1990 Amendments. NSR is a preconstruction permitting program that assures the dual goals of maintaining and attaining air quality and providing for economic growth. These goals are achieved through installation of state-of-the-art control technology at new plants and at existing plants that undergo a major modification.

- For existing major stationary sources, there is a two-step test to determine whether the modification is subject to preconstruction permit review. The first step is whether there is a physical change or change in the method of operation. The second step is whether there is an emissions increase. The current NSR program measures an emissions increase by comparing actual annual emissions to projected annual emissions.

- When EPA proposed revising the NSR emissions test for existing EGUs in October 2005, it was in part in response to a decision of the U.S. Court

of Appeals for the Fourth Circuit Court in United States v. Duke Energy Corp., in which the Fourth Circuit held that EPA must read the 1980 Prevention of Significant Deterioration (PSD) regulations to contain an hourly test, consistent with the New Source Performance Standards regulations.

- On April 2, 2007, the U.S. Supreme Court vacated that decision, finding that such a reading of the 1980 PSD regulations "was inconsistent with their terms." The Supreme Court, however, indicated that EPA may be able to revise the regulations to contain such a test when, as here, it has a rational reason for doing so.

- The Clean Air Interstate Rule (CAIR) and other programs will lead to significant further reductions in sulfur dioxide and nitrogen oxides emissions from the power sector. Both the October 2005 proposal and today's supplemental proposed changes to the NSR program would complement the CAIR requirements by allowing efficient implementation of these programs and eliminating administrative barriers.

ADDITIONAL INFORMATION

- Interested parties can download today's final rule from EPA's NSR web site at: www.epa.gov/nsr.

- The notice and technical support document are also available electronically through the EPA's Air and Radiation Docket and Information Center (Docket Number Docket ID No. EPA-HQ-OAR-2005-0163), at www.regulations.gov. Alternatively, you can request material from our Air and Radiation Docket and Information Center by calling (202) 260-7548, or by fax request to (202) 260-4000 (a reasonable fee may be charged for copying).

- Submit comments on this supplemental proposal, identified by Docket ID No. EPA-HQ-OAR-2005-0163 by one of the following methods:
  - http://www.regulations.gov: Follow the on-line instructions for submitting comments.
  - E-mail: a-and-r-docket@epa.gov.
  - Mail: Attention Docket ID No. EPA-HQ-OAR-2005-0163, U.S. Environmental Protection Agency, EPA West (Air Docket), 1200 Pennsylvania Avenue, NW, Mail code: 6102T, Washington, DC 20460. Please include a total of 2 copies. In addition, please mail a copy of your comments on the information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attn: Desk Officer for EPA, 725 17th Street, NW, Washington, DC 20503.

- Hand Delivery: U.S. Environmental Protection Agency, EPA West (Air Docket), 1301 Constitution Avenue, Northwest, Room B102, Washington, DC 20004, Attention Docket ID No. EPA-HQ-OAR-2005-0163. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

- For general information about this final rule, contact Janet McDonald of EPA's Office of Air Quality Planning and Standards at (919) 541-1450, mcdonald.janet@epa.gov .