

SEER Energy Alert

On Wednesday, December 24, 2003 a federal appeals court temporarily blocked a Bush administration rule, due to take effect on Friday, December 26, 2003 that would have relaxed existing on New Source Review standards (See the section entitled EPA ruling). Under the relaxed rule companies would have been allowed to replace aging equipment with its "functional equivalent" without taking on the expensive pollution-reducing requirements. The rule would also have exempted projects in which replacement costs were less than 20 percent of the plant's value.

The order, by a three-judge panel of the United States Court of Appeals for the District of Columbia Circuit, indicates that the court has substantial doubt about the White House's claims that it has authority to modify the Clean Air Act by regulation and that its changes would not hurt the environment. In staying the new regulation, the court said it would expedite a case brought against the rule by 14 states, among them New York, New Jersey and Connecticut, as well as several cities and environmental groups; it will then hear the case on its merits.

The court stay is likely to delay, and potentially eliminate entirely, potential expansions of existing coal fired capacity. The EPA ruling and its potential implications are summarized below.

EPA RULING

On August 27, 2003 the U.S. Environmental Protection Agency (EPA) issued a rule that created a category of activities that automatically will be considered routine maintenance, repair and replacement (RMRR) under the New Source Review (NSR) permitting program. Prior to this ruling, the 1977 Clean Air Act amendments required power plant and oil refinery operators to install the best-available anti-pollution devices whenever they modified or expanded power plants, but not when they conducted periodic maintenance, repairs or routine upgrades on the plants.

According to the EPA press release "equipment replacement activity will be excluded from NSR if:

- it involves replacement of any existing component(s) of a process unit with an identical or functionally equivalent component(s);
- the fixed capital cost of the replaced component, plus the costs of any repair and maintenance activities that are part of the replacement activity (such as labor, contract services, major equipment rental, etc.), does not exceed 20 percent of the replacement value of the entire process unit;
- the replacement(s) does not change the basic design parameters of the process unit; and the replacement(s) does not cause the unit to exceed any emissions limits."

INTERPRETATION

The 176 page EPA rule does not clearly define "functionally equivalent" or "basic designed parameters". Some have argued that "basic design parameters" could be interpreted to allow substantial expansion of capacity. For example, if a gas turbine were added to a generation unit, this could be considered within the "basic designed parameters". The argument is that the plant was designed to allow the addition of a gas turbine. In fact, this could be a very common way to increase the generation capacity of existing coal units. The gas turbine could be driven by exhaust steam from the original coal unit.

IMPLICATIONS

Under this rule, 110 GW of coal generation capacity could be expanded by 15% to 25%; approximately 70 GW of which, within a year and the remainder, within three years. Assuming an average of a 20% capacity expansion, 14 GW of additional coal generation capacity could become available within one year and 22 GW, within three years. At an 8000 Btu/kWh heat rate and

an 85% capacity factor, the expanded coal generation capacity would be equivalent to 3.6 Bcfd of gas consumption. Natural gas consumption is expected to grow at approximately 1 Bcfd per year. Thus, this expansion could displace an equivalent of 3.6 years of natural gas consumption growth.

These are only estimates of the *potential* impact. It is unknown how many of effected power plants will actually expand capacity. It is possible that the rule will be overturned in the courts and there will be little impact on coal generation capacity. However, the ruling *could* have a major impact on natural gas markets. It could dramatically reduce the need for additional gas supply and cause prices to be much lower than currently expected by most analysts.
