



Fossil Fuel EGUs Continue to Feel the Heat

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In 2013, President Obama issued a memorandum directing EPA to develop limits on carbon emissions from new power plants. EPA did as the President asked when it promulgated a final rule this past October establishing new source performance standards for greenhouse gas (GHG) emissions at new, modified, and reconstructed electric utility generating units (EGUs). The final rulemaking under Section 111(b) of the Clean Air Act establishes CO₂ emission limits for fossil fuel-fired (i.e., coal, petroleum liquids, and natural gas) EGUs, which are defined to mean steam generating units, integrated gasification combined cycle (IGCC) units, and stationary combustion units. Although less stringent than EPA's proposed regulations in 2014, the rulemaking will be costly for new fossil fuel-fired EGUs.

Applicability of the rule is based upon two factors: (i) when the EGU commenced construction, reconstruction or modification, and (ii) its capacity to generate energy and sell it to the grid. Affected EGUs are those units for which construction or modification is commenced after January 8, 2014 or (for steam generating units and IGCC units) reconstruction is commenced after June 18, 2014. But that's not the sole criterion. To be subject to the rule, the EGU must also meet two other criteria:

1. Its base load rating must be greater than 250 million British thermal units per hour (MMBtu/h) (e.g., heat input of fossil fuel, either alone or in combination with other fuels, is equivalent to 73 megawatts or 260 gigajoules per hour); and
2. It serves a generator capable of supplying more than 25 megawatts of electricity for sale to the grid.

40 C.F.R. §§ 60.5508 and 60.5509(a)(1)-(2).

For affected EGUs, the rule establishes emission limits based on implementation of the best system of emission reduction technology (BSER). As an example, a new steam generating unit may not emit more than 1,400 lbs. of CO₂/MWh-gross. To measure gross energy output, EPA sums the total CO₂ emissions (e.g., pounds of CO₂) over 12 operational months and divides by the total gross output (in megawatt-hours) over the same 12 operational months. Similar criteria are provided for reconstructed steam generating units and new or reconstructed stationary combustion turbines. In contrast, and

subject to certain conditions, modified steam generating units and IGCC units will have unit-specific limits determined by the unit's best historical annual CO₂ emission rate from 2002 to the date of the modification. The rule also addresses (i) startup, shutdown, and malfunction, (ii) compliance and emissions performance testing, and (iii) reporting and recordkeeping.

Although EPA touts its new GHG rule as less stringent than its 2014 proposals, the rule effectively ends the construction of new coal-fired power plants by requiring them to be equipped with carbon capture and sequestration systems. That technology is not in use on a commercial scale anywhere in the country. Thus, fossil fuel-fired EGUs continue to feel the heat. All requirements are codified in a new Subpart TTTT of 40 C.F.R. Part 60.

80 Fed. Reg. 64510 (Oct. 23, 2015)

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