Proposed CO$_2$ Emission Limits for New Power Plants

Background. On April 13, 2012, the U.S. Environmental Protection Agency (EPA) published proposed national standards for carbon dioxide (CO$_2$) emissions from new fossil fuel-fired electric generating units (EGUs). The proposed Clean Air Act New Source Performance Standard (NSPS) would limit <u>new</u> fossil-fuel based EGUs to a maximum CO$_2$ emissions rate of 1,000 pounds per megawatt-hour (lb/MWh).

The proposed NSPS would apply to two categories of <u>new</u> EGUs that generate electricity for sale, are larger than 25 MW, and located in the continental U.S.: (1) electric utility steam generating units, including those that operate with boilers or integrated gasification combined cycle systems, and (2) combined cycle units. New simple-cycle turbines burning fossil fuels (for example, natural gas peaking plants), biomass-fired EGUs, and EGUs using other non-fossil fuel resources would not be subject to the proposed NSPS. Also, the standard is *not* applicable to <u>existing</u> EGUs—including those that undertake modifications or are reconstructed—or new EGUs that have permits and start construction within 12 months of EPA's proposal.

New natural gas combined cycle plants would be able to meet the standard, but new coal plants would have to install technology to capture about 50 percent of the CO$_2$ emissions and store the CO$_2$ underground. Given that carbon capture and storage (CCS) is not yet commercially viable and is prohibitively expensive for EGUs, this proposed standard may have the practical effect of eliminating coal as a fuel source for the next generation of power plants. EPA projects only 2 gigawatts of new coal generation with CCS will be built by 2020. This analysis is partly driven by the expectation that natural gas prices will remain low and the current utility sector trend toward using more natural gas for electricity generation will continue.

To attempt to preserve coal as a fuel option for EGUs, EPA also proposed an alternative compliance option for <u>new</u> coal or petroleum coke fueled plants. Under this option, new EGUs that use CCS could use a 30-year average of CO$_2$ emissions to meet the proposed standard rather than meeting the annual standard. These EGUs could be constructed without CCS *if*: (1) the EGU achieves a CO$_2$ emissions rate of 1800 lb/MWh for the first ten years of operation, and (2) the EGU commits to reduce its CO$_2$ emissions to no more than 600 lb/MWh beginning in its 11th year of operation, and continuing for the next 20 years. However, it is not clear that CCS will be either technically mature or cost efficient within 10 years, or many years to come after that.

Existing and modified EGUs are *not* included in this proposed NSPS, but the NSPS is a pre-cursor to the regulation of existing units. EPA committed to propose emission standards for modified and existing EGUs in the same legal settlement agreement that led to this proposal. Therefore, industry expects that EPA will develop and issue separate, proposed regulations for modified and existing EGUs in the future. The timing and stringency of that proposal is unknown and the subject of much speculation and anxiety.

NRECA position. NRECA believes the Clean Air Act was never intended, and should not be used, to regulate greenhouse gases such as CO_2. This proposed regulation is an example of its inadequacy and the failure to recognize the importance of coal as America's most abundant domestic fuel. NRECA will be commenting on this proposed standard, arguing that technology is not commercially available to meet the standard and making other arguments as to why EPA's proposal is flawed and should be withdrawn. America's electric cooperatives continue to support a comprehensive energy and environmental policy that maximizes energy efficiency and truly embraces all domestic fuels: nuclear, natural gas, renewable and coal.

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