EPA's Carbon Dioxide Regulations

Existing Source Performance Standards

The EPA has proposed regulations for existing power plants that would require a 30 percent reduction in carbon dioxide emissions by 2030.

As a practical matter under the Clean Air Act, the statute authorizes the EPA to set standards for existing plants but defers to states to develop implementation plans to achieve the standard. Under the EPA's timeline, states would be expected to submit their final implementation plans by June 2016.

Standards Must Recognize Advancements of Power Sector and Not Lead to Additional Early Retirement of Coal-Fired Generation

Our region enjoys some of the lowest electricity rates in the nation because of our abundant lignite resources. North Dakota produces and utilizes approximately 30 million tons of lignite coal annually; exporting roughly 70 percent of the electricity it produces to the region. At the same time, it is one of only seven "Clean Air" states that meet all of the federal ambient air quality standards. Clearly, clean air and coal-fired electricity are not mutually exclusive.

However, carbon dioxide does not share the characteristics of pollutants or emissions – such as sulfur, ash, mercury, etc - that the EPA has traditionally regulated. These are pollutants that are trace elements in the coal for which controls can be implemented at power plants. Since carbon dioxide is the majority byproduct of burning fossil fuels, the only ways to achieve reductions at the power plant are through increased efficiency, yet-to-be-proven carbon capture and sequestration technology, or by simply reducing power output, which is not an option given ever-increasing demand for electricity. With respect to efficiency, utilities in North Dakota have invested $2 billion, and continue to spend $100 million each year, to increase efficiency and reduce emissions from their electrical generating units.

Yet in the proposed rule, the EPA again gets ahead of the current state of technology by assuming that all coal-fired units can achieve a 6 percent reduction in carbon dioxide emissions through efficiency improvements even as these units add energy-intensive and/or efficiency-reducing environmental controls to comply with other EPA rules. Furthermore, the EPA has provided no basis for the 6 percent reduction it has chosen, nor cites any examples of plants that have been able to achieve that reduction through existing technology.

In its 2013 Long-term Reliability Assessment[1], the North American Reliability Corporation (NERC) stated that 25 gigawatts of fossil-fueled generation – enough power to heat 20 million homes – has been retired since 2011. During this year's "Polar Vortex," 89 percent of the coal capacity that is slated for retirement by a major power provider in the upper Midwest was called upon to meet electricity demand[2]. The EPA's proposed rule could exacerbate this trend and threaten the ability of utilities to supply power during peaks in demand.

[1] http://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/2013_LTRA_FINAL.pdf
[2] http://www.energy.senate.gov/public/index.cfm/files/serve?File_id=3c485574-7d19-4ee9-ae0e-c7e8f986032e

Integrating even more intermittent resources, as proposed by the EPA, into the grid remains a challenge. Coal plants were designed to be run at a constant pace. The sporadic operation associated with intermittent renewable energy production, such as wind, can greatly reduce the efficiency and durability of coal-fired units that are forced to "load-follow". In short, while wind certainly plays an important role in our region's generation portfolio, we are nearing a crossroads with respect to the amount of wind that can be plugged into the grid without sacrificing reliability and efficiency of baseload units, such as coal-fired power plants.

Standards Need to Account for Growing Demand

Demand for electrical power in North Dakota alone is expected to increase by 208% over the next twenty years[3]. With an 800-year supply of lignite reserves, the industry is well-positioned to meet that demand and continue driving economic growth with low-cost coal-fired power. The EPA cannot hamstring the ability of utilities to not only build new generation, but to make investments to expand the ability of existing plants to meet increased demand.

Proposed Rule Will Have No Measureable Benefit

Carbon dioxide emissions from the U.S. coal fleet only represent 3 percent of global greenhouse gas emissions. Reducing U.S. emissions from coal plants by 30%, as EPA's proposed rule requires, comes with a high cost to our economy and our business and residential consumers -- with virtually no climate-related environmental benefits. We should keep this fact in mind as we consider the value and virtues of this proposed rule, and not punish the good actors in the U.S. coal fleet who continue to find ever cleaner and more innovative ways to utilize our vast coal resources.

[3] http://www.nd.gov/ndic/ic-press/Power2012.pdf