

Ms. Barbara Walz
Senior Vice President for External Relations and Environmental
Tri-State Generation and Transmission Association, Inc. Westminster, Colorado
U.S. House of Representatives
Committee on Energy and Commerce
Subcommittee on Energy and Power
The American Energy Initiative: A Focus on EPA's Greenhouse Gas Regulations
19 June 2012

Thank you Mr. Chairman. Chairman Whitfield and Ranking Member Rush, my name is Barbara Walz and I am here on behalf of Tri-State Generation and Transmission Association, a not-for-profit cooperative that provides electricity to about 1.5 million people in mostly rural areas of Colorado, Nebraska, New Mexico and Wyoming. I am Tri-State's Senior Vice President for External Relations and Environmental, and I appreciate the opportunity to testify about EPA's new greenhouse gas rule for power plants. My message is a simple one. If this rule stands, it will effectively ban the construction of new coal-fired power plants in the U.S. and almost certainly will make electricity more expensive. This statement is not hyperbole or exaggeration. In the greenhouse gas rule, EPA has simply decreed that there shall not be any new coal-fired power plants in the U.S. – at least for the foreseeable future. The impacts of banning the construction of new coal-fired power plants will be far reaching and possibly devastating to some of the rural areas of this country that depend on coal not only for power, but for jobs.

To be fair, this greenhouse gas rule does provide an alleged concession for Tri-State and other companies that are in the process of developing new coal-fired power plants. However, this concession may well prove illusory: to qualify we must commence construction on our new plant within one year. If Tri-State is able to meet that condition, the new coal-fired plant we have proposed to construct in Kansas will not be covered by the greenhouse gas rule. But, as I will explain, this alleged concession does not really help us because another EPA rule known as the

MATS rule will likely prevent us - or anyone else - from commencing the construction of a new coal-fired plant in time to meet EPA's one-year deadline.

The Holcomb 2 Project

Almost five years ago, Tri-State entered into an agreement with Sunflower Electric Power Corporation to develop a new coal-fired electric generating unit at a facility located in Holcomb, Kansas. We refer to this project as Holcomb 2. In addition to the investment made by Sunflower, Tri-State has invested approximately \$70 million in the development of Holcomb 2. We've even gone through the rigorous regulatory process of obtaining the requisite federal air permits. Yet the years of planning and the millions of dollars invested to develop this project may have all been for naught if EPA is allowed to use rulemaking to essentially ban the construction of new coal-fired power plants.

The GHG NSPS Unlawfully Imposes the Same Standard for All New Power Plants

For more than 40 years, EPA has followed the mandate of Congress when establishing regulations to implement the Clean Air Act. For several decades and for a range of different pollutants, EPA properly used its authority under the Clean Air Act by proposing and then finalizing one set of emissions standards for gas-fired plants and a separate set of standards for coal-fired plants. As recently as last year, EPA acknowledged that for purposes of setting New Source Performance Standards, the Agency is required to propose and then promulgate different standards for plants that use different types of fuel because emissions standards must be based on the "best available system of emission reduction" that has been "adequately demonstrated." That "best system" is different for each fuel type.

However, on April 13, 2012, EPA broke from this precedent grounded in the statute when it published the New Source Performance Standards to control greenhouse gas emissions from fossil fuel-fired power plants. In this rule, EPA created a new category of EGUs that includes virtually all types of fossil fuel-fired plants, including plants that burn gas, coal, oil, and “pet coke.” Despite the differences between these types of plants and the fuels they combust, the same emissions standards would be imposed on all sources within this broad new category. Rather than establishing a standard that is achievable for each type of plant in this category, EPA based the standard on “the demonstrated performance” of *only one type of source* in that category – natural gas combined combustion turbines. EPA admits that no demonstrated system of emission reduction is available to enable any of the other sources in this category (including state-of-the-art coal units like Holcomb 2) to meet this emission standard. In essence, by issuing this rule, EPA has declared that coal-fired power plants cannot be built at all because only gas-fired power plants can install the “best system of emissions reduction” that can meet EPA’s standard. The Clean Air Act does not authorize EPA to make this judgment and, therefore, we believe that EPA’s actions are unlawful.

Background

Tri-State supports and is committed to good environmental stewardship, but the greenhouse gas new source performance standard (GHG NSPS) will greatly affect Tri-State’s ability to provide affordable electricity to our member systems. As a not-for-profit cooperative, Tri-State does not make any profit from the implementation of these rules. Therefore, the cost to comply with these rules must be passed onto our member systems’ consumers – meaning the families and individuals at the end of the electric lines.

The GHG NSPS creates a regulatory dilemma for developers of new electric generating units (EGUs). On the one hand, EPA has imposed a strict 12-month deadline for certain new coal-fired power plants to begin constructing those facilities in order to comply with the GHG NSPS. At the same time, EPA has also issued other standards for new coal-fired power plants in its Mercury and Air Toxics Standards (MATS). The standards in the MATS rule are so stringent that compliance cannot be reliably measured using the most advanced measurement technology. As a result, project developers may not be able to obtain certifications from their equipment vendors that the equipment will comply with the MATS rule. Without these certifications, project developers cannot obtain financing to commence construction of these new facilities. As a result of issuing these two rules, EPA has erected barriers to the construction of any new coal-fired power plant that could lead to defacto ban on new coal-fired power plants for the foreseeable future.

Given that Tri-State is a not-for-profit cooperative, we don't tend to find ourselves testifying before Congress or filing lawsuits challenging rules issued by EPA. However, because we have invested nearly five years and approximately \$70 million trying to construct a new coal-fired power plant in Kansas, it is important for Tri-State to try to protect that investment and our membership by challenging these unlawful and unreasonable rules. Therefore, on April 13, 2012, Tri-State filed a petition for review of the MATS rule with the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit). Similarly, on June 12, 2012, Tri-State filed a separate petition for review with the D.C. Circuit challenging the GHG NSPS rule.

At the May 24 hearing that EPA held in Washington, D.C., Tri-State requested that EPA take prompt and decisive action to withdraw the GHG NSPS rule in its entirety. We plan to

request the same relief in our written comments that we will submit to EPA during the notice and comment period on the GHG NSPS rule.

However, seeking relief through the courts or by participating in the administrative rulemaking process may not provide us the relief we need in time to save projects like Holcomb 2. Therefore, I have come here today to testify before you to highlight two key issues: (1) the GHG NSPS is unlawful because it inappropriately imposes the same unreasonable emissions standard for coal- and gas-fired facilities despite their differences in technology and (2) the NSPS unreasonably creates a 12-month period for so-called “transitional units” to commence construction, which cannot be met due to EPA’s MATS rule.

The GHG NSPS Inappropriately Requires Coal- and Gas-Fired Facilities to Comply with the Same Unreasonable Emission Standard

Tri-State believes that EPA lacks legal authority to apply the same GHG NSPS to both coal-fired boilers and natural gas-fired combined cycle turbines. Coal-fired boilers and natural gas-fired turbines are different combustion technologies that fire dissimilar types of fuel.

Under the Clean Air Act, EPA is required to establish a “standard of performance” that is “achievable through the application of the best system of emission reduction” that takes into consideration cost, health and environmental impacts, energy requirements and that “has been adequately demonstrated.” Here, EPA has proposed one requirement that all new EGUs (except simple cycle turbines) must comply with, regardless of the fact that this standard has not been “adequately demonstrated” for coal-fired power plants. Furthermore, it is unclear that the standard itself – 1,000 lb CO₂/MWh – is an achievable emission limitation for natural gas combined cycle units. Tri-State has reviewed the carbon dioxide emissions from its facilities and found that its natural gas combined cycle plants emitted approximately 1,300 lb CO₂/MWh

(while its gas-fired simple cycle turbines emitted between approximately 1,200 and 1,600 lb CO₂/MWh). Despite the fact that these units use EPA's preferred fuel – natural gas – they still do not meet the GHG NSPS emission limit. While it is possible that some new, ideally optimized natural gas combined cycle units might be able to meet the 1,000 lb CO₂/MWh standard, there is no guarantee that all new natural gas units will be able to meet this standard. A natural gas unit's ability to meet this standard will depend on numerous variables including turbine efficiency, model, age, generation capacity, and duty cycle. Therefore, we are left wondering: what facilities will be able to comply with the standard? Without a doubt, no new coal-fired boilers will be able to meet the 1,000 lb CO₂/MWh standard and apparently many gas-fired units won't either.

The GHG NSPS Requires Coal-Fired Power Plants to Use Carbon Capture and Storage – an Undeveloped Technology

Another problem with the GHG NSPS is that new coal-fired power units that are not “transitional sources” are required to use carbon capture and storage (CCS) technology, if they want to build such units. The CCS technology that EPA claims can be applied at coal-fired power plants is not technically feasible, has not been demonstrated, is not commercially available, and, even when it becomes available, it will not likely be affordable. The U.S. Department of Energy fossil energy budget for clean coal was reduced from \$680 million in 2009 to \$400 million in 2011 – a 41% decrease in funding. The U.S. Department of Energy budget for carbon capture and storage and power systems is proposed to decrease an additional 25% in 2013. If those problems aren't enough, CCS also imposes a “parasitic load” on a coal-fired power station, meaning that CCS consumes power equal to or greater than approximately 30 percent of the power plant's generation capacity.

Had EPA believed that these problems did not prevent CCS from being a viable “best system of emission reduction” for coal-fired power plants, EPA would have assessed CCS under the Clean Air Act’s “adequately demonstrated” regulatory standard. EPA didn’t, because it couldn’t. Tri-State believes it is clearly unlawful for EPA to mandate the use of a technology that is in its infancy and has not been demonstrated. It is also completely unrealistic to assume that this technology will necessarily develop according to the timeframe provided in EPA’s proposed 30-year averaging compliance option. To issue a rule that essentially requires coal-fired power plants to use CCS while refraining from determining whether CCS has been “adequately demonstrated” was disingenuous, unreasonable, and, most important, unlawful.

The GHG NSPS Unreasonably Creates a 12-Month Period for So-Called “Transitional Sources” to Commence Construction

The GHG NSPS provides certain coal-fired power plants known as “transitional sources” 12 months to commence construction in order to avoid CCS. The GHG NSPS defines a “transitional source” as a “a coal-fired power plant that has received approval for its complete PSD preconstruction permit by the date of this proposal . . . and that commences construction within 12 months of the date of this proposal.” This deadline is arbitrary and is the only means provided in the rule for transitional sources to avoid the unachievable emissions standard imposed in the GHG NSPS. EPA has stated that this 12-month period “would not be extended for any reason,” including because of legal challenges. In other words, EPA has imposed an arbitrary deadline that EPA announces cannot be extended. Transitional sources have, as EPA acknowledges, expended large sums – or “substantial sunk costs” as EPA refers to them – into developing their projects and EPA makes blindingly clear that EPA will not even consider comments that suggest a different result than the one irrevocably embraced by EPA.

The Unachievable Standards in the MATS Rule Will Prevent Transitional Sources from Commencing Construction Within the 12-Month Period Required in the GHG NSPS

Despite the requirement in the GHG NSPS for transitional sources to commence construction within 12 months, facilities such as Holcomb 2 will likely be impeded from doing so by EPA's MATS rule. The new unit standards that were finalized under the MATS rule are so stringent that pollution control equipment vendors have stated that they will not guarantee that their equipment will reduce emissions to the limits required under the MATS rule.

The inability to obtain these guarantees creates a major financing hurdle for project developers. In order to finance a new electric generating unit, the project developer must obtain guarantees from its equipment vendors that the equipment that will be installed will meet all of the required emission limits. Because emission standards are too low to even measure, the equipment vendors explain that they cannot provide these guarantees. Without the guarantees, outside financing the development and construction of these new coal-fired electric generating units will be difficult if not impossible.

EPA has been informed by numerous sources of these problems with the MATS standards. For example, the Institute of Clean Air Companies (a trade association for approximately 100 companies that comprise nearly all the vendors of air pollution control equipment systems and measurement and detection devices) formally told EPA that that the mercury standard is set at a level that cannot be detected by pollution control measurement systems. Babcock and Wilcox Power Generation Group also told EPA that the MATS emission standards for particulate matter, hydrochloric acid, and mercury for new units are not measurable with sufficient accuracy for reliable control of the emissions reduction systems and sustainable

long term emissions compliance. Despite these warnings, EPA has not changed the standards in the MATS rule.

EPA holds unrealistic expectations about the capability of the electric power generation industry to design, finance, permit, construct, test and deploy new undemonstrated technology - in very short timeframes - in order to comply with the MATS rule. EPA seems to have adopted an unrealistic “*Field of Dreams*” philosophy that if the agency mandates a standard, the equipment vendors will be able to build it. This perspective confuses fantasy with reality by ignoring the status of existing technology and instead recklessly assuming that the industry will be able to comply with unprecedented emissions standards in a very limited time frame. But most important, promulgated MATS standards that are not based on “achievable” technology, like proposed NSPS that are not based on “achievable” technology, exceed EPA’s mandate from Congress under the Clean Air Act.

Conclusion

Tri-State is particularly concerned about the impact of the GHG NSPS rule because we provide electricity to many rural areas of Colorado, Nebraska, New Mexico and Wyoming. Some of these areas are located in the most economically depressed counties of the country. The MATS and GHG NSPS will have real and adverse economic impacts on the entire U.S. population generally, but particularly on those that live in these communities.

The Interior West contains vast quantities of high quality coal with low emissions that can be used responsibly to generate cost-effective energy for a growing region of the country. The electric utility industry provides well-paying and meaningful jobs in communities across the

country. Our industry also has a significant indirect beneficial economic impact on the communities in which we operate and do business.

Tri-State is not opposed to the creation of regulatory requirements to protect the public health, welfare, and the environment, but those standards must be achievable and compliance with them must be measurable. Furthermore, the deadlines for compliance must allow sufficient lead time to develop, install, and test any new technology that is required. Tri-State urges the committee to exercise continued oversight over the EPA's regulatory process in order to ensure that the agency is issuing regulations that comply with the Clean Air Act as Congress intended. This additional oversight will help us to continue to provide affordable and reliable electricity to our member systems and their member-owners.

Thank you for inviting me to testify here today. I would be happy to take any of your questions.