



**Ms. Barbara Walz**

***“Oversight: Review of EPA Regulations Replacing the Clean Air Interstate Rule (CAIR) and the Clean Air Mercury Rule (CAMR)”***  
**Senate Environment and Public Works Committee**  
**Subcommittee on Clean Air and Nuclear Safety**  
**Thursday, June 30 2011**

Mr. Chairman, Senator Barrasso and members of the Subcommittee, my name is Barbara Walz. I am the Senior Vice President for Policy and Environmental at Tri-State Generation and Transmission Association, Inc. based in Westminster, Colorado. I appreciate having the opportunity to testify before you regarding the effect that EPA regulations replacing the Clean Air Interstate Rule (CAIR) and the Clean Air Mercury Rule (CAMR) would have on Tri-State’s operations.

**BACKGROUND**

Tri-State is a not-for-profit member-owned electric cooperative. Our mission is to provide reliable cost-based wholesale electricity -- while maintaining high environmental standards -- to our 44 member system electric cooperatives (co-ops) and public power districts (PPDs). These members serve approximately 1.5 million consumers in Wyoming, Nebraska, New Mexico and Colorado.

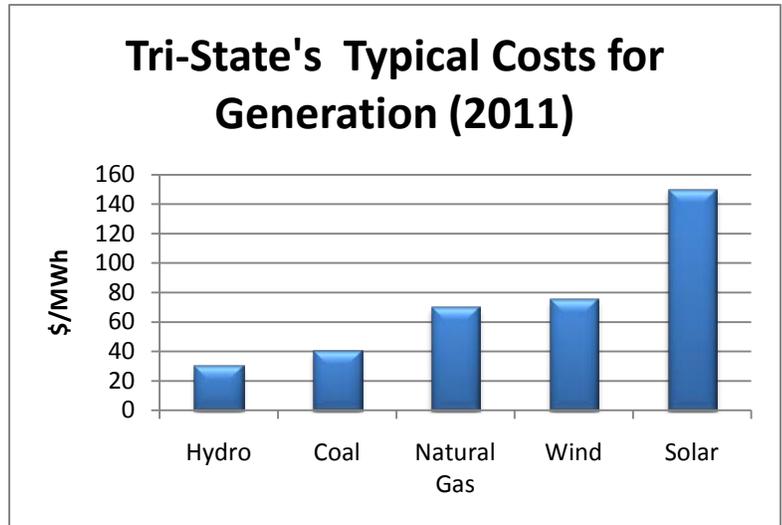
Tri-State’s service territory is spread over more than 200,000 square miles and serves many of the Intermountain West’s rural and frontier communities. The average number of consumers served by our member cooperatives and PPDs is five consumers per mile. (In Wyoming and Nebraska, it’s 2.82 and 2.41 respectively.) Our friends in the investor owned utility sector serve 37 consumers per mile and the municipally owned utilities serve 43 consumers on average.

Tri-State was organized on May 19, 1952 to meet the growing electricity needs of its 15 founding co-ops and PPDs. This initial group of members charged Tri-State with aggregating each member’s allocation of federal hydropower from the Bureau of Reclamation. Through mergers with other co-ops, consumer growth and load growth, Tri-State has evolved over the last 60 years from a co-op that simply provided for its members electricity needs through the aggregated management of a federal hydropower allocation to a co-op that provides for its members’ needs through a diverse portfolio of generation sources.

Today Tri-State generates or purchases power produced by hydropower, solar, wind, coal and natural gas turbines. Tri-State is committed to reliable (federal hydropower) and intermittent (wind and solar) sources of renewable energy. Up to 15% of our power needs comes from

hydropower marketed by the Western Area Power Administration (WAPA). We have also recently integrated 50 megawatts of wind and 30 megawatts of solar into our generation portfolio through purchase power agreements with Duke Energy and Southern Company respectively. The Cimarron facility located on Ted Turner's ranch in Northern New Mexico and owned by the Southern Company is one of the largest photovoltaic solar facilities in the United States and generates enough power to fulfill the electricity needs of 9,000 homes<sup>1</sup>. Tri-State was recently recognized by the Solar Electric Power Association as the highest ranked cooperative developer of solar power in 2010.<sup>2</sup>

While we are very proud in the strides we have taken to integrate intermittent sources of renewable energy into our generation portfolio -- after the cost-based hydropower marketed by WAPA -- coal based thermal generation continues to be the most economical source of baseload generation to meet our members' needs (see graph). Tri-State currently owns and operates the Craig and Nucla power stations in Western Colorado and the Escalante power station in Western New Mexico. In addition to these facilities, Tri-State owns 24% of the Laramie River Station in Wheatland, Wyoming and 35% of the Springerville Generating Station in Springerville, Arizona. We also have plans to own 700 Megawatts of a planned 900 megawatt coal unit with our partner Sunflower Electric Power Corporation in Holcomb, Kansas. The State of Kansas has already issued the air quality permit needed to proceed with construction.



## ECONOMIC IMPACTS OF POWER PLANTS

The Craig, Escalante and Nucla generating stations are not only crucial to Tri-State's baseload operations, but they also play an important role in sustaining and developing rural communities in rural Colorado and rural New Mexico. Tri-State commissioned Development Research Partners (DRP) of Lakewood, Colorado to conduct studies regarding the economic and fiscal impacts of the Craig, Nucla and Escalante stations to the surrounding communities.

### **DRP produced the following findings for the Craig Generating Station in Moffat County, Colorado:**

- The 306 direct power plant employees earn approximately \$33.9 million in wages, salaries and benefits each year.

<sup>1</sup> [http://www.southerncompany.com/news/Cimarron\\_fact\\_sheet.pdf](http://www.southerncompany.com/news/Cimarron_fact_sheet.pdf)

<sup>2</sup> <http://www.solarelectricpower.org/media/194514/sepa-top-10-press-release.pdf>

- The on-going operations of the power plant support the employment of 748 workers annually (306 direct employees + 442 indirect employees).
- Craig receives 100% of its coal supply from the Trapper and Colowyo Mines supporting 100% of the employees from both mines and supporting an annual payroll of \$38.9 for 446 employees.
- The Craig Stations spends \$213.8 million locally each year for goods and services associated with electricity generation.
- Craig generates \$8.9 million annually in tax revenue for local governments.

**DRP produced the following findings for the Escalante Station:**

- Escalante supports the employment of 303 employees (117 direct employees + 186 indirect employees).
- The 117 Escalante employees earn approximately \$13.1 million in wages, salaries and benefits each year.
- The Escalante Station spends \$44.2 million locally each year for goods and services associated with the electricity it produces.
- Escalante generates \$5.2 million annually in tax revenue for local governments.

**DRP produced the following findings for the Nucla Station:**

- Nucla Station is one of the largest private employers in Montrose County, Colorado. It employs 60 with wages and benefits amounting to \$7.2 million annually.
- Nucla purchases 100% of its coal supply from the New Horizon Mine, which supports 28 employees for a direct payroll of \$1.7 million.
- Nucla spends \$20.3 million locally each year for goods and services associated with the electricity generation.
- Nucla station generates \$1.1 million in tax revenue for the various taxing entities in the region.

**TRI-STATE OPERATIONS AND IMPACTS FROM UTILITY MACT AND CATR**

All our power stations are heavily regulated by state and federal agencies which include: Colorado Department of Public Health & Environment (CDPHE), Wyoming Department of

Environmental Quality, Arizona Department of Environmental Quality, New Mexico Environment Department, Kansas Department of Health and Environment, U.S. Environmental Protection Agency (EPA), Army Corps of Engineers and Office of State Engineers. Tri-State is routinely inspected for environmental requirements and is consistently in compliance with the broad array of rules and regulations that are already placed on coal fired electric generating units (EGUs). For the past decade, Tri-State has implemented an Environmental Management System (EMS) that meets the EPA guidelines for EMS's and International Standards Organization 14001 Standard for EMS's. The Colorado Department of Public Health and Environment has recognized Tri-State as a Silver Achiever under the Colorado Environmental Leadership Program (ELP) for implementation of the EMS and sustaining significant achievements in operating our Nucla Generating Station, airport hanger, and headquarters facilities in compliance with all state environmental regulations.

Tri-State has reviewed the proposed Utility Maximum Available Control Technology (MACT) regulation and has considered the allocation methodologies that are set forth in the proposed Clean Air Transport Rule (CATR). We have submitted comments to the EPA on the alternative allocation methodologies for the CATR and will submit comments to the EPA on the Utility MACT proposed rule. Tri-State has a team of environmental staff that have evaluated the proposed rules but due to the volume of new rules being proposed by EPA, Tri-State is not able to evaluate all the rules on our own and we rely on national organizations such as the utility Air Regulatory Group and the National Rural Electric Cooperative Association to provide analysis of rules as well. This testimony is based on analysis by several of these organizations in addition to Tri-State environmental staff.

Tri-State's power generating stations all have state of the art air pollution controls that work to meet or exceed federal and state clean air and clean water standards. The stations have scrubbers to remove more than 90% of the sulfur dioxide and baghouses that remove up to 99% of the particulate matter. These controls also result in a co-benefit of mercury emission reductions ranging from 65% to 95% at Tri-State stations. The proposed MACT rule will likely require additional controls to meet the particulate matter or metal standards. These additional controls will result in a finishing or second baghouse at the plants. Because we are a not-for-profit cooperative that is ultimately owned by our consumers, these new compliance costs will be passed on directly to cooperative member-owners in the form of higher rates.

Tri-State supports and is committed to good environmental stewardship and the appropriate assessment of environmental regulations to ensure such protections. We support the use of good quality data for decision making and have readily complied with the EPA's Information Collection Request (ICR) data collection requirements. The emissions testing was done on very short notice and represents a snapshot in time, with most constituents having only one data point for the station emissions. It is important to have good data for regulation development. Tri-State not only supports the reasonable application of emission controls to achieve reasonable emission limits that are designed to protect public health and the environment, we also support the installation of emission controls in a reasonable timeframe such that facilities are capable of complying with the requirements of a given rule. Tri-State believes that the proposed rules for the Utility MACT are not reasonable, are not based on sound practices of data quality and are not readily achievable using generally available emission control technologies, especially for new units.

## **CLEAN AIR ACT AMENDMENTS OF 1990 SHOULD BE IMPLEMENTED PRIOR TO ANY MACT RULE**

In amending the Clean Air Act (CAA) in 1990, Congress set utilities apart from other sources in addressing hazardous air pollutants (HAPs) and established special circumstances, set forth in section 112(n)(1), for regulation of electric utility steam generating units. Congress recognized the importance of coal-based electricity generation to our country's electric reliability and economic growth. Congress also recognized that a substantial amount of emission reductions would occur from the utility sector as a result of the **full** implementation of the 1990 Clean Air Act amendments. Congress indicated, in section 112(n)(1) that further regulation was warranted *only if*,

“..... a study of the hazards to public health reasonably anticipated to occur as a result of emissions by electric utility steam generating units of pollutants listed under subsection (b) **after imposition of the requirements of this act.**”

Congress further expressed this perspective by stating that

“The Administrator shall regulate electric utility steam generating units under this section, if the Administrator finds such regulation is appropriate and necessary after considering the results of the study .....” **conducted after imposition of the requirements of the act.**

The EPA has not yet implemented the provisions of the act in a timely fashion such that the EPA could consider the benefits of those required programs prior to conducting the study required in section 112(n)(1). It is only after these programs have been implemented that the EPA could appropriately consider the impact of the remaining emissions from electric utility steam generating units as set forth in Section 112(n)(1). The EPA clearly states in the proposed rule preamble that it is not opposed to the generation of electricity using coal, but clearly takes actions that contradict that statement by disregarding the benefit that these other CAA programs that provide to public health and the environment, specifically PM2.5 NAAQS compliance. The EPA has estimated the benefits of the Utility MACT from PM2.5 emission reductions to be approximately \$42 – 130 billion, but PM2.5 emission reductions are a NAAQS program benefit that should not be attributable to the Utility MACT.

Specifically, the EPA has failed to consider the benefit of the emission reductions that would have occurred had the EPA appropriately addressed the requirements of §110(a)(2)(D) regarding interstate transport of pollutants for the achievement of the National Ambient Air Quality Standards, the Prevention of Significant Deterioration of air quality, and the protection of visibility. Clearly, the EPA should have considered the emission reductions at electric utility steam generating units that would have resulted from returning nonattainment areas to compliance with the NAAQS. The EPA has also failed to take into consideration the benefit of emission reductions from the implementation of the Visibility Protection Program set forth in section 169A of the Clean Air Act. Here again, the EPA should have taken into consideration the emissions reductions that would likely occur as a result of implementing the requirements of

this provision of the Act. The EPA disregards these clear requirements and has charged ahead to unnecessarily and inappropriately impose regulatory burdens on the coal fired electric generation sector. The EPA has also miscalculated the public health benefit of the proposed rule because it has failed to attribute the public health benefits of other required 1990 Clean Air Act amendment programs prior to the proposal of this rule. The public health benefit of these other required programs should be subtracted from the totals that the EPA has presented in the proposed rule and appropriately attributed to the other programs.

## **EPA'S 2000 LISTING DECISION IS TOO STRICT; OTHER FLEXIBLE OPTIONS EXIST FOR REGULATION**

In December 2000 EPA Administrator Browner concluded that mercury emissions from coal-fired electric utility steam generating units posed a public health concern and that regulation of these sources was “appropriate and necessary.” Despite earlier statements by EPA about its regulatory flexibility under §112(n)(1)(A), Administrator Browner concluded that the only option EPA had for regulation, once there was a finding that regulation was necessary and appropriate, was to list electric utilities under §112(c) and to proceed in the development of MACT standards under §112(d). This decision to proceed under the MACT provisions of §112(d) narrowly construes §112(n)(1)(A) and unduly constrains EPA’s present regulatory options.

Section 112(n)(1)(A) provides EPA broad discretion to address specific public health risks EPA identified as a result of its Utility Study to Congress. Section 112(n)(1)(A) is not specific to the provisions under which EGUs should be regulated. Instead, this section requires EPA to “develop and describe” alternative control strategies for emissions which may warrant regulation. The development of alternative control strategies would be a pointless paperwork exercise if the EPA’s only option was to regulate under the MACT provisions of §112(d). When Congress instructed the EPA to identify alternative control strategies, it provided the agency authority to implement the control strategies that it found to be the most appropriate to address any identified health concerns.

In the 1990 CAA Amendments Congress treated electric utility steam generating units differently than all other source categories under §112. Rather than subjecting these units to the §112(c)/§112(d) regulatory scheme, Congress enacted §112(n)(1)(A) to govern any §112 regulation of these units. Section 112(n)(1)(A) requires the EPA to study any hazards to public health reasonably anticipated to occur as a result of hazardous air pollutant emissions from electric utility steam generating units, after considering the impact of the other provisions of the CAA on this source category. As part of that evaluation, Congress directed the EPA to “develop and describe” alternative control strategies for emissions which may warrant regulation. Finally, Congress directed the EPA to determine whether regulation of these units is “appropriate and necessary” after considering the results of a public health hazards study.

The legislative history of §112(n)(1)(A) provides perspective on Congress’ approach to address emissions from electric utility steam generating units under §112. S. 1630, which passed the Senate on April 3, 1990, would have required EPA to list electric utility steam generating units under §112(c) and to regulate them under the MACT provisions §112(d). However, when the House passed a modified version of S. 1630 on May 23, 1990, it substantially changed the §112

provisions related to electric utility steam generating units making them virtually identical to the current §112(n)(1)(A) which was later adopted by the conference committee and made law.

Congressman Mike Oxley (R-OH), a sponsor of the House provision and a member of the conference committee, explained the intent of §112(n)(1)(A):

Pursuant to section 112(n), the Administrator may regulate fossil fuel fired electric utility steam generating units only if the studies described in section 112(n) clearly establish that emissions of any pollutant, or aggregate of pollutants, from such units cause a significant risk of serious adverse effects to the public health. Thus, . . . he may regulate only those units that he determines – after taking into account compliance with all provisions of the act and any other Federal, State, or local regulation and voluntary emission reductions -- have been demonstrated to cause a significant threat of serious adverse effects on the public health.

Thus, Congress directed the EPA to make a regulatory determination regarding fossil-fuel-fired generating units based on consideration of any adverse public health effects identified in the study. Congress did not dictate in §112(n)(1)(A) that the EPA must regulate electric utility steam generating units under §112(d). The EPA first had to conclude that regulation was “appropriate and necessary.” Even if the EPA concluded that regulation was appropriate and necessary, Congress did not require the agency to regulate “under subsection (d) of this section” – the language used in CAA §112(c)(5), for most source categories – or, for that matter, any other specific subsection of §112.

Thus, the EPA’s December 2000 listing decision is premature and inappropriate because it does not rest on a finding from the study that the EPA was required to conduct identifying that these non-mercury hazardous air pollutants present a public health threat once the other applicable provisions of the CAA were implemented.

### **EPA SHOULD NOT REGULATE ANY NON-MERCURY HAPS**

Because the regulation of electric utility steam generating units is governed by the provisions of §112(n)(1)(A) the EPA is not required to regulate all HAP emissions from an electric generating unit as required by §112(d). Section 112(n)(1)(A) requires the EPA to “perform a study of the hazards to public health reasonably anticipated to occur as a result of emissions by electric utility steam generating units of pollutants listed under subsection (b) of this section after imposition of the requirements of this chapter.” The Administrator is required to consider the results of that study to determine if regulation of electric utility steam generating units is “appropriate and necessary” under §112. Thus, the basis for any regulatory action by the EPA is an initial finding that a HAP presents a public health concern.

In its 1998 Utility Study, the EPA identified all of the HAPs emitted by coal-fired power plants, estimated the emissions of each HAP, and analyzed the risk posed by emissions of each HAP using conservative, screening models and assumptions. As a result of that work, the EPA decided not to make a regulatory determination as part of the Utility Study. Instead, the EPA offered the general conclusion that mercury from coal-fired power plants is the HAP of “greatest potential concern” and that additional research and monitoring is needed. As for all other HAPs, the

agency found that a few other HAPs had some remaining potential concerns and uncertainties may need further study.

The December 14, 2000 regulatory decision described the evidence that caused the EPA to conclude that “mercury is both a public health concern and a concern in the environment.” With regard to other HAPs, the EPA stated that arsenic and a few other metals (e.g., chromium, nickel, cadmium) were of potential concern for carcinogenic effects and that dioxins, hydrogen chloride, and hydrogen fluoride are of potential concern. The EPA added that “the other HAPs studied in the risk assessment do not appear to be a concern for public health based on available information.”

The Electric Power Research Institute (EPRI) also conducted a detailed study of the HAPs emitted by coal-and oil-fired power plants and modeled the risks posed by those HAPs. The EPRI study confirmed the EPA’s conclusions that the non-mercury HAPs from electric utility steam generating units did not pose public health threats. As a result, the rulemaking record does not establish a public health concern from power plant emissions of non-mercury HAPs. The proposed MACT rule contains HAP standards for eleven non-mercury HAPs for which EPA has not evaluated and proven a public health concern. Industry should not have to install pollution control devices until it is shown it will address a public health issue. EPA should not regulate HAPs other than mercury until a determination is made that a public health threat does exist based on specific factual analysis.

### **NO PLAUSIBLE LINK BETWEEN COAL PLANT MERCURY EMISSIONS AND MERCURY IN FISH TISSUE**

The EPA has failed to establish a plausible link between the emissions of mercury from coal fired power plants and the methyl mercury concentrations upon which it has based its decision to regulate mercury from coal fired electric power generation. There is a significant amount of mercury in the global atmosphere that can have an impact on the deposition of mercury onto the land and water surfaces. Total mercury in the atmosphere has been estimated in the range of approximately 6,000 to 8,000 tons. This global pool of mercury is made up of natural and manmade emissions of mercury in various chemical forms. The natural sources of mercury account for about 3,500 tons to the lower end of the total atmospheric projection of about 6,000 tons. Man-made sources of mercury in the atmosphere account for about 2,000 to 2,500 tons and mercury emissions from coal fired power generation in the United States accounts for about 56 tons per year. The net effect of the utility MACT to reduce mercury emission would be approximately 22 tons per year. EPA has never fully demonstrated that the mercury emissions from coal fired electric utilities is emitted and deposited in the lakes and streams for which EPA claims credit for the proposed rule.

### **EPA INAPPROPRIATELY ESTABLISHED THE MACT STANDARD - ACTUAL OPERATING SOURCES DO NOT ACHIEVE THESE STANDARDS**

The EPA has selected the emission standard for each of the constituents it intends to limit on an individual basis from several different facilities and aggregated those limits into a single set of emission limits that will apply to all facilities. Tri-State believes that the EPA significantly underestimates the impacts of this approach on existing and new sources. The EPA does not

seem to realize or consider that there is not a linear relationship between the control equipment at a facility, how the facility is operated and the resultant emissions of each individual HAPs. The EPA must consider HAP emissions on a per unit basis and not simply consider each HAP separately taking the 12% best emitting sources of each single HAP, then adding them together to create a wholly new facility profile that is not reproduced anywhere in the existing operating system. MACT standards must be set based on the level of performance achieved by actual sources.

As noted earlier in this testimony, Tri-State stations are highly controlled power plants. In general the plants have scrubbers that remove greater than 90% of the sulfur dioxide and have baghouses that remove up to 99% of the particulate matter. These controls also result in a co-benefit of mercury emission reductions ranging from 65% - 95% at Tri-State Plants. The proposed MACT rule will likely require additional controls to meet the particulate matter or metal standards. These controls will result in the addition of a finishing or second baghouse at the plants, which is not current industry practice that should be reflected in a MACT standard that is set on achievements of actual operating sources.

### **MACT STANDARD FOR NEW UNITS ARE ARTIFICIALLY LOW AND NOT ACHIEVABLE**

Although the economy is still recovering, Tri-State member system demand for energy continues to increase about 3-4% per year. Therefore, Tri-State needs to plan for new generation stations and continues to look at all fuel options with a focus on affordable, reliable electricity that is environmentally sound. Under the proposed MACT rule, new coal units can **NOT** be constructed to meet the MACT standards due to the fact that technology does not exist to meet limits, vendors will not give guarantees to meet limits, and financial institutions will not support new projects that are not able to ensure compliance with environmental rules.

Emission estimates from Powder River Basin (PRB) coal used at a new unit with state of the art environmental controls for particulate matter, mercury, sulfur dioxides and nitrogen oxides are well above the proposed emission limits in the MACT rule. Although Powder River basin coal is considered clean coal (low mercury, low sulfur and high thermal value), this MACT rule will prohibit the building of new PRB coal power plants.

### **SUBCATEGORIZATION FOR CIRCULATING FLUIDIZED BEDS**

Tri-State's Nucla facility is a circulating fluidized bed coal fired electric generating unit that has the lowest mercury emissions in the ICR database. The Nucla facility does not have add on controls for reducing mercury emissions. The reduced nature of the mercury emissions at the Nucla facility are due to the combustion process that results in near zero mercury emissions.

Coal fired electric generating units are complex operating systems whose emissions must be considered in a complicated equation of variables that include the chemistry of the fuel, the design of the boiler, the atmospheric pressure, the emission control system currently in use and many other factors. It is not appropriate to include CFB units in the mix of all boiler types to create a MACT standard that reflects the best 12% performing units. There is a fundamental

difference in the process that does not allow CFBs to be compared directly to conventional boilers.

### **MACT FLOOR CALCULATIONS ARE BASED ON FLAWED DATA ANALYSIS**

EPA has conducted a significant amount of analyses to determine the MACT floors for each of the hazardous air pollutants (HAPs) and HAP surrogate categories using the 2010 Information Collection Request (ICR) data that was supplied by the industry participants. This analysis was conducted in a relatively short period of time. Tri-State appreciates that the EPA has provided all of the working data and spreadsheets for members of the public to review and provide comment on as well as the proposed rule itself. EPRI has reviewed the data that was supplied by the EPA and has noted that there are many data errors and incorrect MACT Floor calculations. The EPA has acknowledged some of these discrepancies in their May 18, 2011 correction of the proposed mercury emission limit for existing sources revising that emission limit from 1.0 lb/TBtu to 1.2 lbs/TBtu. Tri-State believes that this 20% change in the level of the emission standard for mercury is a significant change and that a mistake of this magnitude warrants an EPA quality assurance review of all the data that the EPA used in the determination of the MACT floors. The EPRI analysis identifies several instances where the EPA used incorrect heat rates, where EPA has made inconsistent MACT floor determinations, used inconsistent Upper Prediction Limit (UPL) calculation procedures and where the EPA has made significant errors in its conversion of the ICR testing data. Tri-State supports the EPRI analysis and believes that the EPA should review the analyses and re-propose the rule with accurate analyses such that the public can have a reasonable opportunity to provide public comment on what should be substantially revised emission limitations.

### **THE TIMELINE FOR INSTALLATION OF CONTROLS IS NOT ACHIEVEABLE**

The MACT deadlines for installation of controls are hard deadlines of three years with an option for one year extension. The current EPA timeline for installation of controls to meet MACT would be by 2014 or 2015. It will be nearly impossible for all affected utilities to install controls in the timeline due to the fact that time is needed for design, permit, construct and start up of retrofit controls. Utilities will be getting bids from a limited number of vendors who have limited skilled labor to take on such projects. Rural Electric Cooperatives are small utilities that have smaller and fewer units than do the for-profit companies that may be retrofitting a multitude of units. In past rulemakings, cooperatives have experienced vendors choosing not to bid our projects due to the fact they are smaller projects, and the vendors can focus on larger companies with multiple unit needs. More time will be needed to comply with any new standards.

### **BENEFITS OF THE UTILITY MACT PROPOSED RULE**

The EPA has portrayed that the benefits of the Utility MACT as a standard which will dramatically outweigh the costs that they (under) predict for the proposed rule. The EPA has estimated the public health benefits of the proposed Utility MACT in the range of \$53 – 140 billion dollars. The EPA has also estimated that the costs to society to implement the Utility MACT in 2016 will be approximately \$10.9 billion dollars. However, it has also stated that over 90% of the benefits of the proposed rule will be attributable to the emission reductions that will

be achieved as co-benefits of the proposed rules implementation. The proposed rule that was signed by the EPA administrator states that the benefits could range between \$450,000 to \$6 million dollars. The EPA's Regulatory Impact Analysis (RIA) has presented the actual benefits of the proposed rule attributable to mercury will fall in the range of \$5,000 - \$6 million dollars. The EPA also has portrayed that the Agency cannot monetize the benefits of the non-mercury HAP emissions from coal fired electric generating units. An economic benefit of \$53 - \$140 billion dollars is a significant economic benefit and not one that can easily be dismissed, but it is inappropriate for the EPA to pursue the public health benefit that the emission reductions from PM2.5 under the auspices of §112 of the Clean Air Act. It would be much more cost effective for the EPA to seek these emission reductions under the premise of the NAAQS compliance other CAA mechanisms. Compliance costs for the implementation of regulations are typically considered on a cost effectiveness basis or on a dollar per ton of emissions reduced basis. In a comparable air quality program, BACT or Best Available Control Technology assessments for new and modified sources, utilities typically see cost effectiveness assessments in the \$5,000 to \$15,000 dollar per ton of emission reduced. In the Utility MACT, we see the cost effectiveness calculation at approximately \$162,000 per ton of emissions reduced for mercury and acid gases.

## **CLEAN AIR TRANSPORT RULE**

The CATR is proposed by the EPA to address air quality in eastern states to achieving compliance with the National Ambient Air quality Standards (NAAQS) due to the transport of pollutants into those areas. Tri-State does not have existing operations on the CATR states, but, has been monitoring the development of the rule and provided comments to EPA on the allocation methodologies since it is likely that a final rule will be used as a precedent for any future rules with allocation programs.

EPA has significant discretion to select allocation methodologies that are reasonable and consistent with the goals of the CAA. It appears that the allocation options proposed by the EPA do not function to distribute allowances in a reasonable, sensible or equitable manner.

It appears that natural gas combined cycle (CC) and turbine units receive more allocations than they can use in all the CATR allocation options, and that in general coal units do not get enough allocations to operate with controls in place. Tri-State has concerns with an allocation option that greatly favors one fuel source over another.

## **CONCLUSION**

Thank you for the opportunity to testify before you today on this important issue that we are facing. Tri-State supports good environmental regulations, but, firmly believes that the MACT rule goes beyond EPA authority and over-regulates coal fired power plants. Existing Tri-State stations generally meet the mercury emission limits in the MACT rule through co-benefits of existing controls. We believe that the proposed rules for the Utility MACT are not reasonable, are not based on sound practices of data quality and are not readily achievable using generally available emission control technologies, especially for new units. The MACT rule will result in adding additional controls at Tri-State facilities to meet particulate matter and metals limits

which are non-mercury HAPS. The EPA should not regulate non-mercury HAPS until a study and determination is made that a public health threat exists.