

Commissioner Jeff Davis  
Missouri Public Service Commission  
Committee on Energy and Commerce  
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Subcommittee on Energy and Power

Chairman Whitfield and members of the committee:

Thank you for allowing me the opportunity to appear before this subcommittee. I have to preface my remarks by saying that I am here appearing on my own behalf and that my comments are solely my opinions and should not be attributed to any other group I may be affiliated with.

As a commissioner of the Missouri Public Service Commission and as President of the Regional State Committee for the Southwest Power Pool, I am acutely aware of the potential impacts of the pending regulations currently being promulgated by the Environmental Protection Agency. Further, I appreciate and applaud this committee's review of the impacts those regulations will have on our citizens, our states and our nation's economy.

Essentially, we've been invited here today to answer two questions regarding the EPA's new and proposed power sector regulations:

- (1) Can we keep the lights on?
- (2) How will these regulations impact utility ratepayers, commerce and industry?

The answer to the first question is simple: Yes, we'll do whatever it takes to keep the lights on.

That being said, it won't be easy and more people will be unable to pay the costs to keep their lights on without outside assistance. Nobody knew there was a problem in Arizona, Southern California and Baja under the current system until 1.5 million Americans were left in the dark less than a week ago and reliability is definitely going to be impacted.

The answer to the second question is more complex, but two points need to be made here:

- (1) Less generation equals less reliability; and
- (2) Replacing these coal-fired plants with a new type of generation will create a whole new set of problems and risks.

Right now, we've got better than 20% reserve margins in both the SPP and MISO footprint. The cumulative effect of these regulations will be to significantly reduce those reserve margins over the next decade by forcing the closure of almost every coal unit in the country that's below 300 MW of capacity as well as a significant number of units having between 300 – 500 MW of capacity. There have been more than a half dozen studies done on the issue and each one estimates the cumulative effect to be a loss of anywhere between 10 and 70 GW of coal-fired generation.

You also have to keep in mind that these are baseload plants – units that run more than 1,500 hours a year. Replacing them with renewables creates more of a reliability problem and replacing them with gas will undoubtedly lead us back to the affordability crisis we've faced two or three times in the last decade. As one creates greater demand for natural gas to be used to support the production of electricity, this increased demand will result in higher costs for natural gas to be used to heat our homes and businesses. This increased natural demand will increase the costs for domestic manufacturing processes. Such costs increases should not be incurred until other alternative approaches have been fully examined to explore options that could avoid these costs increases.

There are also risks from a transmission perspective. By forcing the closure of a coal plant or small cluster of coal plants, these regulations are going to create some pockets on the grid that have an increased risk of reliability issues because the grid was designed and built on

the premise that those plants are going to be there providing voltage support to satisfy local load requirements in respective systems throughout the country. I haven't taken the time to start plotting out where these plants are on the map, but you can rest assured that the absence of those plants will change the flow of power on the grid and create reliability issues in some of those areas.

I want to leave you with one final story on this issue that's close to home for me. In late January 2009, a massive ice storm swept through the Central United States and the Southeast destroying miles of high voltage transmission lines that many of our utilities depend on to serve their customers. A number of municipal utilities like Malden, Missouri, and Piggott, Arkansas, were able to quickly restore power using their old backup diesel generators. There are hundreds of these units throughout the Midwest, a lot of them date back to the World War II era and in times of emergency like that ice storm or on peak days when the system's congested those generators have proven to be an invaluable resource. Now, one rule – the Hazardous Air Pollutant Rule for Compression Ignition Reciprocating Internal Combustion Engines (HAPS CI RICE) is forcing us to mothball all of those plants because they're cutting off the funds used to maintain and repair the units because they don't have SCR or the necessary run-time to qualify.

Turning to the actual effect of these EPA regulations themselves, I can tell you that if all of these regulations come to pass they are going to have a devastating effect on Missouri's economy and our people.

Missouri has approximately 50 coal plants, totaling almost 13,000 MW of capacity. More than 80% of the electricity actually consumed in Missouri comes from coal. I need those plants to serve our native load, so we're married to coal for the next half century or longer whether you like it or not.

More importantly, the stable supply of energy supplied by those plants combined with sharp-penciled regulation has produced some of the lowest electric rates in the country. Those rates and the reliability of those plants have attracted a number of manufacturers to Missouri over the years and now those jobs are being threatened by rising rates.

Fitch has estimated electric rates are going to rise 3-5% annually while wages are going to remain stagnate. Missouri will be especially hard hit because we burn a higher percentage of coal than most other states. Those costs will significantly increase the burden on residential, commercial and industrial customers alike for three reasons:

- (1) You've got the cost of the physical equipment you have to install, the installation itself and the lost productivity from the plant during installation;
- (2) From an operational standpoint, EPA doesn't give utilities enough collective time to design the necessary plant changes, build the necessary infrastructure and implement all the new required changes from an operational standpoint without incurring tens or even hundreds of millions of dollars of additional costs on a per unit basis; and
- (3) The rules being promulgated by EPA are analyzed only on the basis of the effect that single rule will have and not their cumulative effect. When implementing those rules, utilities and manufacturers have to cope with more than a dozen major rules in the aggregate – including a few that conflict with one another.

For example, scrubbers used to remove particulates and gases cost anywhere between \$250 - \$300 million per unit. In the most recent major rate case to come before the Missouri commission, we determined that the prudently incurred costs associated with adding scrubbers to a single plant – ONE plant to meet ONE regulation on ONE pollutant – was \$528.1 million.

When you figure a 10% return on investment equity, gross that number up for taxes and amortize the costs to ratepayers out over 30 years, it's ultimately going to cost the utility's ratepayers about \$1 billion. If you assume the company has 1.2 million customers and divide those costs out on a per customer basis, you're looking at almost \$1,000 per customer over the next 30 years. Adding these costs to small business in today's uncertain economy can have devastating impacts. Just the fear of these costs impacts business negatively as current decisions are being made regarding a future uncertain time period when costs of doing business can be significantly higher. This uncertainty threatens to make current business decisions inappropriate in the future depending on which cost scenario materializes.

To give you a little more perspective on that number, Missouri has almost 600,000 households – almost 1.5 million people – that don't make \$25,000 a year as a household. They're having a hard enough time paying their bills already. They can't afford anything else.

In Missouri, there have already been an estimated 26 heat-related deaths this year. 18 deaths are still pending a final determination. In some cases, there was evidence that the customers actually had functioning air conditioners, they just weren't using them because in all likelihood they were afraid they couldn't pay the bills as they needed their money to pay for food and shelter. These EPA rules aren't going to be able to help customers who share that dilemma.

If time permits, I'd like to share two more examples:

First, another Missouri utility installed SCR at a plant that was originally estimated to cost \$270 million. By the time it was installed, their final cost ballooned to more than \$420 million due to the overtime they had to pay for a compressed work schedule and it being a seller's market in that they were out there competing with every other coal-burning utility in the United States for engineering and construction resources. You couldn't get fixed price contracts,

liquidated damages clauses or many of the standard consumer protections because the engineering firms would just say “we’ll go work for somebody else.” I was told that in at least one case the work was even outsourced by the U.S. firm to a foreign company.

Second, EPA has issued two different sets of draft rules to regulate coal ash – known as Coal Combustion Residuals. One EPA rule would classify this as hazardous waste. Another classifies it as a special waste. This coal ash is currently used as a filler in concrete that builds everything from roads to buildings. If it is classified as a hazardous waste, as one rule holds, it could no longer be used for this purpose, thereby eliminating a \$2 billion industry in the U.S. If it is classified as a special waste, more costly storage processes would be required.

While those two rules conflict, EPA has drafted another rule – the Electric Generating Unit Maximum Allowable Control Technology (EGU MACT or Mercury Rule) in which EPA selected dry sorbent injection technology for mercury. Yes, this method controls mercury emissions. However, using this technology renders the ash unusable for a concrete additive because it increases the sodium level beyond that allowed by the cement industry’s standards for cement.

The cost of EPA regulations, in terms of direct costs to ratepayers, as well as the cost of attempting to comply with these rules under accelerated timelines, will exact a dear price paid by everyone in this country who uses electricity. Rates are going to rise, more people aren’t going to be able to pay their bills, more jobs are going to move overseas and U.S. manufacturers are going to be further disadvantaged.

The timing of the implementation of any such EPA regulations should consider the time required to allow the US to develop the industry needed to support the construction, operation, and maintenance of related facilities here in America. Without consideration of this objective, a

significant portion of these EPA regulation expenditures will go overseas and result in the loss of the opportunity to create these jobs here in the US.

Six days ago, the president of this nation stood before this Congress and said these words:

“We should have no more regulation than the health, safety and security of the American people require. Every rule should meet that common sense test.”

I commend the chairman and the subcommittee for holding this inquiry and I would encourage you to hold EPA accountable for their actions and to make sure their rules do, indeed, meet the “common sense test” to which the President referred. Again, I thank the committee and the chairman for the privilege of testifying before you today. I’m happy to answer any questions.