BEFORE THE
UNITED STATES SENATE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

TESTIMONY OF THE HONORABLE ROBERT K. SAHR
CHAIRMAN, SOUTH DAKOTA PUBLIC UTILITIES COMMISSION
ON BEHALF OF THE
NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS

ON

"Outlook for Growth of Coal-Fired Electric Generation and Coal Supply"

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Good Morning Mr. Chairman and Members of the Committee.

I am Robert K. Sahr, Chairman of the South Dakota Public Utilities Commission (PUC). I am testifying today on behalf of the National Association of Regulatory Utility Commissioners (NARUC) and the South Dakota PUC. I very much appreciate the opportunity to appear before you this morning.

NARUC is a quasi-governmental, non-profit organization founded in 1889. Its membership includes the State public utility commissions serving all States and territories. NARUC's mission is to serve the public interest by improving the quality and effectiveness of public utility regulation. NARUC's members regulate the retail rates and services of electric, gas, water, and telephone utilities. We are obligated under the laws of our respective States to ensure the establishment and maintenance of such utility services as may be required by the public convenience and necessity and to ensure that such services are provided under rates and subject to terms and conditions of service that are just, reasonable, and non-discriminatory.

I. Overview of Issue

Today, I appear before you with the interests of tens of millions of electricity consumers and ratepayers in mind. Consumers who may not know that their rates will rise significantly or that their region's coal plants are distressingly close to "going black" if an interruption occurs due to weather, accident or attack.

At a time when we are looking to become more energy efficient and less reliant on unstable sources of energy, it is a travesty that our nation's coal plants stand ready to generate low cost, reliable electricity but cannot due to supply issues. Instead, many of these plants have been forced to operate at less than full efficiency, leading to higher electricity costs and unnecessarily putting the energy security of our country at risk.

Today and into the future, coal is expected to fuel the majority of electric generation in the United States. However, we are currently facing a situation with the supply of America's most abundant fossil fuel that needs to be fully addressed. The problem is not with the availability and supply for purchase of the commodity from the mining operations. Instead, the issue concerns the reliable, efficient and economic transportation of the commodity to the consumers who have already purchased the coal at the mine mouth from coal fields, in the Powder River Basin (PRB) in Wyoming and Montana, in particular. In short, the consumers cannot get reliable delivery service at reasonable rates from the nation's rail carriers to meet the electric generation needs of our economy.

II. Rail Carrier Deregulation

The nation's railroads are exempt from most provisions of the nation's antitrust laws. For most of the 20th century, the railroads of the nation were subject to extensive regulation by the Interstate Commerce Commission (ICC). Prior approval by the ICC was required for almost all railroad actions. Due to this extensive regulation, the railroads were granted exemptions from most provisions of the nation's antitrust laws. The Staggers Rail Act of 1980 deregulated competitive rail traffic and directed the ICC (now superseded by the Surface Transportation

Board (STB or Board) of the Department of Transportation) to ensure that the railroads did not abuse their monopoly power over "captive" rail customers, particularly with respect to rates.

Today, more than 25 years after passage of the Staggers Rail Act, the major railroad industry participants have consolidated from more than 40 companies in 1980 to four major railroad companies that move over 90 percent of the nation's traffic. The consolidation of the rail industry has resulted in two major railroads serving the western United States, the Burlington Northern Santa Fe and the Union Pacific, and two major railroads serving the eastern United States, the CSX and the Norfolk Southern. No more than two major railroads transport coal from the coal suppliers in any of the nation's coal fields and generally only one major railroad and perhaps a short line railroad tied to that major railroad serves any of the nation's electric generating units. Thus, a majority of the coal used for electric generation is transported to electric utilities under non-competitive conditions, which often results in extremely high rates and poor service.

III. Gas vs. Coal-Generated Electricity

Recently, the nation has experienced record high prices for natural gas, which has dramatically increased the cost of both natural gas and electricity service to the millions of business and residential customers in this country. Currently, the fuel cost component of producing electricity at gas-fired power plants can be as much as five times higher than the fuel component of producing electricity at a coal-fired power plant. As a prudent business practice, one would expect that, given existing gas prices, electricity producers would be seeking to utilize

existing coal-fired electric generation as much as possible in lieu of gas-fired generation in order to produce electricity more economically and to avoid upward pressure on natural gas prices.

Most coal-fired electric generating plants in the United States are not located at the mine mouth and, thus, are dependent on reliable rail delivery and sufficient capacity to carry coal supplies from the PRB in Montana and Wyoming, the Illinois Basin, the Appalachian region and other major coal regions to meet the nation's electricity needs. However, as explained, at best, only two railroad companies are available to ship coal out of any of these regions and many customers are captive to a single carrier at destination. Unfortunately, in the last year or so, electric generating facilities have experienced unreliable coal deliveries, particularly from the PRB.

A. Reduction of Coal Deliveries

At our February meeting in Washington, D.C., the members of NARUC focused a good deal of attention on the coal delivery problem. We found that utilities in many States, particularly those powered by PRB coal, had experienced in 2005, reduced coal deliveries under firm contracts by 10 to 25 percent, thereby dramatically reducing the amount of coal inventory available for current and future electricity production. We understand that many utilities expect similar short falls in 2006. These reduced coal shipments resulted in coal conservation programs, under which utilities reduced the operation of their coal plants to conserve their coal resources. These utilities were forced to substitute much higher priced gas-fired production or market purchases of gas-fired generation to make up the difference. The higher costs of substitute gas-fired electricity has resulted in significant rate increases to customers of rural electric

cooperatives, public power authorities, and investor-owned utilities all across the country, totaling hundreds of millions and even billions of dollars, and have placed upward pressure on natural gas market prices.

IV. NARUC Resolution

On the basis of these findings, NARUC adopted in February a resolution calling on Congress to enact legislation that will improve the oversight of the railroad industry by the STB and legislation that will remove the current railroad industry exemptions from the nation's antitrust laws. In addition, the NARUC resolution calls on Congress to ensure that the STB has the necessary authority to oversee railroad service problems, as well as rate problems, to include the development of mandatory railroad reliability standards similar to those this committee included in the Energy Policy Act of 2005. As State public service commissioners, we recognize that the railroad industry provides essential services to the nation, is highly concentrated and should be subject to supervision by a federal agency as to reliability of service and rail capacity. A copy of our resolution is attached to this testimony.

V. South Dakota: One State's Story

Back in my home state of South Dakota, we are seeing firsthand the effects of this coal supply crisis:

- Power plants operating at less than ideal capacity due to supply problems;
- Plant operators purchasing more expensive replacement power;
- Utilities paying more for electricity;
- Consumers ultimately bearing these higher costs;

- Adverse economic and social impacts of higher electricity prices; and
- Energy security and public safety of the region put at risk.

While these points illustrate a dire situation, the good news is that we can readily define the root of the problem (supply), and this gives us the opportunity to take the steps necessary to solve it.

Two major electric power producers in my region, the 460-megawatt Big Stone Power Plant near Milbank, South Dakota, and Laramie River Station in Wyoming with its three coal-based units, each with 550 megawatts, rely on coal delivered by rail from the PRB. These plants furnish electricity to a wide variety of utility sectors including investor-owned companies, rural electric cooperatives and municipal utilities. Representatives of these energy suppliers recently participated in a forum hosted by the South Dakota Public Utilities Commission to describe the scope of this problem. At this forum, my fellow commissioners and I heard, in staggering detail, how these vital electric producers servicing our region have been hit hard by poor rail service, which has substantially hindered efficient plant operations and produced dramatic and unexpected price increases. This problem is producing a ripple effect in our local and regional economies that we are just beginning to experience. It will grow wider and affect more people and businesses if it remains unchanged.

A. Depletion of Coal Stockpiles

Because the power plants are not receiving their demand for coal for normal operations, they have been forced to dip into their coal stockpiles. The stockpiles have grown perilously sparse as the railroads' performance has continued to lag and the railroads have failed to replenish the stockpiles with new coal deliveries. In March, the Big Stone Power Plant stockpile

dwindled to a 10-day supply while the plant waited for their rail service provider to deliver the needed coal. Some of the coal at the bottom of the stockpile has been stored on open ground, exposed to the elements for 20 years in some cases, and can only be used as a last resort. According to Basin Electric Power Cooperative, a co-owner of Laramie River Station, using this coal also brings other issues of concern. The coal at the bottom of the Laramie River Station stockpile has significantly reduced BTU value and includes rocks that are being run through the plant's turbines. Plant staff members are now cleaning the pulverizers on a daily basis, where in normal operation it is done every two to three weeks.

B. Security Concerns

Besides the problems I have just described, the depletion of this stand-by coal supply creates significant operational concerns. Given the critical shortage of coal being experienced at these plants, and the fact that these are large plants designed to meet the baseload needs of the public, any weather, operational, rail accident, terrorism, or other incident could further compromise the ability of these electricity providers to meet the public demand, the effect of which could be crippling for our state and region. Just imagine the havoc that would be caused by the loss of one of these coal plants that supplies such an important source of electricity for the upper Midwest.

C. Conservation Measures

Even if future coal shipments match daily burn requirements, replenishing the coal reserves at the plants is taking an extended period of time. As a result, these electricity providers have had to develop or implement conservation measures to preserve and rebuild their diminished stockpiles.

In early April, due to the carriers' continuing service failures, the Big Stone Power Plant was forced to reduce its generation output to 45 percent of normal levels. When the stockpile is replenished, it is anticipated that plant output levels will only be allowed to increase to approximately 85 percent of the historic levels experienced in 2004-2005 and still maintain the stockpile.

D. Market-Purchased Electricity

Curtailments such as this force the plant to purchase replacement energy on the open market at a significant cost to customers. For example, the Big Stone plant co-owners have explained they are purchasing power on the open market at $20 a megawatt hour higher than they can produce the power. The co-owners estimate their retail customers are paying an additional $3 million per month for this more expensive replacement electricity. Because the retail utility customers have rate adjustment clauses, these higher costs are being passed on to their residential, business and industrial customers who are seeing electric bills 5 to 10 percent higher than normal as a result. As we enter the summer season – a time of peak energy use – our concern for our rate payers is great as the open market cost of electricity is expected to climb.

F. Captive Shipper Costs

Replacement electricity is not the only additional cost power producers are managing. Besides receiving poor service, as captive shippers, these companies are facing exorbitant rail fees. Otter Tail Power Company, a co-owner of the Big Stone plant, reported a 38 percent increase in freight rates at their Big Stone Plant in just one year. An analysis by Basin showed

they are paying rates approaching and above 500 percent of the railway's actual costs to transport coal to their Laramie River Station. Their rates have been more than doubled by their railroad service provider. If Basin's rail transportation costs continue to rise as projected, it will have a $7.7 million annual impact on their South Dakota rate payers.

The co-owners of both plants, Big Stone and Laramie River Station, have filed rate cases with the STB, a process that is both lengthy and costly. Otter Tail Power Company filed its case in 2002. Nearly four years later, it was dismissed by the STB. Otter Tail is appealing the decision, which is expected to take 18 months. The Laramie River Station rate case was filed in October 2004. Basin Electric Power Cooperative reports that $5 million has been spent on the case to-date and that the STB put the case on hold in February. The STB decision is now expected in 2007, a delay that will cost the company $500,000 to $1 million. In the meantime, the plant will continue to pay the higher rail transportation rates imposed by their carrier during the continuing pendency of their rate cases.

South Dakota is not alone in this situation. It is a crisis that has been building over the past several years that is reaching critical mass. Something must be done to put more railcars on the tracks to deliver the needed coal supplies to our power producers in a reasonable timeframe and at a reasonable cost. Rate payers throughout the nation deserve a reliable supply of energy and should not be held in jeopardy because of a monopoly or duopoly situation that has been allowed to be created in the rail shipment industry. They also should not be placed in a situation of incurring higher energy costs by being forced to use alternate fuel supplies or more expensive purchased power to meet demand.

G. Safety and Economic Threats

The threat this coal shortage poses to health, safety and economic viability is sobering. Until the shortage is resolved, there is no assurance for consumers that they will be able to affordably keep cool in the hot summers and warm during the frigid winters. Those most vulnerable to heat and cold are many times those who are on limited incomes. Higher energy rates put them at greater risk of not being able to pay their bills. They should not have to choose between keeping warm, cool or if they will eat.

Further, this shortage threatens economic development throughout my state and region as well. When a power plant goes into curtailment mode, their retail customers may need to impose drastic conservation measures. Industrial customers, for example, may not be able to meet contractual agreements and may be forced to pay penalties to their customers. In addition, when these plants purchase electricity, such as that generated by natural gas, on the open market, it drives up the cost of natural gas for all purchasers of that product.

H. Stopgap Efforts

The statements I have made thus far paint a dark picture. Therefore, I want to impress upon the committee that the power producers are taking steps within their control to alleviate the situation, but these adjustments are proving to be temporary fixes only. For example, the Big Stone plant arranged to commit to receiving trains of Montana coal. While this effort has allowed the plant to build back its stockpile to a normal 30-day level, it has come at a cost. The Montana coal has higher sulfur content than PRB coal. The additional sulfur dioxide allowances that are

required with the fuel make this option prohibitively expensive for the plant. In addition, Big Stone has fixed quantity contracts in place with two PRB mines and taking the Montana coal put the Big Stone co-owners at risk for not meeting contractual obligations. They are required to pay for the contracted tons of coal during the year, whether they are delivered or not. The plant also negotiated with their rail shipper to provide a temporary, third train set to deliver coal from the PRB. This, too, helped to build up the stockpile.

IV. Conclusion

In conclusion, NARUC believes that this problem could be alleviated, first through more effective regulatory leadership by the STB. The STB can do this by establishing reasonable rates on market dominant rail traffic where rate challenges have been brought and by establishing programs to ensure that customer demand is adequately met by the railroads.

Legislative and regulatory reform at the federal level are also necessary to help ensure more reliable rail service, improved railroad operations and dedicated capacity improvements, more rail carrier options for shippers, and more equitable rates for affected rail shippers. Congress should address and resolve these issues by enacting legislation which would empower the STB to develop and enforce quality of service standards, implement a more equitable rate-setting process, interpret the existing deregulation law to promote competition, ensure reasonable rates in a competitive market, and remove the remaining railroad industry exemptions from the federal antitrust laws. This legislation could create mandatory reliability standards for the nation's railroad system, enforced by the STB, along with rate reform. This would help ensure just and reasonable rates, particularly in the absence of competition, since this nation is no less

dependent on a reliable and reasonably-priced rail system than we are on a reliable and reasonably-priced electric transmission system.

Because of the critical importance of these coal plants to our consumers, economy and energy security, we must act quickly.

Thank you, Mr. Chairman, for inviting me to participate in this hearing to address one of this nation's most pressing energy issues. I greatly appreciate your attention, Mr. Chairman, and the attention of the committee members present today. I will be happy to answer any questions you may have.

N A R U C

National Association of Regulatory Utility Commissioners

Resolution Urging Legal and Regulatory Reform to Improve Railroad Shipper Rates and Quality of Service

WHEREAS, The Staggers Rail Act of 1980 provided for the deregulation of competitive rail traffic and directed the Interstate Commerce Commission (now superseded by the Surface Transportation Board under the Department of Transportation) to continue to maintain reasonable rates where there is an absence of effective competition for rail traffic within the Board's jurisdiction; *and*

WHEREAS, Today, 25 years after passage of the Staggers Rail Act, over half of the electric energy in the United States is generated using coal, the majority of which is transported to electric utilities under non-competitive conditions, by no more than two railroad companies serving any coal region, which charge unjustifiably high monopoly prices for unreliable service, even though they are presumably subject to regulatory supervision by the Surface Transportation Board; *and*

WHEREAS, This body, the National Association of Regulatory Utility Commissioners (NARUC), passed a resolution in March of 1984, almost 22 years ago, voicing similar concerns about the lack of appropriate regulatory standards and alternatively the lack of competitive market conditions within the rail industry; *and*

WHEREAS, Today, 20 years after the last NARUC resolution on this issue, the railroad industry has consolidated to such a great extent that there are only 4 Class I railroads providing over 90% of the nation’s rail transportation; *and*

WHEREAS, Today, in 2006, the nation is experiencing record high prices for natural gas, which has dramatically increased the cost of both natural gas and electricity service to the millions of business and residential customers in this country; *and*

WHEREAS, The cost of producing electricity with a gas-fired plant is several times higher than the cost of producing electricity with a coal-fired plant; *and*

WHEREAS, This economic statistic means that existing coal-fired electric generation should be used as much as possible in lieu of gas-fired generation in order to produce electricity more economically and to avoid upward pressure on natural gas prices; *and*

WHEREAS, Coal plants in the United States are dependent on reliable rail delivery and sufficient capacity to carry coal supplies coming out of the Powder River Basin in Montana and

Wyoming, the Illinois Basin and the Appalachian region, yet only two railroad companies are available to ship coal out of any of these regions; *and*

WHEREAS, The 4 Class I railroads have had significant reliability and capacity problems and have reduced their coal deliveries to firm contract customers in numerous States by 10 - 25%, thereby dramatically reducing the amount of coal inventory available for current and future electricity production; *and*

WHEREAS, These reduced coal shipments have resulted in a substantially diminished ability of many electric utilities to rely on lower-cost electricity production from their existing coal plants, thereby necessitating the substitution of much higher priced gas-fired production or market purchases of gas-fired generation to make up the difference; *and*

WHEREAS, These higher costs of substitute gas-fired electricity have resulted in significant rate increases to customers of rural electric cooperatives, public power authorities, and investor-owned utilities all across the country, totaling billions of dollars, and have placed upwards pressure on natural gas market prices; *and*

WHEREAS, These billions of dollars in higher energy bills have contributed to a higher manufactured product cost for many industries, lower net business earnings, less disposable household income, and diminished economic productivity across the country; *and*

WHEREAS, This problem could be alleviated through legislative and regulatory reform at the federal level that would ensure more reliable rail service, more railroad capacity, more rail carrier options for shippers, and more equitable rates for affected rail shippers; *now therefore be it*

RESOLVED, That the Board of Directors of the National Association of Regulatory Utility Commissioners (NARUC), convened in its February 2006 Winter Meetings in Washington, D.C., urges Congress to immediately address and resolve these issues by enacting legislation which would empower the Surface Transportation Board to develop and enforce quality of service standards and implement a more equitable rate-setting process, and to interpret the existing deregulation law to promote competition as well as to ensure reasonable rates in a competitive market, and to also remove the railroad industry's exemption from the federal antitrust laws; *and be it further*

RESOLVED, That NARUC urges the development of specific federal legislation that would create mandatory reliability standards for the nation's railroad system, enforced by the Surface Transportation Board, along with rate reform to ensure just and reasonable rates, particularly in the absence of true competition, since this nation is no less dependent on a reliable and reasonably-priced rail system than we are on a reliable and reasonably-priced electric transmission system; *and be it further*

RESOLVED, That NARUC calls upon the members of the Surface Transportation Board to exercise their existing regulatory authority to protect rail customers and consumers in this country, and to support Congressional efforts to pass the additional legislation necessary to

ensure reliable rail service at just and reasonable rates, and enhance additional competition within the rail industry.

Sponsored by the Committee on Electricity
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