

**Statement of**

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**Discussions with Utility and Railroad Representatives on**

**Market and Reliability Matters**

**Docket No. AD06-8 -000**

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Good afternoon Chairman Kelliher, Commissioner Kelly and Commissioner Brownell. I am Alan Richardson, President and CEO of the American Public Power Association (APPA). The APPA is pleased that FERC has decided to hold this meeting today in response to a request we made along with the National Rural Electric Cooperative Association (NRECA), the Edison Electric Institute (EEI) and the Electric Power Supply Association (EPSA), for a workshop on railroad coal delivery challenges and their impacts on markets and to electric reliability. We are hopeful that this discussion with utility and railroad representatives on these matters will bring more light to an issue of concern to all of us.

APPA is the national service organization representing the interests of the nation's more than 2,000 state and community-owned electric utilities collectively serving over 43 million Americans. APPA member utilities include state public power agencies and municipal electric utilities that serve some of the nation's largest cities. However, the vast majority of these publicly owned electric utilities serve small and medium-sized communities in 49 states, all but Hawaii. Almost 30 percent of the generating capacity owned by public power systems is coal-fired, representing 29,175 MW of total capacity.

Over the past year, many APPA member systems that rely on coal-fired generation have faced increased problems maintaining adequate coal stockpiles and, in some cases, have experienced extremely low coal reserves. Additional problems relating to coal shipping issues, including dramatic price increases for transportation during contract renewals, the elimination of long term service contracts, and unpredictable rail service reductions and

disruptions have also grown. As mentioned later in my comments, we realize that many of these are issues that fall outside of FERC's jurisdiction and will have to be remedied legislatively or through other regulatory action. However, they are important to note in order to place the issue in context. While we realize that these are issues for another forum, they are important to note in order to place the issue in context.

These issues are not unique to APPA's members with coal-fired generation. Roughly half of the total electricity generated in the U.S. is generated using coal and most coal-fired generators that rely on railroad transportation have encountered the same problems. Most coal-fired electric generation plants in the United States are not located at the mine mouth and therefore require the shipment of coal from the mine to the generator. While some coal is also transported by barge or truck, the vast majority is carried by rail. Due to massive consolidation in the rail industry, in many cases utilities are dependent on a single railroad to transport the coal the entire distance from the mine to the plant, resulting in a monopolistic situation where the utility is captive to being served by that railroad and is essentially at their mercy with no access to competition. These "captive shippers" oftentimes pay exorbitant rates for the only viable means of transporting the coal they require.

If problems with coal deliveries and stockpile levels such as those I will describe in this statement continue, or recur, and regular, reliable access to a sufficient amount of coal is not available, utilities will be forced to purchase higher cost power on the spot market, operate higher-cost, less efficient generation or make longer-term decisions that could

increase costs and reduce reliability unnecessarily. Additionally, if coal plants that are able and available to generate low cost, reliable electricity are not able to operate at full efficiency due to coal supply problems, this will place additional upward pressure on natural gas prices. Further, generation curtailments could affect electric reliability by reducing the number of generation units available to support the electric grid. If stockpile shortages occur or recur at large, base load plants, any potential rail accident or line disruption, act of terrorism, severe weather condition or other unanticipated event could cripple the ability of these plants to meet their load and have adverse effects – economic and otherwise – on the regions they serve. These concerns are shared by APPA, EEI, NRECA and EPSA and our members and prompted us to suggest this workshop.

In the Energy Policy Act of 2005, Congress placed great emphasis on reliability, ordering the nation's electric industry to adhere to new mandatory reliability requirements. This dependence on regulation to ensure utility reliability was enacted even though national policy has been moving the industry toward deregulation. The same approach should be taken in this situation. Reliable rail coal delivery is essential to the ability of utilities to provide a reliable supply of cost-effective electricity. APPA does not believe the issue of low coal stockpiles and their potential effect on reliability and markets is receiving sufficient, if any at all, attention from the Surface Transportation Board (STB). In fact, our industry along with a wide swath of other shippers including the chemical, timber, paper, cement, grain, and agriculture industries, feel that there are a number of other service, price and railroad performance issues that are not receiving adequate or fair and balanced attention from the STB as well. Due to the potential impacts on reliability and

energy markets, we felt it was appropriate to urge FERC to learn more about this situation.

Coinciding with a number of our members experiencing difficulties with coal shipments, significant increases in the cost of other fuels used for electricity generation, chiefly natural gas, have heightened the need to maintain coal as a viable, economic fuel option for electricity generation. Recent reports from our members of acute coal shortages at power plants around the nation are worrisome, especially since the summer months of peak electricity demand are right around the corner. Over the past six months, some coal-fired generation facilities have been dangerously close to the point of having to curtail generation operations to conserve their remaining supplies of coal. The effects such stockpile shortages and curtailments could have on electricity markets and reliability are of great concern.

During the spring of 2005, there were derailments on one of the Joint Lines connecting to the Powder River Basin (PRB) which did exacerbate the shortage of coal reserves at power plants served by that line and others. There is, however, debate on whether proper maintenance on this line may have helped to prevent the extensive damage caused by accumulated coal dust combined with adverse weather conditions.

The following examples of the impact of coal delivery problems on public power systems demonstrate that while utilities made improvements in attempts to facilitate coal deliveries, they received no guarantee that they would receive the coal needed to generate

the electricity required by the communities they are obligated to serve. The railroads did not appear to have an official curtailment policy to decide, during a major track outage, who would actually receive their coal shipments and who would not or for that matter, when utilities would be in receipt of the coal they needed. It is still unclear whether reductions were applied across the board or selectively – allowing the railroads to pick and choose to whom they would deliver the coal.

The railroads may also blame any coal stockpile shortage on a lack of capital to maintain and improve infrastructure. Seizing this opportunity, the major railroads are launching a legislative effort to obtain a 25% federal investment tax credit and first year expensing provision for investments in railroad infrastructure. While we agree that the infrastructure and capacity of our nation's rail system is in need of improvements and that a robust infrastructure is key in moving commodities around the nation, we strongly believe Congress should not issue a blank check in the form of an investment tax credit for railroad infrastructure. Any such tax credit must be coupled with a package of much needed reliability, accountability and policy reforms. Additionally, in order to guarantee some degree of accountability, there must be a level of regulatory oversight to ensure that these investment tax credits finance infrastructure improvements in areas where they are needed most – and not solely in those that are most profitable to the railroads.

### **Examples of the Impact on Public Power Systems**

I would now like to address some specific problems confronting APPA members. The Laramie River Station (LRS) is a coal-fired power plant located in Wyoming, 175 miles from the PRB that is jointly owned by four public power systems and two rural electric cooperatives. Approximately 8.3 million tons of coal per year is utilized to generate power for consumers in Nebraska, Iowa, Minnesota, Colorado, South Dakota, North Dakota, Wyoming and New Mexico served by LRS. LRS is served solely by the BNSF railroad. In an effort to aid the railroads in increasing the coal stockpile at their plants, the owners of LRS acquired a fourth train at a cost of upwards of \$8 million with no long-term guarantee that BNSF would schedule the additional train in a way that would improve the coal reserve pile at the plant. This fourth train was purchased in response to a decreased performance in turn-around times by BNSF from 37 hours to more than 50 hours as well as coal reserves dropping to dangerously low levels that necessitated the development of a plan to curtail plant operation at the plant.

At one point late this winter, coal stockpiles dropped to approximately a four day supply and plant owners were hours away from implementing a 20 percent curtailment in operation. Such a curtailment would have represented a loss of approximately 330 MW in the region for an unknown period of time and placed plant owners in the position of buying power in the highly volatile daily markets or operating more expensive peaking units. Another result of the BNSF's failure to deliver coal to LRS has been that plant owners have had to assume the cost of Powder River Basin spot coal which has tripled from \$5-\$7 per ton in 2005 to at or above \$20 per ton today, which was delivered via an additional leased train set.

In order to ameliorate problems with their coal deliveries, MEAG Power, the municipal joint action agency in Georgia, which owns portions of two coal-fired generation plants (Plant Scherer and Plant Wansley), has added, and paid for, sidings and additional rail cars and sets to improve their ability to receive coal. MEAG also made substantial capital investments to retrofit their plants to burn PRB coal to ensure compliance with environmental laws. MEAG Power is a captive customer of Norfolk Southern. Due to consistent unreliable service, over the past two years, MEAG Power has also had to curtail output and purchase higher cost replacement power.

With already low stockpiles due to service problems, the damage to the PRB line from flooding in the spring of 2005 left MEAG's Plant Scherer with a low of two days of coal supply at the end of September 2005. In order to ensure the necessary increase in their coal inventory levels to continue generation, MEAG Power began importing coal from Indonesia in January of 2006. Indonesian coal, having similar characteristics to PRB coal, was most suitable for use in MEAG's boilers. This situation is expected to continue through the end of the year and possibly longer if conditions do not improve. This additional tonnage has cost MEAG Power and its members \$5.1 million over what they would be paying if they could use PRB coal due to higher transportation and product costs. It is forecasted that MEAG Power's member communities and their customers have incurred approximately \$21 million in additional capital expenditures and \$28 million in increased operating costs as a result of these difficulties in securing reliable rail service.

CPS Energy of San Antonio, Texas serves almost 650,000 retail electric customers in and around the San Antonio area and also provides wholesale power to customers in the Electric Reliability Council of Texas (ERCOT) system. The Calveras Lake facility, located just east of San Antonio, accounts for more than half of their electric generation. CPS Energy contracts with Union Pacific for the delivery of this coal from the mine mouth to the plant. For the year 2005, CPS Energy had a 1.1 million ton shortfall in coal deliveries of their contracted coal from the PRB to the Calveras Lake facility. From May 15, 2005 through June 30, 2005, CPS Energy's Calveras Lake coal inventory dropped by more than 300,000 tons. In response to reduced coal deliveries, CPS Energy implemented a coal conservation program on July 1, 2005. This plan involved reduced power generation from coal-fired power plants primarily during off-peak hours.

In addition to their coal conservation program, CPS Energy initiated the purchase of 150,000 tons of supplemental coal from Columbia, South America. The supplemental coal is shipped to Corpus Christi, Texas, and is then trucked to San Antonio since Union Pacific has not accepted solicitations to provide rail service. The delivered price of the Columbian coal is nearly three times the delivered price of Southern PRB coal on an equivalent energy basis. Truck delivery rates from Corpus Christi are averaging less than 16,000 tons per month. Due to its air emission permit, CPS Energy can only use the Columbian coal at one of their three coal-fired power plants that is equipped with an emissions scrubber. CPS Energy will have required approximately 6,000 truck deliveries to complete movement of the overseas coal. The same volume movement by rail would

require less than 10 train trips assuming 16,000 tons per train. The volume of trucks added to the roads has raised local concerns about public safety and air pollution.

The problem with coal deliveries persists today. While it is encouraging that stockpiles at LRS are currently at target levels – 700,000 tons, enough for 30 days of continuous operation, those stockpiles have grown primarily due to a milder than predicted winter and a seven week scheduled maintenance outage of one of the three LRS units, thereby reducing daily coal demand by one-third. Without their recent scheduled maintenance outage, LRS estimates their current stockpile would be at 10 days. Even after CPS Energy began conserving coal and importing overseas coal, their usable coal inventory dropped to less than ten days of supply in the fall of 2005. By the end of 2005, CPS Energy's coal inventory slowly began to build.

Thus far in 2006, CPS Energy's rail service has improved, but coal deliveries are still below a reasonable comfort level. The improved deliveries combined with several maintenance outages on CPS Energy's coal-fired power plants this spring have allowed them to continue to rebuild their inventory. The overall financial impact to CPS Energy and its customers is still being evaluated, but is expected to be in the tens of millions of dollars. MEAG power, meanwhile, continues to import foreign coal and will have to continue some reduction of unit output since their unreliable rail service has continued.

Other public power systems have had to institute curtailments due to extreme delivery problems or plan for the summer peak season without any assurances that they will in

fact receive the amount of coal they are contracted for or of when it will actually be delivered. This is due not only to slower turn around times by the railroads and other service problems, but by the fact that there is no accountability for the actions of the railroads.

### **Future Implications**

The demand for coal in the utility sector will increase in the coming years. Several APPA members are moving forward with plans to develop new coal-fired base-load power plants. Collectively, they are or soon will be spending billions of dollars on new generation and they are concerned about the ability of the railroads to deliver the coal they will need over the next 30 to 50 years, especially considering the current shortfalls in deliveries for existing plants. For example, in 2010, CPS Energy will bring a 4<sup>th</sup> coal-fired unit online that will increase their annual coal requirements by over 50 percent, up to approximately 10 million tons per year. Based on past performance, CPS Energy is justifiably worried that the railroads may not be able to meet this demand and CPS Energy may therefore not be able to provide the electricity their customers need. The same is true for several other APPA systems in other states and regions.

Utility plans for new coal-fired generation and the need for reliable delivery of coal at these new plants cannot come as a surprise to the railroads. The railroad, coal mining and utility industries jointly participate in multi-industry groups that work together on the siting of coal generators. The railroads are privy to the generation development plans of

the electric utility community through these councils and through other means, including federal agency projections and reports, the general media and electric utility trade journals and publications

If railroads are not able to meet existing load demand for coal-fired generating plants that have been in service for years, my members are justifiably concerned about placing their faith in the ability of the railroads to deliver coal over to new plants in the future. Power plants must maintain inventory levels that support both ongoing operations and possible disruptions in fuel deliveries. In order to manage coal inventory levels and adequately plan the cycle of purchasing, scheduling and providing rail cars for this process, consistent, reliable delivery service from the railroads is essential.

For 2006, the demand for PRB coal is approximately 370 million tons. The railroads are forecasting estimated deliveries of 350 million tons. This potential 20 million ton shortfall would require 340 billion cubic feet of natural gas to supplant the coal-fired generation with natural gas generated power. At an estimated average natural gas price in 2006 of approximately \$7 per cubic foot, the cost of replacing this shortfall in coal delivery could be upwards of \$2 billion. Any future coal plants will be subject to the same lack of competition and captive service by a minimal number of rail lines. This may cause some utilities to reevaluate their long-term planning decisions for future electric generation construction.

As mentioned earlier in my comments, reliable rail coal delivery is essential to the ability of utilities to provide a reliable supply of cost-effective electricity. To this end, we urge FERC to take immediate steps to work with the STB and other agencies as appropriate to monitor the reliability of rail service and the adequacy of coal stockpiles.

### **Specific Recommendations**

APPA is very aware of the Commission's jurisdictional limitations. The Commission does not regulate the railroad industry and, indeed, the cause of our frustration and the essence of our concern stems from the belief that no one currently truly regulates the railroads or oversees the adequacy of the service they provide. However, based on the information provided to us, the inability of the railroads to ensure reliable delivery of coal to current and future coal-fired, base-load power plants is a very real challenge to the reliability of the nation's electric utility system. We believe this should be an issue of concern to the Commission and that there are certain actions the Commission should pursue.

The Energy Information Administration (EIA) publishes coal stock information each month in *Electric Power Monthly*. EIA's most recent publicly available figures, based on data from the end of March 2006 (see attachment) revealed lower stocks of sub-bituminous coal compared to a year ago. EIA also publishes stock data by region and state. The March 2006 report showed problems occurring in three census regions: West North Central, West South Central, and Mountain. 14 states had lower stock levels at

electric power facilities compared to the prior year: Nevada, Missouri, Oklahoma, Wyoming, Iowa, Colorado, Texas, Kansas, West Virginia, Wisconsin, New Jersey, Nebraska, Georgia and Minnesota. For these states, the year-to-year decline in coal stocks at electric power facilities ranged from approximately 2% to 42%. The average for all 14 states combined was 16%.

EIA collects the data from a sample of plants each month – from about 1,400 plants out of the 3,000 required to file the data on an annual basis. The information is collected by plant and is confidential on a plant-by-plant basis. However, EIA’s confidentiality policy, shown on the instructions to the form required for the data submission, states that the Federal Energy Administration Act authorizes EIA to provide company-specific data to other federal agencies when requested for official use.

We would therefore urge FERC to work with EIA to track coal stocks at specific power plants. With industry input, FERC could identify those coal-fired plants most critical to grid reliability, and track coal stocks on a monthly basis. Since EIA has the stock data much earlier than it is made available to the public, FERC could have close to real-time information on the status of coal stockpiles. Despite disclaimers, the railroads clearly have at least some control over coal deliveries and the size of on-site coal stocks, the simple act of tracking railroad coal delivery performance by FERC would likely have a positive effect on how the railroads conduct their business. We also encourage FERC to place a greater emphasis on coal stockpiles in their seasonal Energy Market Assessments.

If FERC tracks the status of coal stocks at critical coal-fired power plants across the country, it would then be able to determine the extent to which depleted stocks challenge overall grid reliability. If the Commission concludes that problems in the delivery of coal – for whatever reason – challenge the reliability of the grid or significantly effect costs of generation, it could then, under Federal Power Act Section 311, 16 U.S.C. § 825j, issue a report together with any recommendations for legislation to the Congress. Clearly, the Commission’s authority to under this section is quite broad. This section authorizes FERC to “conduct investigations regarding the generation, transmission, distribution and sale of electric energy, however produced.” Among other things, FERC is charged in this section with keeping “current information regarding the ownership, operation, management, and control of all facilities for such generation,” the “capacity and output thereof,” and the “cost of generation.” Finally, it can investigate “the relation of any or all such facts to the development of navigation, industry, commerce, and the national defense.”

On behalf of the APPA and all of our member utilities, we thank you for holding this important meeting today look forward to working with you in addressing these vital coal transportation issues affecting the electric utility industry and our nation’s electric markets and reliability.

## Coal Stocks at Electric Power Facilities

Source: Energy Information Administration, *Electric Power Monthly*, June 2006

**By State: States with a decline in stockpiles, Mar.-06 compared to Mar.-05**

Coal Stockpiles (thousands of Tons)			
	Mar-06	Mar-05	% Change
Nevada	473	816	-42.0%
Missouri	5,008	6,768	-26.0%
Oklahoma	2,207	2,940	-24.9%
Wyoming	1,424	1,808	-21.2%
Iowa	2,773	3,356	-17.4%
Colorado	2,048	2,427	-15.6%
Texas	7,209	8,481	-15.0%
Kansas	2,132	2,479	-14.0%
West Virginia	2,953	3,387	-12.8%
Wisconsin	3,102	3,522	-11.9%
New Jersey	505	558	-9.5%
Nebraska	2,326	2,509	-7.3%
Georgia	3,965	4,184	-5.2%
Minnesota	2,002	2,032	-1.5%
	38,127	45,267	-15.8%

## Coal Stocks at Electric Power Facilities

From EIA's June 2006, *Electric Power Monthly*

Coal Stockpiles (thousands of Tons)			
	Mar-06	Mar-05	% Change
<b>By Census Region</b>			
New England	W	708	W
Middle Atlantic	6,662	4,979	33.8%
East North Central	31,003	26,634	16.4%
West North Central	15,741	18,643	-15.6%
South Atlantic	19,997	18,226	9.7%
East South Central	11,798	9,465	24.6%
West South Central	13,532	14,563	-7.1%
Mountain	10,725	11,431	-6.2%
Pacific Contiguous	920	W	W
Pacific Noncontiguous	W	W	W
<b>U.S. Total</b>	<b>111,299</b>	<b>105,458</b>	<b>5.5%</b>

