



CLEAN AIR ACT RULES

CLIMATE CHANGE

**RESTRUCTURING OF THE
ELECTRICITY INDUSTRY**

**A SPECIAL REPORT
FOR**

**THE OFFICE OF
THE SECRETARY OF ENERGY**

Prepared by

THE NATIONAL COAL COUNCIL

October 1997



**CLEAN AIR ACT RULES; CLIMATE CHANGE;
RESTRUCTURING OF THE ELECTRIC INDUSTRY**

A NATIONAL COAL COUNCIL SPECIAL REPORT

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THE NATIONAL COAL COUNCIL

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October 2, 1997

The Honorable Federico F. Peña
Secretary of Energy
United States Department of Energy
1000 Independence Avenue SW, Room 7A257
Washington, DC 20585

Dear Mr. Secretary:

The National Coal Council is chartered to give counsel and advice to the Secretary of Energy on general energy matters relating to coal. We are very much aware that you, along with your colleagues in the Executive Branch, are currently very much involved in examining and determining your position on several important policy matters.

In our reports of studies conducted for you and your predecessors, we have clearly stated conclusions and made recommendations relative to these matters. Accordingly, we have carefully reviewed our reports and have taken into consideration our understanding of recent events. In turn, we have restated positions taken by the Council which we believe to be germane.

The National Coal Council is pleased to forward herewith, for your information and use, a Special Report. This report focuses on three major issues, now before you, to wit:

- ◆ The Environmental Protection Agency's new National Ambient Air Quality Standards ("NAAQS") for ozone precursors and fine particulates;
- ◆ The U.S. government's presumed policy positions on climate change in the upcoming international meetings in Kyoto, Japan, in December 1997; and
- ◆ The on-going restructuring of the electric utility industry, designed to bring competition and customer choice to the consumption of electricity.

An Advisory Committee to the Secretary of Energy

PREFACE

The National Coal Council is a private, nonprofit advisory group, chartered under the Federal Advisory Committee Act.

The mission of the council is advisory only, providing guidance and recommendations as requested by the Secretary of Energy on general policy matters relating to Coal. The Council is forbidden by law from lobbying or carrying out other such activities. The National Coal Council receives no funds or financial assistance from the Federal Government. It relies solely upon the voluntary contributions of the members for the support of its activities.

The members of the National Coal Council are appointed by the Secretary of Energy for their knowledge, expertise, and stature in their respective fields of endeavor. They reflect a wide geographic area of the United States, representing more than 30 states. They are taken from a broad spectrum of diverse interests from business, industry, and other such groups as listed below:

Large and Small Coal Producers
Coal Users such as Electric Utilities and Industrial Users
Transportation interests from the Rail, Waterways, and Trucking Industries as well as Port Authorities
Academia
Research Organizations
Industrial Equipment Manufacturers
Environmental Interests
State Government including Administrative Officials, Legislators, and Public Utility Commissioners
Consumer groups including special women's organizations
Consultants from scientific, technical, general business, and financial specialty areas
Attorneys
Special interest groups that are regional or state in concentration
Indian Tribes

The National Coal Council provides its advice to the Secretary of Energy in the form of reports on subjects requested by the Secretary and at no cost to the Federal Government.

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A Special Report on Matters relating to the use of coal

INTRODUCTION

The use of coal to meet our energy needs is an important and vital part of the American economic and social fabric:

- Over 55 percent of all the electricity in the United States comes from coal-fired sources
- Coal is the least-cost fossil fuel for electric generation
- Coal plays a prominent role in the continuing spread of electricity into every aspect of our lives, and coal contributes in a major way to our affordable standard of living
- Coal helps insure our low inflation rate, our global competitiveness, and our energy security

Over the years, as the prices of other fossil fuels have fluctuated greatly, the price of coal has remained stable and is expected to decline in the years ahead according to the Energy Information Administration.

The coal industry produces over one billion tons and directly contributes more than \$21 billion annually to the U.S. economy and provides jobs for almost 100,000 miners. These are high-paying, stable jobs with a skilled, dedicated and amazingly productive work force, working in a safe environment.

In many areas of the United States, coal is the backbone of the local economy. The indirect economic effects of coal – the spin-offs in terms of other businesses in the community who sell goods and products to the industry and its employees, the benefit of state and local taxes paid by miners and those that serve the mining community -- are nearly 11 times the direct contribution. There are nearly 17 jobs in the economy at large created by every direct job in the coal industry.

The coal industry and its partners in the transportation industry have created the means to efficiently produce and move coal to markets everywhere in the United States. Coal is the most important commodity moved on the nation's railroads, and a major source of traffic on the U. S. waterways and highways. This multi-modal transportation system produces an efficient, flexible system to move coal to markets.

The U. S. coal industry makes two crucial positive contributions to America's balance of trade.

CLEAN AIR ACT RULES

In July 1997, the U.S. EPA promulgated rules to increase the stringency of the National Ambient Air Quality Standards for ozone precursors and establish a new standard for 2.5 micron particulates. These new rules are potentially devastating to the use of coal. If these stringent rules were necessary for the nation's well-being and the public health, their need would be more understandable.

EPA'S New Rules Unscientific, Unattainable, and Punitively Aimed at Coal-Fired Electric Generating Plants.

EPA's Clean Air Scientific Advisory Committee was badly divided on the new ozone and fine particulate standards. A review of the committee's record reveals that there is no sound science behind either new rule. The ozone rules are predicated on studies attempting to show impacts of smog on asthmatic children. Yet these studies show only weak associations, far less than the confidence levels the National Institutes of Health says are required in valid epidemiological studies. The science behind the fine particulate standard is far from compelling. The associations between fine particulates and health effects are quite tenuous, and not analyzed for the impact of confounders such as use of tobacco, other pollutants and the weather. EPA originally claimed that the particulate standard could save 15,000 lives, then acknowledged a calculational error that would reduce the claim to 10,000.

Internal Combustion Engines Produce 40% of Emissions

The impact of the ozone standard will be to push the electric utility industry toward much greater control of oxides of nitrogen, and increased switching from coal to natural gas. The EPA has targeted the utility industry in this rulemaking, testifying to such intent in Congress and making the point repeatedly in public appearances. However, utility boilers are not the major source of ozone-producing emissions, being responsible for less than 30 percent of national emissions. The major source of ozone-producing emissions, belongs to the internal combustion engine, which produces over 40 percent of the ozone precursor emissions that are responsible for episodes of urban non-attainment of the current ozone standard.

EPA's existing rules under the Clean Air Act Amendments of 1990 are accomplishing the task of reducing emissions of NOx. EPA already has in place a stringent program to lower NOx emissions by over 2.5 million tons. A variety of NOx control strategies and technologies currently exist to reduce emissions from coal-fired boilers.

CLIMATE CHANGE

The President has stated that man-made greenhouse gases are causing global warming and other adverse climatic change and that this represents a major environmental threat. Many reputable scientists disagree with that assessment. Just what the Administration will choose to do, particularly at the upcoming December international meeting in Kyoto to deal with the perceived environmental threat is not clear. Obviously, the National Coal Council is vitally concerned about what reduction targets the Administration will support and what approaches to dealing with greenhouse gases will be on the table.

94% Of All CO₂ in the World is Natural; 6% is Manmade

There is notable scientific disagreement whether man-made carbon dioxide or emissions of other greenhouse gases are raising global temperatures. There is even more uncertainty on the timing, magnitude, geographic distribution, and social and economic effects of a changing climate.

In the face of this scientific uncertainty, it is important that any steps taken be based on sound science and done so in an extremely careful manner, inclusive of those measures that make sense for economic reasons – such things as improving power plant efficiency or making cost-effective reductions in consumption of fuels and electricity.

It is also important to avoid getting locked into policy positions that limit the flexibility of the United States government and of the private firms that will ultimately be responsible for carrying out U.S. policy. Because ninety four percent of all CO₂ in the world is natural and only six percent is manmade, it is essential that we do not agree to policies that will wreak havoc on the economy while delivering questionable benefits to the global environment.

Voluntary programs, such as the DOE's Utility Climate Challenge, Motor Challenge or the Coal Bed Methane Program, are working well and provide a model for effective, flexible public policy. All potential options for mitigation, control and sequestration should be carefully considered in developing economically sound courses of action.

Developing Countries Contribute Greenhouse Gases

In reality, the developed world – the United States, Europe, Canada, Australia, Eastern Europe, Russia and Japan – cannot stop the global growth of greenhouse gases even if it were necessary. Even if the United States and the rest of the Organization for Economic and Cooperative

RESTRUCTURING OF THE ELECTRIC INDUSTRY

The U.S. electric utility industry today is going through a remarkable restructuring. More than 40 states are looking seriously at electric restructuring and several have implemented pilot programs to test competitive access for retail customers. California's transformed electric market which features a power exchange for competitive purchase of electricity and an independent system operator to run the monopoly transmission system goes into effect Jan. 1, 1998. Other states – notably Pennsylvania, New Hampshire, Rhode Island, Montana, Nevada, Oklahoma, Massachusetts, New Jersey and Michigan – are not far behind.

At the federal level, several bills dealing with restructuring have been introduced in the 105th Congress. Correspondingly, the House has held a series of hearings and the Senate an array of "workshops." The Administration is currently working on refining its position on this complex issue. Seen broadly, the electric industry is in transition and the future contains a high degree of uncertainty. But one thing is certain, the restructuring of the electricity marketplace will have profound implications for the use of coal. Restructuring will reshape markets, change the fuel mix, and change the way fuels are priced and distributed. The rise of wholesale power marketers, for example, has already produced a whole new approach called "tolling," in which the marketers arrange for economic swaps between electricity and fuel, depending on current market prices. This financial hedging mechanism has already been used for electricity-natural gas and electricity-coal trades.

A competitive generating market may push market prices for electricity down to marginal cost, the cost of fuel plus operation and maintenance costs. In many cases, this will mean the price of electricity will be very little more than the cost of fuel to produce it. This will force owners of coal-fired power plants to improve their operations or in the case of plants with high fixed O&M costs to shut down.

A more competitive electric industry is also likely to push the coal industry into more partnerships among coal suppliers, transporters and customers. Smoothing the cycle of delivery, for example, could reduce inventories at the mine, in transit and at the generating plant, resulting in lower fuel costs. Smaller margins also stimulate development of new technologies to improve mining productivity and further lower costs.

Some observers, including the Environmental Protection Agency, have argued that a competitive generating market will mean increased generation by low-cost coal-fired plants in the Midwest for selling electricity into high-cost markets such as New England, New York and New Jersey. This

CONCLUSIONS

1. CLEAN AIR ACT RULES

The National Coal Council has significant concerns about the recently EPA promulgated rules on ozone precursors and fine particulates. As we have repeatedly stated in our previous reports the National Coal Council supports a clean national environment, however, the Council does not believe that Federal guidelines should be mandated when based on weak science and hold unwarranted and significant potential to negatively impact the continued utilization of coal in the national energy mix.

2. CLIMATE CHANGE

The National Coal Council continues to support on-going comprehensive scientific review and research into global climate change and the role, if any, of increased emissions of man-made gas. However, the Council seeks clarification on the positions relating to global climate change to be taken by the Administration at the upcoming international meeting in Kyoto, Japan. The Council believes that current voluntary industry programs are achieving stated goals, while providing industry the needed flexibility to ensure continued national economic growth. As stated previously, we feel very strongly that our nation's policy should not run counter to domestic economic concerns and negatively impact jobs, our gross domestic product and the delivered price of electricity to the consumers of the United States. The Council further supports the inclusion of all countries into the global solution, and urges that joint implementation be a key feature of any future agreements.

3. RESTRUCTURING OF THE ELECTRIC INDUSTRY

The National Coal Council recognizes and supports competition in the wholesale electric power market. Wholesale competition has repeatedly proven to benefit all consumers.

The Council strongly believes that any actions by the federal government, relative to electric power utility restructuring, must assure that regulatory and other official governmental changes affecting the utility industry do not put the use of coal in meeting our nation's energy needs at an unfair and/or unjustifiable disadvantage.

APPENDIX A

PREVIOUS NATIONAL COAL COUNCIL REPORTS

This Special Report was based upon the following previous reports prepared by The National Coal Council for the Secretaries of Energy:

June 1990	The Long Range Role of Coal in the Future Energy Strategy of the United States
January 1992	The Near Term Role for Coal in the Future Energy Strategy of the United States
January 1993	The Role of U.S. Coal in Energy, the Economy, and the Environment — Special Report
December 1993	The Export of U.S. Coal and Coal Technology
January 1994	Clean Coal Technology for Sustainable Development
March 1995	A Critical Review of Efficient and Environmentally Sound Coal Utilization Technology
November 1995	The Implications for Coal Markets of Utility Deregulation and Restructuring
February 1997	Vision 2020: The Role of Coal in U.S. Energy Strategy

APPENDIX B

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