006487

AMERICAN
PUBLIC
TRANSPORTATION
ASSOCIATION

2001-006487 3/9 P 4:06

March 7, 2001

The Honorable Spencer Abraham
Secretary
U.S. Department of Energy
Forrestal Building
1000 Independence Avenue, N.W.
Washington, DC 20585-1000

Dear Mr. Secretary:

I write on behalf of the American Public Transportation Association (APTA) to express support for the development of a national energy policy. As President Bush highlighted in his February 27th address to a joint session of Congress, regional energy shortages have become serious concerns and have brought attention to this major issue facing our country.

As the trade association representing the public transportation industry, we would like to offer our assistance in any way to help facilitate your initiative. We applaud President Bush for his interest in developing energy sources and for promoting energy conservation.

Thank you for your efforts to address our nation's energy needs. We look forward to working with you on this issue as your efforts move forward.

Sincerely yours,

William W. Millar
President

WWM/cbo

1666 K Street, N.W. Washington, DC 20006 Phone (202) 496-4800 FAX (202) 496-4324 www.apta.com

27815

2001-003523

Department of Energy
Washington, DC 20585

March 8, 2001

Mr. David J. O'Reilly
Chairman and Chief Executive Officer
Chevron Corporation
575 Market Street
San Francisco, CA 94105-2856

Dear Mr. O'Reilly:

Thank you for your recent letter to Secretary Abraham, which offered Chevron's recommendations for a comprehensive U.S. energy policy, urged the Administration to sponsor a "National Energy Summit", and provided a paper on the California electricity crisis.

As you know, one of President Bush's first acts was creating a National Energy Policy Development Group, headed by Vice President Cheney, to help the private sector and government at all levels, promote dependable, affordable, and environmentally sound production and distribution of energy for the future. This group includes myself, as well as the Secretaries of the Treasury, Interior, Agriculture and Commerce Departments, the heads of the Federal Emergency Management Agency, the Environmental Protection Agency, the President's Deputy Chief of Staff for Policy, and the Assistants to the President for Economic Policy and Intergovernmental Affairs.

The group will consider the ideas and recommendations of consumers, businesses, and independent experts on how best to address the broad range of energy issues now facing the Nation, including rapidly rising costs for natural gas, electricity supply and price problems in the West and the increasing dependence of the United States on imported oil. I am certain that Chevron's recommendations will be given careful consideration in this process.

Thank you for writing.

Sincerely,

Margot Anderson

Margot Anderson
Acting Director
Office of Policy

Printed with soy ink on recycled paper

27816

From the desk of

John Barker

Dear Mr. Abraham.

Our country sorely needs a national energy policy.

A rationale policy that balances our energy needs with reasonable environmental requirements.

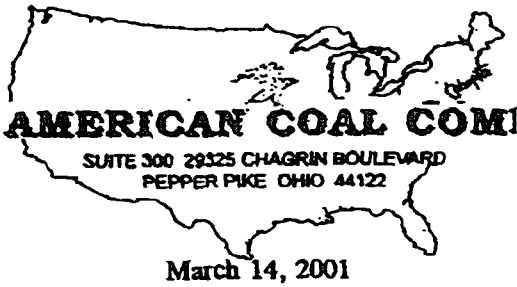
A policy that encourages the development of our own natural resources & reduces our dependence on imports

A policy that encourages the development of all of our energy resources & does not favor one fuel over another.

I hope you find the attached paper of interest. I wrote it to put my thoughts together. Feel free to use it if it will advance our objectives.

V. T. Y.

J. E. Barker



THE AMERICAN COAL COMPANY
SUITE 300 29325 CHAGRIN BOULEVARD
PEPPER PIKE OHIO 44122

ROBERT E. MURRAY
Director

PHONE (216) 765-1240
FAX (216) 765-2654

March 14, 2001

The Honorable Spencer S. Abraham
Secretary
Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

2001-006933 Mar 14 p 3:04

Dear Secretary Spencer:

This is in follow-up to our meeting in Washington, D.C. on March 1, wherein we discussed a meeting regarding the National Energy Policy.

We understand that you are currently meeting with Senators regarding the National Energy Policy, and we believe that my input would be very valuable to you at this time.

I am available to come to Washington to meet with you at your convenience and would like to do so as soon as possible. Please have your office call my Executive Secretary, Mrs. Renea Wolfe, at (740) 926-1351 to coordinate the visit.

Thank you for your kind consideration of this request.

Sincerely,

THE AMERICAN COAL COMPANY

Bob

Robert E. Murray
Director

REM:arw
cc: Mr. Kyle McFlarrow, Chief of Staff
Ms. Leila Sepehri, Scheduler

2001-002956

Department of Energy
Washington, DC 20585

March 15, 2001

Dr. John R. Snell
President
Worldwide Technologies
918 Rosewood
East Lansing, Michigan 48823

Dear Dr. Snell:

Thank you for your letter of February 1, 2001, which provided useful insights on domestic and global energy and environmental issues, including global climate change. We appreciate you sharing your knowledge and ideas to assist in mapping out a possible way forward. The Administration is taking these issues very seriously as it addresses our nation's energy problems.

The Administration's White House Energy Task Force, led by Vice President Cheney, is creating a national energy policy. The Task Force is devising ways to increase oil, natural gas, coal, and nuclear energy supplies from domestic sources. Conservation and efficiency improvements are also a priority with the Task Force.

It is evident you and your organizations have had first-hand exposure to the previous and on-going technology research and development programs sponsored by the Department of Energy, particularly those focusing on energy efficiency and renewable energy. It is anticipated the Department will continue to pursue these programs to ensure our nation will continue to have reliable and environmentally sound energy supply. Your package of information is being shared with the Department's Office of Energy Efficiency and Renewable Energy, who will contact you directly should there be an interest in pursuing your ideas on further R&D in the area of bioenergy.

Thank you for your interest in energy policy.

Sincerely,

Margot Anderson

Margot Anderson
Acting Director
Office of Policy

27819

Peninsula Energy Partners

2001-007739 3/21 P 4:05

007739

Jane Hughes Turnbull, Principal

64 Los Altos Square; Los Altos, CA 94022 • (650) 559-1766 • Fax (650) 559-1763 • jaturnbu@ix.netcom.com

March 16, 2001

Secretary Spencer Abraham
U.S. Department of Energy
1000 Independene Ave., SW
Washington DC 20585

Dear Secretary Abraham:

The recent reversal of the administration's position on mitigation of carbon dioxide emissions is a monumental mistake. Recognizing that pressure from the National Coal Council contributed to this decision, I must in good conscience submit my resignation from the Council.

I have served on the Council for the past four years. My objective, in keeping with my primary expertise in the area of biomass systems, has been to foster more efficient and less environmentally damaging electric generation using solid fuels – both coal and biomass. It seemed to me that the council was moving toward positions consistent with this objective. In fact, the major emphasis during the years 1999 and 2000 was the definition of more effective means of carbon dioxide reduction and sequestration – one method being the co-firing of coal with closed-loop biomass.

But it was evident at the last Council meeting in November that its leadership was intent on bolstering the economic well-being of the industry, if need be at the expense of the environment. My hope *was that concerns about our environment would not be ignored, but it is clear now that my hope has* not been realized.

This recent reversal in policy is profoundly short-sighted, an obvious and expedient response to industry interests – I should say to *misperceived* industry interests. Already we are experiencing notable glacial melting, rising ocean levels and temperatures, falling water tables, increased frequency of catastrophic weather events, and the loss of arable and forested lands. The Intergovernmental Panel on Climate Change has in clear terms recommended immediate action to reduce greenhouse gases as essential to minimizing the potentially disastrous temperature increases projected over the century ahead. Unless real efforts are made in the near-term, our earth's natural systems may be irretrievably harmed and our social systems will not have the capability of maintaining themselves.

Our European colleagues have recognized the dangers posed by climate change and are effectively acting on this recognition. They are working collaboratively to improve the technical and economic viability of renewable energy systems and investing in large-scale improvements in energy efficiencies. Our country could make comparable efforts without harm to existing industrial investments. Conversely, failing to address the present potential for widespread ecological disaster can only result in harm to our environmental, social, and economic well-being.

I hope that you, along with Council leadership, will encourage President Bush to adopt an approach to energy policy that is in the interests of *everyone*. A sound national policy will recognize the very real environmental and economic implications of climate change -and the opportunities that the development of new and improved energy technologies would bring.

Sincerely,

Jane Hughes Turnbull

27820

March 16, 2001

The Honorable George W. Bush
President of the United States
The White House
Washington, DC 20500

Dear Mr. President:

We are writing to offer you our encouragement and support for your effort to develop a national energy policy.

We agree with you that we need to act now to meet America's energy needs for the 21st Century. While the current energy situation presents our nation with some serious challenges and obstacles to overcome, it also presents us with a tremendous opportunity to achieve energy policy changes that would provide ample, reliable energy supplies at reasonable prices, thus help ensure economic and national security for all American families and businesses.

Such a policy should provide market-based solutions to the challenges associated with maximizing our energy supplies, meeting our infrastructure needs, and ensuring environmental protection. It must also encourage the development of the next generation of energy technologies and meet consumer demand for reliable energy at reasonable prices. America needs to preserve and enhance the use of all available energy sources, including conventional, alternative and renewable fuels, as well as promote even greater energy efficiency. Such an energy policy should also protect low-income families and seniors in need through the expansion of the Low Income Heating and Energy Assistance Program (LIHEAP).

We are committed to providing you and the Congress with the support necessary to enact a national energy policy that will assure reliable energy security for American families and businesses, and thereby help ensure prosperity for future generations.

Respectfully,

Frederick L. Webber
President and CEO
American Chemistry Council

W. Henson Moore
President and CEO
American Forest & Paper Association

David N. Parker
President and CEO
American Gas Association

Andrew G. Sharkey III
President and CEO
American Iron and Steel Institute

Red Cavaney
President and CEO
American Petroleum Institute

Thomas R. Kuhn
President
Edison Electric Institute

Jerald V. Halvorsen
President
Interstate Natural Gas
Association of America

Michael Baroody
Executive Vice President
National Association
of Manufacturers

John R. Cady
President and CEO
National Food
Processors Association

Jack Gerard
President
National Mining Association

Richard Roldan
Vice President Govt. Relations
National Propane Gas Association

R. Skip Horvath
President
Natural Gas Supply Association

Joe F. Colvin
President and CEO
Nuclear Energy Institute

Ray Roper
President
Printing Industries of America

Bruce R. Josten
Executive Vice President
U.S. Chamber of Commerce

Wayne Gibbens
President
U.S. Oil and Gas Association

cc: Vice-President Richard Cheney
Secretary Paul O'Neill
Secretary Gale Norton
Secretary Don Evans
Secretary Ann Veneman
Secretary Norman Mineta
Secretary Spencer Abraham
Director Mitchell E. Daniels Jr.
Administrator Christine Todd Whitman

2001-007603 3/21/01 11:26

007603

Secretary, The

From: Mike_Rothman@ML.COM%internet [Mike_Rothman@ML.COM]
Sent: Monday, March 19, 2001 4:51 PM
To: Secretary, The
Subject: Policy

FROM: Mike_Rothman@ML.com
NAME: Michael Rothman
SUBJECT: Policy
ZIP: 10281-1319
CITY: New York City
PARM.1: TO:the.secretary@hq.doe.gov
STATE: NY
TOPIC: Dialogue
SUBMIT: Send Comments
CONTACT: email
COUNTRY:
MESSAGE: Dear Secretary Abrahams, By way of introduction, I'm Michael Rothman, director of energy market research at Merrill Lycnh & Co. I've been at the firm for 16 1/2 years and have been attending the OPEC ministerial meetings since 1986. I would welcome the opportunity to discuss a number of topical issues regarding energy policy particularly in light of the administration's reaction to the outcome of the recent OPEC meeting. Respectfully, Michael Rot'man
MAILADDR: World Financial Center, North Tower, 19th Flr

008018

National Energy Summit
Opening remarks by Thomas J. Donohue
President & CEO
U.S. Chamber of Commerce
March 19, 2001

INTRODUCTION

- Good morning, and welcome to the U.S. Chamber of Commerce. I'm Tom Donohue, president and CEO of the Chamber, and I'm delighted to kick off the Chamber's Energy Summit.

- I'd like to thank each of you for coming. I first want to acknowledge the staff of the National Chamber Foundation, the Chamber's think tank, and the Chamber's Environmental, Technology and Regulatory Affairs department for organizing this summit.

- Today, we have the opportunity to lay the foundation of a market-based national energy strategy that will meet our current and future energy needs, protect the environment, and promote economic growth.

- You may be wondering why the Chamber is hosting this event, and why this organization is a strong advocate for developing a national energy strategy.

- It's quite simple. Every business, whether it is a manufacturing plant or the corner dry cleaner, needs an adequate supply of energy to produce the goods and services our country and the rest of the world demands.

- Energy is the lifeblood of our economy, the substance that fuels the engines of economic growth. But it's even more fundamental than that.

- Energy is the basis of our human existence, such a fundamental part of our everyday lives that we too often take it for granted. Okay, maybe Californians aren't as guilty of this as the rest of us.

- We flip a switch and expect light, we expect our cars to start in the morning, and we assume our computers will flick on at the push of a button.

- But do we ever stop to think of the tremendous amount of resources needed to perform these everyday, normal functions? Or how we can better conserve these resources and build a greater supply of them?

- It's a shame that it takes rolling blackouts and high gasoline prices for the public and governments at every level to sit up and take notice of our failing energy infrastructure.

- When it comes to energy, America has been asleep at the switch. We have failed to take the necessary steps to meet our current and future needs.

- And let me tell you, this failure, unless corrected now, poses the single biggest threat to our economic prosperity in the first decade of this new century.

- Without action, the outlook looks grim. A high-tech economy and a rapidly growing population are fueling a demand for energy at a level never before seen.

- Conserve power and diversify our energy mix? Of course. But the bottom line is that it's still going to take a lot of "low tech" fossil fuels to grow our high tech economy.

- Today I'd like to talk about the challenges and opportunities before us as we attempt to develop a national energy strategy that will ensure adequate energy supplies for now — and the future — and does so in an environmentally friendly manner.

- But first, let's take a look at where we've been.

- Innovations by business over the past 20 years have greatly increased energy efficiency, cutting out waste in the system.

- New cars and trucks continue to run on less fuel than earlier models. In fact, a fleet of 20 fuel-efficient cars produces less air pollution today than a single car built in 1960. Now that's progress.

- The amount of energy we use in our homes has decreased more than 25% because of more efficient appliances and construction methods and material. The same goes for our nation's office buildings and manufacturing plants.

- Today's best air conditioners use 30% to 50% less energy to produce the same amount of cooling as air conditioners made in the mid-1970s.

- In 1980, it cost $110 per year to run the average refrigerator. Today, it costs just $40 per year.

- As a result of these tremendous advances in energy efficiency, we've dramatically improved our environment.

- America has the cleanest environment of all of the world's industrialized nations, in large part because of business' willingness to invest in it.

- Business has voluntarily lowered U.S. greenhouse gas emissions by more than 200 million tons per year.

- Air pollutants decreased 58% over a 20-year period ending in 1997.

- Our water is cleaner because discharges of untreated organic wastes and toxic metals from industry has plunged 98% from 1970 levels.

- Overall, business will have spent almost $3 trillion cleaning our environment in a forty-year span between 1970 and 2010. That kind of commitment shows that business is concerned about more than just the bottom line.

- When it comes to the environment, business is doing more than just talking – it's writing the checks to back it up.

- So, we've taken the right steps on energy conservation in the past few decades, and we've made tremendous progress in cleaning up the environment.

- But these actions aren't enough to get us out of the jam we're in.

- The challenges can be summed up in a few statistics.

- In the next 20 years, total energy consumption will increase by 32% while domestic production of crude oil is expected to increase by just a fraction of that.

- Power demand is rising 10,000 megawatts a year, but only 7,000 to 8,000 megawatts of new power are coming on line each year. And this trend has been going on for five years!

- We're the most technologically advanced industrial nation in the world, yet we've reduced our crude oil production by 14% since its peak in 1970, and we've shut down one-half of all oil refineries since 1981.

- In fact, we haven't built a new major oil refinery in 25 years!

- We need to build 1,200 new power plants over the next 15 years to support the increasing demand for electric energy.

- Annual investments in new electricity transmission lines have declined by about $100 million a year for the past two decades, primarily because a few people in several communities say the lines are an eyesore.

- The energy content of the nation's coal supply is equal to all of the world's oil, yet our coal-based energy output last year tapped only four-tenths of one percent of coal's potential.

- And what about natural gas -- the clean-burning fuel of choice for electricity generation?

- Demand will jump 30% in the next decade, and we'll need to add 38,000 miles of new interstate natural gas pipelines to meet that demand.

- These statistics are a result of poor planning and an approval process that stretches on indefinitely.

- Some folks in California were scratching their heads wondering how they could be left without power.

- Certainly part of the reason is because that state has not brought a new major power plant on line in a decade.

- It took one California company about a year and $1 million to gather the 2,500 pages of data it needed just to apply for a new power plant.

- It will take another four years or longer to get that plant up and running. Natural gas suppliers around the country know all about long delays. Approval for major gas pipeline projects can take up to two years.

- Electricity is now being moved across state lines, and our inadequate network of transmission lines is causing an interstate electricity traffic jam, threatening the energy supply of millions of consumers around the country.

- Like oil refineries, electricity transmission is a low-margin business to begin with.

- When you tack on costly and unreasonable environmental regulations and lengthy approval procedures, there's absolutely zero incentive to build new energy facilities.

- The huge gap between our supply of energy —and the infrastructure that delivers it — and the demand for energy is a perfect example of what happens when we stifle free markets and overload the system with heavy-handed government regulations.

- It's not just the energy companies that suffer. Ask the millions of Californians who suffered through the blackouts and the millions of New Yorkers who will probably experience the same thing this summer, when energy use is at peak level.

- Ask the millions of motorists who have experienced sticker shock at the gas station.

- We have an opportunity to correct the situation so that none of our homes and businesses will ever go dark.

- It's going to take nothing less than a comprehensive national energy strategy that forces us to rethink how we use energy, and how we produce it.

- Such a strategy can be boiled down to five points:
  - Smart conservation;
  - The development of feasible alternative sources of energy;
  - A significant increase in domestic energy production;
  - A dramatic expansion of our energy infrastructure; and,
  - A changing of public attitudes about how we produce and deliver energy in this country.
- First, we have to explore new ways of conserving our energy supply.
- Business supports conservation – it makes good business sense. After all, we pay the monthly bill for the energy that keeps the factories running and the computers humming.
- Any corporate executive worth his weight makes sure that the company is not wasting resources.
- But we must have the right kind of conservation – the kind that is based on improved efficiency and less waste.

- We cannot afford conservation measures that impede the growth of our high-tech, 24/7 economy, mandating how or when businesses can or cannot operate.

- The free market rewards businesses that use fewer resources to produce their products, and punishes those that are wasteful.

- Let's allow the free market to play its natural role and not let the government choose winners and losers.

- Second, we must develop feasible alternative and renewable sources of energy.

- In addition to increasing our production of fossil fuels, including coal, and nuclear energy, we have to fully investigate the opportunities presented by fuel cell technology, wind, water, solar radiation and biomass.

- Business has invested a lot of resources in these cost-effective and environmentally friendly forms of energy, and though some have not fully penetrated the market, they're becoming more and more common.

- For instance, in 1999 there were more than 400,000 alternative-fueled vehicles on the roads, a 62% jump from 1992.

- Any smart investment banker will tell you that it's smart to diversify your portfolio. So we should encourage further development of alternative and renewable fuels so that we don't become too dependent on conventional energy sources.

- Third, the government must allow for more domestic exploration and extraction of crude oil and natural gas.

- The U.S. sits on a treasure chest of natural resources, yet we are the only major industrial nation that significantly limits access to our own resources.

- We have a 10-year supply of natural gas located on land owned by federal and state governments that is either closed or restricted from drilling.

- And what about the oil we need to heat our homes and operate our cars and trucks?

- It's estimated that between 3.5 and 16 billion barrels of oil exist in the coastal plain of the Alaska National Wildlife Refuge, or ANWR.

- Sixteen billion barrels could replace all the oil we import from Saudi Arabia for the next 30 years.

- Even by the lowest estimates, ANWR would still be the second-largest oil field ever discovered in North America.

- At the beginning of the century, our government established a national policy of multi-purpose federal land use.

- But in recent years, extreme environmentalists have gained the upper hand by convincing our leaders that non-park federal lands should not be used for anything under any circumstances.

- Too often, they've swayed government officials with an "either/or" proposition – we can either increase exploration and drilling OR we can have a clean environment.

- But the bottom line is, we don't have to choose between a clean environment and producing the energy we need to grow our economy. We can have both, if not always, then most of the time.

- Business has developed the technology to explore and produce sources of energy faster, safer, cleaner, and more efficiently than before — with little or no harm to fish, wildlife and natural habitat.

- We have to strike a balance between environmental concerns and our need for economic growth.

- We need a new regulatory process that carefully weighs the benefits of increased exploration and extraction against the costs.

- The prohibition of oil exploration in ANWR is the perfect example of an unreasonable environmental regulation whose costs outweigh its benefits.

- Only about 2,000 acres of coastal plain would be disturbed by development, leaving almost 19 million acres of the ANWR untouched.

- And those 2,000 acres of land are buried under a sheet of ice most of the year and are void of virtually any trees or plant life — not exactly a tourist destination.

- So what price do we pay for not opening up ANWR and other portions of our country to oil exploration?

- We become even more dependent on foreign oil, putting our national security at risk and becoming more susceptible to extreme fluctuations in gasoline prices.

- We already rely on the world for 55% of our oil supply, and at the rate we're going, we will import 64% of our oil by 2020.

- Think about it. The most advanced, powerful nation in the world at the mercy of foreign dictators for its oil supply.

- Now I'm not saying that we would become completely self-sufficient if we drilled for more oil and gas in this country. Our nation is too large and our economy too big not to have to seek oil in overseas markets.

- But we can't allow ourselves to become dependent on any one foreign supplier. We've put ourselves in a pretty bad position when a turn of events in the Middle East can cause gasoline prices in this country to shoot up over $2 per gallon.

- We need to increase the number of countries from which we buy oil. How do we do this?

- We eliminate U.S. unilateral sanctions, we foster the growth of open energy markets all over the world, and we encourage the development of reliable, affordable and market-based energy in developing countries.

- The U.S. imposes unilateral sanctions against more than 70 countries, and they've never achieved their stated goal in any instance.

- They close off markets to American companies that remain open to their foreign competitors while propping up corrupt and undemocratic foreign leaders.

- By eliminating unilateral sanctions, we would allow American companies to purchase more oil from more countries, increasing our supply of affordable, reliable oil and strengthening our position in the world.

- The fourth item on my five-point plan is to expand and upgrade our energy production and distribution capacity.

- I've already mentioned some statistics that illustrate the growing gap between supply and demand.

- We need an enormous capital investment in all forms of energy – fossil fuels, including coal, as well as nuclear, alternative, and renewable sources – because no single source can meet our energy needs.

- Yet increasing our energy supplies serves no purpose if we can't get it to the people and businesses that need it.

- We must increase the mileage of natural gas and oil pipelines and electricity transmission lines by 30% at a cost of $150 billion.

- Our energy infrastructure is no different or less important than our transportation infrastructure.

- Much like our society would become paralyzed without an adequate grid of roads, airports, waterways and rails, our economy runs the risk of failure if we don't invest in a modern energy freeway system.

- Upgrading our infrastructure requires a streamlined approval process for the construction and citing of electricity plants and energy transmission and distribution systems that is not tipped in favor of local antigrowth advocates.

- We don't need more experiences like California, where a never-ending approval process for power plant construction is a major reason why that state found itself in the dark.

- Government at every level must also allow free and competitive energy markets to flourish.

- When government tries to control an industry – or worse yet, regulate one sector of that industry while allowing for free market conditions in another – the result is less competition, higher costs, and greater inefficiency.

- Look at the airline industry. Before the government began deregulating the airlines in the late 1970s, token competition among carriers resulted in high fares, preventing everybody but the privileged class from flying commercially.

- Since then, new market entrances by many low-cost airlines have given consumers more choices at lower prices, making commercial travel affordable to the masses.

- In the same way, local governments should give consumers more energy choices.

- When consumers are allowed to have their choice of energy suppliers, competition heats up, prices go down, and new, more efficient discoveries are made.

- So let's streamline government regulations so that new players will be encouraged to enter the market and invest in the resources needed to maintain our economic growth.

- Finally, the last item on our five-point plan is to change public attitudes about the need for an improved energy infrastructure.

- Americans demand affordable energy and plenty of it — as long as the facilities needed to produce and transport it aren't located anywhere near their homes.

- Americans want it all, but reality demands that we make choices.

- We can either encourage smart investments in our energy infrastructure that will help bolster our economic strength and security, or we can do nothing and experience energy shortages that are commonplace in industrialized European countries.

- Local communities that hold energy construction and expansion projects hostage with unreasonable demands must realize that their "Not In My Backyard" attitudes have a major impact a long way from their homes.

- Just about every western state is feeling the pinch of California's decisions not to adequately invest in energy-producing facilities.

- If we don't change our attitude, it's only a matter of time before the ripple effect from California reaches every corner of the country.

CONCLUSION

- Ladies and gentlemen, energy is the juice that sustains the U.S. economy and American society.

- But we're letting our supply dry up by putting off critical investments in our energy infrastructure.

- We have the technology to explore, extract, produce and distribute energy in a way that will solidify our economic security while preserving our environment.

- It doesn't have to be an either/or proposition as the extreme environmentalists and their anti-growth allies like to say it is.

- We can have it both ways — a strong energy system AND a clean environment.

- Smart environmentalists know that it is safer and much more prudent to have an orderly, well thought out plan to expand energy resources.

- Because if we don't, and the real crisis hits — lights go out and gas tanks go empty — the American people will demand rapid, helter-skelter action, and damn the consequences.

- We have to put politicians, environmentalists and local communities on notice that they will be held accountable for their efforts to block improvements in our energy infrastructure.

- As big as this problem is, we have a great opportunity to solve it.

- This is a unique moment. We have a new Congress, a new Administration that appears committed to developing a national energy strategy, and a new sense of national urgency brought on by the blackouts in California and predictions of more throughout the country this summer.

- The time is ripe for action. But we can't expect instant results. After decades of neglect, we can't expect to build an adequate energy system overnight.

- It's going to take time, but the longer we wait, the bigger hole we dig for ourselves. Let's get moving now before the lights go out on America's leadership in the global economy.

- Thank you.

# # #

2001-010995

American Association of Petroleum Geologists
An International Geological Organization

DIVISION OF PROFESSIONAL AFFAIRS

President

G. Warfield "Skip" Hobbs
Ammonite Resources
181 Mariomi Road
New Canaan, Connecticut 06840

Tel: (203) 972-1130
Fax: (203) 972-6899
E-mail: 73162.1256@compuserve.com

March 19, 2001
Via Fax to: 202-586-7573

Ms. Cheryl Alford
Office of the Secretary of Energy
Washington, D.C.

Dear Ms. Alford;

I have the rare distinction of being a Connecticut Yankee who is actually a working independent petroleum geologist. Additionally, I represent the 30,000 professional geoscientists who are members of the American Association of Petroleum Geologists (AAPG). It is our job to find and evaluate the world's fossil fuel resources. In my capacity as president of the AAPG Division of Professional Affairs, I am the spokesman on national energy policy for the AAPG.

On Thursday, March 22nd, I and my colleague Dr. Naresh Kumar will be in Washington to testify before the House Subcommittee on Energy and Mineral Resources regarding our opinion of the energy resource estimates of the United States Geological Survey and the Minerals Management Service. Without reliable resource assessments, it is not possible to develop a national energy policy. Dr. Kumar is now an independent consulting geologist. However, he was previously Chief Geologist of ARCO Alaska, and is intimately familiar with Prudhoe Bay and the Arctic National Wildlife Refuge.

This past year I have made speeches all over the country on national energy policy. As a professional petroleum geologist and a resident of super-environmentally sensitive Connecticut, I believe I have a very good sense of how the public views energy policy, and what the Bush Administration must do to convince the public that a) we actually have an energy crisis, and b) what is needed to convince the public to support the Administration's energy recommendations.

While in Washington this week, I would very much like to meet with Secretary Abraham and his energy policy advisors to discuss strategies for winning the public's support for the Bush Administration's energy policy recommendations. Would it be possible to meet late Thursday afternoon or evening, after our House Energy and Minerals Subcommittee hearing (2:00 pm), or on Friday afternoon?

I look forward to your earliest reply.

Yours sincerely,

G. Warfield Hobbs
President

U.S. House of Representatives
Committee on Energy and Commerce
Room 2125, Rayburn House Office Building
Washington, DC 20515–6115

March 20, 2001

Ms. Mary J. Hutzler
Director, Office of Integrated Analysis and Forecasting
Energy Information Administration
1000 Independence Avenue, SW
Washington, DC 20585

Dear Ms. Hutzler:

I am writing to confirm the invitation for you to testify before the Subcommittee on Energy and Air Quality on Tuesday, March 27, 2001, at 1:00 p.m. in 2123 Rayburn House Office Building. The hearing will be entitled "National Energy Policy: Nuclear Energy."

This is one in a series of hearings on national energy policy. Your testimony should address the current utilization of nuclear energy for electric generation, statutory and regulatory provisions that impact the supply of nuclear energy, the prospects for using nuclear energy to meet future generation needs, including the use of new technologies, and the role of nuclear energy in a comprehensive national energy policy.

Following are important details concerning the preparation and presentation of your testimony.

The Form of Your Testimony. You are requested to submit a written statement which may be of any reasonable length and may contain supplemental materials; however, please be aware that the Committee cannot guarantee that supplemental material will be included in the printed hearing record. Your written statement should be typed, double spaced, and should include a one-page summary of the major points you wish to make. You will have an opportunity to present an oral summary of your testimony to the Subcommittee; to ensure sufficient time for Members to ask questions, your oral presentation should be limited to five minutes.

Pursuant to Rule 4(b)(1) of the Rules of the Energy and Commerce Committee (a copy of which is enclosed), I am requesting you to provide 75 copies of your written statement at least two working days in advance of your appearance. This will allow Members and staff the opportunity to review your testimony. On the day of the hearing, please bring an additional 75 copies of your testimony to satisfy the anticipated public interest in this hearing.

Rule 4(b)(1) of the Committee Rules also requires that, if you have the technological capability, you should also submit a copy of your testimony in electronic format, i.e., on a computer disk. The Committee will post your testimony to the Committee Website (at "http://www.house.gov/commerce/welcome.html") after the hearing. This will increase public access to your testimony and reduce the Committee's printing costs. Please be aware that submission of your testimony in electronic form does not relieve you of the obligation to submit the requested number of printed copies of your testimony. Additional guidelines for submission of testimony in electronic format are enclosed.

Please send the electronic and printed copies of your testimony required two working days before the hearing to the attention of the Legislative Clerk for the Committee on Energy and Commerce in 2125 Rayburn House Office Building, Washington, D.C. 20515.

Publication of the Hearing Record. Rule XI, clause 2(e)(1)(A) of the Rules of the House requires the Committee to keep a written record of committee hearings which is a substantially verbatim account of remarks made during the proceedings, subject only to technical, grammatical, and typographical corrections. Your testimony, the transcript of the hearing, and any other material that the Subcommittee agrees to include in the hearing record (subject to space limitations) will be printed as a record of the hearing. You will receive a copy of the printed hearing record when it becomes available, usually 30 to 60 days after the date of the hearing.

If you have any questions concerning any aspect of your testimony, please contact Dwight Cates of the Energy and Commerce Committee staff at (202) 226-2424.

Sincerely,

Joe Barton
Chairman
Subcommittee on Energy and Air Quality

Enclosures: (1) Electronic Format Guidelines
(2) Rules for the Committee on Energy and Commerce

ES
FY1

U.S. SENATOR CHUCK HAGEL

To: **Kyle McSlarrow**
ATTN: Regina, 586-7644

Pages: **1 (*to follow*)**

From: **LouAnn Linehan**
Chief of Staff to Senator Chuck Hagel

Date: **Tuesday, March 20, 2001**

Regina: As we discussed this morning. Thank you for your help.

LouAnn Linehan

From the desk of...
Lou Ann Linehan
Chief of Staff
Senator Chuck Hagel
248 Senate Russell Bldg
Washington, D.C. 20510
(202) 224-5805
Fax: (202) 228-0467

2001-007533 Mar 21 A 8:21

MEMORANDUM

TO: Kyle McSlarrow
Chief of Staff to Secretary Spence Abraham

ATTN: Regina

FROM: Lou Ann Linehan
Chief of Staff to Senator Chuck Hagel

DATE: March 20, 2001

As mentioned on the phone to Regina, here is information on a meeting request from high-level utility industry representatives to meet with Secretary Abraham. I would like to discuss this request with Kyle at his convenience.

From March 27th to March 29th a group of CEOs and senior executives from the following representatives will be in Washington, DC for The Edison Electric Institutes Spring CEO Conference:

Greg Abel, President of MidAmerican Energy Holdings Company
John Rowe or Corbin McNeill, Co-CEOs of Exelon
Jim Broadhead, Florida Power & Light Corporation
Al Noia, Allegheny Energy
Jim Rogers, Cinergy
Jim Howard, Xcel Energy

They would like to meet with Secretary Abraham to discuss PUHCA repeal and the Administration's strategy for a national energy policy.

Any assistance that you can provide in arranging this meeting would be appreciated. Please call me at 202-224-5805 to discuss.

Thank you.

2001-007932 Mar 23 p 3:55

Bio

BIOTECHNOLOGY
INDUSTRY
ORGANIZATION

March 21, 2001

The Honorable Spencer Abraham
Secretary of Energy
1000 Independence Avenue, S.W.
Room 7A257
Washington, D.C. 20585

Dear Secretary Abraham:

I am enclosing a copy of a letter I sent to Vice President Cheney. I trust you will agree that biobased energy can plan an important role in our energy future if adequate resources are directed to its development.

The development of industrial biotechnologies that can use cellulose as a feedstock will help supply energy and contribute to the development of rural agricultural areas in the United States. With major breakthroughs in enzyme technology and plant genomics, rural areas could be both the nation's breadbasket and biobased energy fields.

I look forward to working with the Department of Energy and other federal agencies in developing this important energy resource.

Most sincerely,

Brent Erickson
Director
Industrial & Environmental Section
Biotechnology Industry Organization

BE:slmd

Attachments

1625 K STREET, N.W., SUITE 1100
WASHINGTON, D.C. 20006-1604

202-857-0244
FAX 202-857-0237
http://www.bio.org

27850

Bio

BIOTECHNOLOGY
INDUSTRY
ORGANIZATION

March 21, 2001

The Honorable Richard Cheney
Vice President of the United States
The White House
1600 Pennsylvania Avenue, NW
Washington, D.C. 20500

Dear Vice President Cheney:

I understand that you are in charge of developing a new energy policy for the United States. I applaud your efforts to provide leadership in this critical policy area and I am confident that you will take the steps necessary to ensure a diverse and robust energy policy. I would request that you consider including measures in your policy that support the development of a biobased energy industry.

To meet the current and future demand for energy, I think you would agree that we must develop a wide range of energy sources. One potential new source of energy is that produced by using enzymes as biocatalysts to convert cellulosic biomass to starch and fermentable sugars.

The development of industrial biotechnologies that can use cellulose as a feedstock will help supply energy and contribute to the development of rural agricultural areas in the United States. With major breakthroughs in enzyme technology and plant genomics, rural areas could be both the nation's breadbasket and biobased energy fields.

The problem of how to economically convert cellulose into starch and fermentable sugars is technologically very challenging. The private sector is working hard to develop novel enzymes to do this job, but many barriers remain. President Clinton signed an Executive Order in 1999 creating a biobased products and biobased energy initiative. While this was an adequate first step, much more work and more funding are needed to solve this problem.

The Bush-Cheney administration may want to consider undertaking a major new initiative to help our universities, farmers and biotechnology companies develop the means to produce enzyme biocatalysts in the amounts that would support a full-fledged cellulosic biomass energy industry. Industrial

1625 K STREET, N.W., SUITE 1100
WASHINGTON, D.C. 20006-1604

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http://www.bio.org

The Development of Biobased Energy Production

To meet the current and future demand for energy the United States must be prepared to develop a wide range of energy sources. This energy development should include energy produced through industrial biotechnology processes employing enzymes to convert cellulosic biomass to starch and fermentable sugars. The worldwide biomass represents a huge pool of untapped energy and source material for biobased products. Research must be brought to bear on enzyme technologies that can make this untapped pool of energy and feedstocks available to us.

Development of industrial biotechnologies that use cellulose in new ways will not only help supply energy and biobased products (such as biodegradable plastics), but it will also spur development in the United States' rural agricultural areas. With major breakthroughs in enzyme technology and plant genomics, rural areas not only could be the nation's breadbasket, but also become our energy fields of tomorrow.

The problem of how to convert cellulose into starch and fermentable sugars is technologically very challenging. While the privates sector is working hard to develop novel enzymes to do this job many barriers remain. President Clinton signed an Executive Order in 1999 creating a federal initiative on biobased products and biobased energy. While this was an adequate first step, much more work and more funding are needed to foster a viable biobased energy industry.

The Bush administration should consider undertaking a major initiative that would help our universities, national laboratories and biotechnology companies develop the means to produce enzyme biocatalysts in the quantities needed to support a full-fledged cellulosic biomass energy industry. The Bush administration should also begin studying ways to develop the infrastructure to gather, transport and store the cellulosic biomass a large-scale biomass energy production program would demand.

Industrial biotechnology can play a meaningful role in producing energy and biobased products if the federal government will adequately support private sector efforts to revolutionize the way in which the agriculture and biotechnology industries process agricultural biomass. Biobased energy can offer environmental and economic advantages to our country if we commit significant long-term efforts to establish an economically viable biobased energy industry. The following are just a few steps that could be taken to support this area of biotechnology.

2001-007868 Mar 22 p 2:32

BARBOUR GRIFFITH & ROGERS

TENTH FLOOR
1275 PENNSYLVANIA AVE. NW
WASHINGTON, DC 20004
(202) 333-4936

JIM JOHNSON
OF COUNSEL

DIRECT (202) 661-6327
FAX (202) 347-1534
EMAIL JIM_JOHNSON@BGRDC.COM

TO: Cheryl Alford
Office of the Secretary of Energy
586-7573

FROM: Jim Johnson

DATE: March 22, 2001

RE: Appointment request to meet with Secretary Spencer Abraham

---

Mr. George Bullwinkle, Executive Vice President, and Mr. James Burwell, Vice President of Government Affairs of SCANA Corporation, Columbia, SC. will be in Washington on Wednesday, March 28 and Thursday, March 29, 2001. SCANA is the largest supplier of electricity in South Carolina, and is a major supplier of gas in Georgia, North and South Carolina.

They would like very much to make a courtesy call to discuss the Administration's energy policy with the Secretary. We would like to request an appointment for Wednesday, March 28th, in the afternoon between 2:00 – 5:00 p.m., or Thursday, March 29th, between 9:00 – 11:00 a.m., whichever is most convenient for the Secretary. I will be accompanying Mr. Bullwinkle and Mr. Burwell. Please call Kathy Barrett at 202-333-4936 to confirm the appointment, or if you have any questions. Thank you.

B L A C K & V E A T C H

O. H. (Dean) Oskvig
President
Power Delivery

2001-008177 3/26 P 4:03

March 22. 2001

The Honorable Spencer Abraham
Secretary of Energy
Department of Energy
Forrestal Building
1000 Independence Avenue SW
Washington, D.C. 20585

Dear Mr. Secretary:

It was a pleasure to talk with you at the Energy Summit sponsored by the U.S. Chamber of Commerce, Monday, March 19. Black &Veatch and Siemens were honored to host you, your Chief of Staff, Kyle McSlarrow, and members of the Energy Policy Development Task Force. I believe that your forceful, forthright statement of the energy-related problems which the U.S. must confront and overcome lays the foundation for a challenging program that we must now flesh out and implement.

In this vital endeavor, Black & Veatch stands ready to assist as required. As one of the world's foremost designers and builders of electrical power systems, we shall no doubt be engaged in the design and construction of vitally needed facilities.

The day after your address, we, along with Siemens, presented a generation/ transmission project concept to the attendees of the Summit as an electric power shortage solution. It effectively uses Western U.S. coal and can also use renewable sources of energy. Central to the concept is a strong transmission system.

As this concept is further developed, we look forward to presenting details of this approach to your staff at the Department of Energy. In addition, we shall continue to work with your former colleagues in the Senate and House to support legislation aimed at achieving the goals you described in your Energy Summit address. We look forward to working with you and your staff in the realization of those goals.

In the meantime, I wish your Spartans the best of luck in the tournament.

Sincerely yours,

Dean Oskvig

cc: Mr. Kyle McSlarrow, Chief of Staff

P.O. BOX 8405 KANSAS CITY, MISSOURI 64114

27854

GLOBAL ENVIRONMENTAL SOLUTIONS
P. Benjamin Underwood, Esq.
Maritime Building, Suite 100G
215 East Bay Street
Charleston, S.C. 29401

March 22, 2001

The Honorable Spencer Abraham
Secretary
United States Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

RE: Coordinating the National Energy Policy and the National Environmental Policy Act (NEPA)

Dear Secretary Abraham:

I congratulate you on your recent speech before the U.S. Chamber of Commerce at the National Energy Summit. Having arrived at the brink of a new energy crisis, due in large part to nearly a decade of political shortsightedness, I applaud your efforts to propose and implement a National Energy Policy. I would also like to propose a solution to a legal issue that you and the Administration will no doubt confront very soon.

As you and the Administration prepare to announce a proposed energy policy to the nation, I would suggest that there is a statutory tool that could serve you, the Energy Task Force, and the Administration quite well, if applied strategically. This statutory tool consists of the environmental process requirements within the National Environmental Policy Act (NEPA). Too often, Federal agencies forsake the opportunity to use the procedural requirements of NEPA to their full advantage, especially when confronting a new policy or plan. Instead, environmental compliance becomes an afterthought and the obligatory process fails to provide the political gains and legal protection of a well-designed NEPA strategy.

An objective reading of 40 CFR §1508.18(b) by your attorneys will confirm that NEPA applies to the adoption of a proposed national energy strategy. The critical question for the Administration, therefore, is not whether, but when and how to satisfy the procedural requirements of the statute. May I suggest that it would be to the Administration's strategic advantage to implement the procedural requirements of NEPA as soon as practicable and to utilize a policy-level approach to statutory compliance. The benefits of such a strategy would be many, including: 1) the immediate recognition that the Administration takes environmental requirements seriously; 2) reassurance to a suspicious public that the development of a national energy policy will be an above-board process with ample opportunity for public involvement; 3) an acceleration of the actual implementation of the new energy policy and ensuing site-specific actions; and 4) the

Phone: 843 • 577 • 6100 nepa@bellsouth.net Fax: 843 • 577 • 9778

establishment of a strong legal position from which to defend against the inevitable challenge.

DOE is fortunate to employ some of the best NEPA talent in the country. Carol Borgstrom, Bill Dennison, Marc Johnston, Steve Fergusen, to name just a few, are outstanding practitioners and counselors. Additionally, the staff at the Council on Environmental Quality (CEQ), which oversees NEPA compliance nationally, relies upon the exceptional guidance of Dinah Bear and others. Some of the other Federal agencies that would necessarily cooperate in the development of a national energy policy also have NEPA advisors with varying degrees of expertise. Nevertheless, with all this talent, designing an effective NEPA strategy to advance a national energy policy will be an enormous undertaking and require creative thinking "outside the box."

May I suggest that a policy-level document recently prepared by DOE's Bonneville Power Administration (BPA), which evaluates the alternative means to balance regional energy production and fish and wildlife mitigation, would serve as a useful analytical model for a NEPA process to support the national energy policy. This BPA NEPA process is an outgrowth of another policy-level NEPA document prepared for the Agency's business plan, which was lauded by the United States Court of Appeals for the Ninth Circuit as "superior." In my opinion, the methodology employed by BPA to examine energy and environmental issues in the Pacific Northwest could be modified and expanded to evaluate similar issues on a national scale.

To be completely candid, I assisted BPA, as a consultant, in the preparation of the aforementioned policy level NEPA document and am very proud to have contributed to the development of this unique document. I have approached bigger, more recognized NEPA consulting firms about jointly proposing a procedural solution for a national energy policy, but I sense that they either fear the vastness of this project or are unwilling to step "outside the box" to change their standard approach to NEPA compliance. In my opinion, however, it is the very enormity of the project that mandates a different procedural approach, as BPA was willing to do with respect to their analysis of energy production and endangered salmon.

It now occurs to me that DOE and the Administration may be further along than anticipated and, probably feared, in the development of a strategy that will satisfy an important environmental compliance requirement, involve and inform the public, advance an energy policy long overdue, and provide legal protection. I would further suggest that the cost of fulfilling these goals could be considerably less than some may propose. Much of the talent necessary to do the job is scattered around the country, but already on the government payroll. I predict that the challenge of being associated with such a substantial and unique NEPA project would be of great interest to these individuals. No doubt, such an endeavor would require a recommitment of resources, but the job need not cost the many millions that some will no doubt suggest.

In closing, as one who has seen good, bad and ugly NEPA processes, I strongly suggest that DOE, the Interior Department, CEQ, EPA and others begin to design a

NEPA strategy today that will position the Administration where it wants to be a year or two down the road. The sooner you start, the sooner you can actually begin to solve the problem to your greatest advantage.

I appreciate your valuable time.

Sincerely,

P. Benjamin Underwood, Esq.

cc:-- The Honorable President of the United States George W. Bush
The Honorable Vice-President of the United States and Chairman of the Energy Task Force Richard Cheney
The Honorable Secretary of Interior Gale Norton

JANE DEE HULL
GOVERNOR
STATE OF ARIZONA

March 22, 2001

The Honorable Richard Cheney
Vice President of the United States
Old Executive Office Building
17th Street & Pennsylvania Avenue
Washington, D.C. 20500

Dear Vice President Cheney:

I appreciate your ongoing leadership of the President's Task Force on National Energy Policy and the effort the Administration has dedicated to this vital undertaking. I know my fellow Western Governors join me in sincere appreciation of the input you have sought from us on this topic. We are working together to prevent harm to the other states in the region, as California seeks to deal with the problem it has created for itself.

Arizona has been working hard to address our electricity supply needs. While we still need to import some power in the summer, we are leading the Nation in approving, siting and constructing new electricity plants. Incidentally, we've maintained this adequacy of supply even while our state grew by 40% over the past decade. Absent some distortion of the Western market and grid by either California or the federal government, we should still have the electricity supply our state needs for the foreseeable future.

Arizona's primary concern is ensuring adequate transmission capacity to get our supply of generated electricity to the places it is needed within the state. If there is an urgent and obvious federal role in the Western energy situation, it is to facilitate the approval and siting of new transmission lines. Since so much of the West is dominated by federal land ownership, we must count on the timely and professional assistance of federal land agencies or we simply cannot move this generated electricity to the markets.

This has been a concern most recently with the national monument declarations by the Clinton Administration, during the last few months of his tenure. I made considerable effort to inform Secretary Babbitt and President Clinton of the barriers to transmission corridors that some of these monuments could create. Even though some of these corridors could benefit California – as well as the people in my state, of course – the Secretary and President Clinton failed to provide a path that is particularly helpful.

1700 WEST WASHINGTON, PHOENIX, ARIZONA 85007
(602) 542-4331 • FAX (602) 542-7601 • WWW.GOVERNOR.STATE.AZ.US

I am grateful to Secretary Gale Norton, who has already gone to work on this problem with great understanding and attention. She has worked with us – within the parameters of the Sonoran Monument declaration – to create a process to act on desperately needed transmission corridors. Secretary Norton has been constrained in this effort, however, by the somewhat time-consuming "management plan" process. And other monuments declared in Arizona may also create barriers to other transmission line corridors that could be essential to provide electricity to Tucson, Phoenix and other places in the West. In addition, the imposition of a new federal process on top of the existing regulatory regime, including those approvals already granted by the state, will potentially delay energy projects for which we cannot wait any longer.

As the President's Task Force considers these issues, I encourage the Task Force to evaluate the broader issue of approving and siting transmission lines across various types of federal lands. Given our recent experience in Arizona, I also encourage specific attention to the latest potential barriers caused by newly declared monuments in my state and elsewhere in the West.

Again, thank you for your work on this critical issue. I appreciate the Administration's strong stance in support of the best strategy for the energy future of the West and the Nation. While there has been great pressure to adopt policies that would be "feel-good" solutions at best, you have kept the focus on the sound, long-term approach that will benefit our entire country in the future.

Sincerely,

Jane Dee Hull

JANE DEE HULL
Governor

b(5)

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC 20426

OFFICE OF THE GENERAL COUNSEL

March 23, 2001

Mr. Joe Kelliher
United States Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Dear Mr. Kelliher:

b(5)

Sincerely,

Kevin P. Madden
General Counsel

Attachment

cc: Secretary Abraham
Chief of Staff Andrew Card

JAMES M. INHOFE
OKLAHOMA
WASHINGTON OFFICE
453 RUSSELL SENATE OFFICE BLDG.
WASHINGTON, DC 20510-3603
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1900 N.W. EXPRESSWAY, SUITE 1210
OKLAHOMA CITY, OK 73118
405-608-4381

United States Senate

WASHINGTON, DC 20510-3603

COMMITTEES:
ARMED SERVICES
ENVIRONMENT AND PUBLIC WORKS
INDIAN AFFAIRS
INTELLIGENCE

March 23, 2001

The Honorable Richard B. Cheney
Vice President of the United States of America
The White House
1600 Pennsylvania Avenue, NW
Washington, D.C. 20500

Dear Mr. Vice President:

In your capacity as the Chairman of the National Energy Policy Development Group, we are writing to bring to your attention our concerns that, unless addressed, the prior administration's EPA's New Source Review ("NSR") enforcement policies will continue to interfere with our nation's ability to meet our energy and fuel supply needs. We strongly urge that the Administration take into account these concerns in developing its national energy plan.

As you are very much aware, the nation faces a potential energy supply shortage of significant dimensions. The California energy crisis is receiving the greatest attention in the media. However, major challenges exist in meeting demands for gasoline and other fuels, especially in the Midwest. More troubling, current projections suggest fuel shortages and price spikes – far exceeding last year's problem. These are due to a number of factors including: difficulties in making summer-blend Phase II reformulated gasoline; EPA hurdles to expanding refinery capacity; and the overall increase in energy demand.

Unless reviewed and addressed, EPA's implementation of NSR permitting requirements will continue to thwart the nation's ability to maintain and expand refinery capacity to meet fuel requirements. In 1998, EPA embarked on an overly aggressive initiative in which it announced new interpretations of its NSR requirements that it has applied retroactively to create a basis for alleging that actions by electric utilities, refineries and other industrial sources taken over the past 20 years should have been permitted under the federal NSR program. We also understand that these new interpretations conflict with EPA's regulations, its own prior interpretations and actions, and State permitting agency decisions.

EPA's actions have been premised heavily on its reinterpretation of two elements of the NSR permitting requirements. First, EPA's regulations specifically exempt "routine maintenance, repair and replacement" activities from NSR permitting. EPA now claims that

projects required to be undertaken by utilities and refineries over the past 20 years to maintain plants and a reliable supply of electricity and fuels were not routine and thus should have gone through the 18-month, costly NSR permitting process. EPA's enforcement officials are asserting this even though, for more than two decades, EPA staff have had full knowledge that these maintenance, repair and replacement projects were not being permitted.

A second ground for many of EPA's claims has to do with whether projects resulted in significant emissions increases. By employing a discredited method for determining whether emissions increases would result from a project-using so called "potential emissions" instead of actual emissions, EPA is asserting that numerous projects resulted in emission increases when in reality they had no effect on emissions or were followed by emissions decreases.

EPA's NSR interpretations have created great uncertainty as to whether projects long recognized to be excluded from NSR permitting can be undertaken in the coming months to assure adequate and reliable energy supplies. Electric utilities and refineries have expected that they could undertake maintenance activities, modest plant expansions, and efficiency improvements without going through lengthy and extraordinarily costly NSR permitting, as long as the project involved either routine maintenance or no significant increase in actual emissions.

Now, in light of the new interpretations, utilities and refineries find themselves in a position where they cannot undertake these very desirable and important projects. This is not an acceptable result when the nation is faced with severe strains on existing facilities. Against this backdrop, we strongly urge that the National Energy Policy Development Group:

- give investigation of EPA's implementation of its NSR requirements a high priority;
- suspend EPA's activities until such time as there has been a thorough review of both the policy and its implications;
- clarify whether the implications of EPA's new NSR interpretations and its enforcement initiative are being reviewed by the White House Office of Energy Policy and the Secretary of Energy prior to actions that could undermine energy and fuel supply; and
- establish guidelines to assure that EPA's application and enforcement of its NSR requirements will not interfere with the Administration's energy and fuel supply policy. Requirements should be developed, which are consistent with responsible implementation of the statutory NSR requirements.

Specifically, to assist you in assessing the implications of NSR on meeting the nation's energy and fuel supply demands, you may want to obtain the following: (1) all requests since January 1, 1998 for information under section 114 of the Clean Air Act issued to facilities and companies in any sector involved in energy and fuel supply; and (2) notices of violation issued to, and complaints filed against, any such company and/or facility alleging NSR violations during that period. We are submitting a similar request to EPA today.

Thank you for your consideration of this matter. We look forward to working with you in the future to develop environmental policy, which further protects human health and the environment and works in concert with sound energy policy.

Sincerely,

James M. Inhofe
U.S. Senator

John B. Breaux
U.S. Senator

cc: The Honorable Christine Todd Whitman
The Honorable Spencer Abraham
The Honorable John Ashcroft

2001-008262 3/27 P 3:18

ASSOCIATION OF AMERICAN RAILROADS
50 F STREET, N.W.
WASHINGTON, D.C. 20001

Edward R. Hamberger
President and Chief Executive Officer

Telephone: (202) 639-2400
Fax: (202) 639-2286

March 23, 2001

The Honorable Dick Cheney
The White House
Washington, DC 20500

Dear Mr. Vice President:

I am writing to you in your capacity as chairman of the White House Energy Policy Development Task Force. The Association of American Railroads (AAR) appreciates this opportunity to offer its observations on the impact of higher energy prices on the nation's rail sector.

I would note that AAR's comments are intended to supplement the briefing papers submitted to you earlier by the Coal-Based Generation Stakeholders group of which the railroads are leading members. Some 52 percent of our nation's electricity is generated by coal (with more than two-thirds of that coal transported by rail) and coal is one of the nation's least expensive sources of electrical energy.

In developing an effective energy strategy, it is important to remember that America -- at least until recently -- has enjoyed some of the lowest energy prices in the world. These low energy costs have enhanced our competitive position in all sectors of trade from agriculture to manufacturing.

Railroads applaud the Bush administration's efforts to develop a national energy strategy, and we commend you for personally taking on the responsibility for this effort. Energy improvements will contribute to the industry's bottom line due to both lower diesel fuel costs as well as their impact on railroad customers. These customers range from automobile manufacturers whose products can be affected by higher fuel prices to electric utility customers for whom railroads ship millions of tons of coal each year.

27864

Despite the fact that railroads are three times more fuel efficient than trucks, the price of diesel fuel continues to be a major challenge for the rail industry. In providing cost and energy efficient freight service, U.S. freight railroads consume huge volumes of diesel fuel -- over four billion gallons annually. Because the cost of fuel is a major cost component of railroad operations -- comprising 7.1 percent of industry costs -- the alarming jump in fuel prices over recent periods has been a substantial hardship for railroads and their customers.

The price of railroad fuel toward the end of 2000 was the highest during the past 20 years, and likely the highest ever. As of the end of 2000, the average price paid by railroads for diesel fuel had rocketed to a level 239 percent of the price at the beginning of 1999. Long term contracts and customer agreements often limit the ability of railroads to recover major cost increases in a timely fashion. Thus, railroads are being forced to expend an additional $2.4 billion annually or $6.6 million more each and every day. Moreover, because this huge increase in costs is required to perform exactly the same level of service, these increased costs have a direct impact on the industry's financial bottom line. In fact, they represent an amount equal to three-quarters of industry net income.

Looking ahead, future pricing policies will have to include major price increases to recover lost profitability as a result of fuel cost increases. Some shippers have indicated that they will be unable to absorb these transportation rate increases and will be forced to pass the expense on to their customers.

Because railroads have huge fixed costs to cover, it makes economic sense to move traffic that is marginally profitable (i.e., railroads handle traffic that is slightly above variable cost because it contributes to fixed cost). However, the fuel cost increases have raised our variable costs to such a degree that, in some segments, variable costs are becoming higher than the revenue, and traffic that has been historically profitable may have to be eliminated.

Moreover, higher energy prices are having a negative effect on some freight shippers, a development that affects freight railroads indirectly. For instance, eight of the ten major aluminum producers served by one leading railroad are currently shut down, and the remaining two are operating at 50 percent capacity. Instead of producing product, these companies are selling their allotted power.

Other railroads report that dramatically higher natural gas prices have led to significant traffic losses due to reductions in production and plant closures in areas such as plastics, cement, fertilizer, and intermediate gases such as propane and butane.

For these reasons, AAR encourages you to take strong and immediate action to formulate an effective national energy strategy. In addition to urging support for actions

to reduce energy prices and for the positions of the Coal-Based Generation Stakeholders group, I am pleased to enclose AAR briefing papers on the following three railroad priorities: repeal of the 4.3 cent per gallon "deficit reduction" diesel fuel tax, an acceptable resolution of the coal mine valley fill issue, and establishment of a locomotive fuel efficiency program within the Department of Energy.

AAR looks forward to working with you and the other members of the Energy Policy Development Task Force to craft a balanced and effective energy policy for our nation.

Sincerely,

Ed

Edward R. Hamberger

cc: The Honorable Norman Mineta
The Honorable Spencer Abraham
Mr. Lawrence Lindsey
Mr. Andrew Lundquist
Ms. Karen Knutson
Mr. John Frenzel

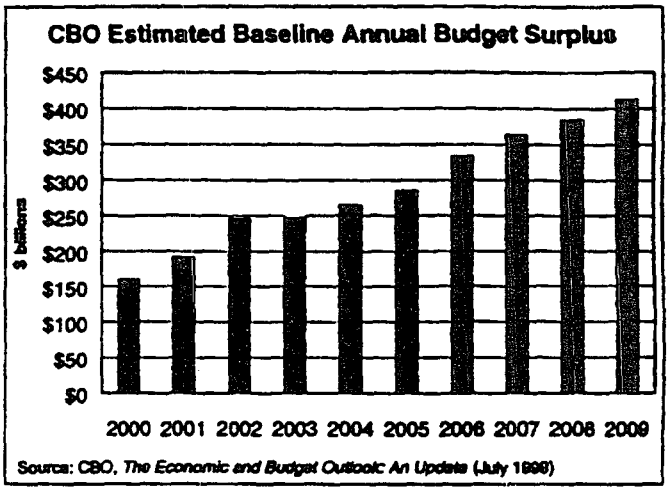
Repeal Deficit Reduction Fuel Taxes

AAR supports S. 820 and H.R. 1001 that would repeal deficit reduction fuel taxes paid by railroads and barges. AAR opposes H.R. 2060 that would create a railroad trust fund from deficit reduction fuel taxes.

Inequitable Taxation in a Surplus Environment

The railroad and inland barge industries pay a 4.3 cents per gallon deficit reduction fuel tax even though there is no longer a federal deficit. Furthermore, the railroad and inland barge industries are required to pay deficit reduction fuel taxes while their competitors, the truckers, do not.

Among all U.S. industries, only transportation industries have been obligated to pay special deficit reduction fuel taxes, and today, among the different transportation modes, only railroad and barge companies continue to pay such a tax. The deficit reduction fuel tax rate has varied over time, and currently stands at 4.3 cents per gallon on diesel fuel consumed. Since inception of the tax in 1990, freight railroads have paid over $1.4 billion in deficit reduction fuel taxes. Railroads continue to pay these taxes even though there is no longer a federal deficit.



Trucking companies, direct competitors of railroads and barge companies, do not pay a deficit reduction fuel tax. The entire revenue from the taxes paid by the truckers is paid into the Highway Trust Fund, and is used to pay for improvements and maintenance of highway infrastructure. Therefore, while railroads continue to contribute to a non-existent deficit, the truckers contribute to their own infrastructure improvement.

By contrast, the railroad industry does not have a trust fund but privately funds its own maintained rights-of-way. In 1998, freight railroads spent $7.7 billion maintaining and improving their own infrastructure. This is equivalent to a tax of $2.13 per gallon of fuel consumed by railway locomotives — an amount, which is four to ten times the equivalent of tax paid by the competing modes of transportation.

Both the House and Senate 1999 tax cut bills, acknowledged the tax inequity and included a repeal of the 4.3 cent deficit reduction fuel tax for the railroad and barge

industries, but the final 1999 tax cut bill was vetoed by President Clinton for reasons other than the railroad tax repeal.

Support for an Equitable Solution

The railroads are not alone in calling for a fair and equitable solution to the current deficit reduction fuel tax problem. The U.S. Chamber of Commerce and the American Road and Transportation Builders Association (ARTBA) have adopted policies in support of repealing the 4.3-cent deficit reduction fuel tax. Numerous agriculture groups including the American Farm Bureau Federation, American Soybean Association, National Association of Wheat Growers, and the National Corn Growers Association are also on record supporting the repeal of this tax.

Railroad Trust Fund Proposals

AAR opposes H.R. 2060, the Railway Safety and Funding Equity Act of 1999 (RSAFE), a bill that would transfer the 4.3-cent deficit reduction fuel tax into a new Railroad Trust Fund for highway-rail grade crossing safety programs. H.R. 2060 would divert significant railroad resources to help solve what is fundamentally a highway safety problem. Not only is this proposed cross subsidy of highway needs by the railroads bad public policy, but these railroad fuel tax revenues are needed to meet significant railroad infrastructure needs.

AAR also opposes any effort to use the 4.3 cents per gallon deficit reduction fuel tax paid by the railroads to create a Railroad Trust Fund to finance short-line/regional railroad improvements, intercity or commuter passenger rail needs, or other purposes. In these scenarios, the beneficiaries of the funds, while having contributed little or nothing, would profit from a cross-subsidy from the large freight railroads. It is not appropriate to expect the large railroads to provide additional funding support for passenger rail, short-lines, or highway-rail traffic control devices. Neither do large railroads care to finance their own infrastructure needs through a Railroad Trust Fund by inefficiently sending funds to Washington, DC, simply to be returned to private sector railroads, minus bureaucratic administrative and overhead costs, and subject to political manipulation and government regulatory red tape.

Summary

The railroads' true advantage in cost, environmental impact, reduced highway damage and congestion, safety, and fuel efficiency rightfully have become important criteria in a modal choice. Artificial cost barriers to the use of freight transportation, in terms of inequitable deficit reduction taxes, can only disadvantage rail in the competitive marketplace and distort consumer choice.

AAR supports S. 820 and H.R. 1001 that would repeal the 4.3 cents per gallon deficit reduction fuel tax for the railroads and barges. This tax should be repealed because it is:

1. Discriminatory against railroads, since the trucking industry pays no deficit reduction fuel tax;

2. Economically unsound, because it artificially diverts traffic that other wise would travel by rail; and

3. Inconsistent with national policy, because it violates the goals of economy, impartiality, energy efficiency, and environmental friendliness.

Additionally, large freight railroads oppose the transfer of these revenues to a federal Railroad Trust Fund or any other form of a transportation trust fund.

THE COAL MINE VALLEY FILL ISSUE

DESCRIPTION: In October 1999, a federal district court in West Virginia stunned the Nation's coal industry with a decision barring the longstanding practice of building valley and hollow fills to store the dirt and rock generated during coal mining. *Bragg v. Robertson*, 72 F. Supp. 2d 642 (S.D. W.Va. 1999), *appeal pending*, No. 99-2443 (4th Cir). Notwithstanding the fact that these engineered fill structures are both a necessary part of coal mining operations and expressly authorized by federal laws regulating coal mining, the court interpreted regulations issued under those laws as prohibiting their construction in hollows and valleys that inevitably contain stream courses. While the decision remains pending on appeal, the past Administration abandoned the working men and women of America's coal industry and announced that it now agreed with the court's view. The past Administration's action in this regard is not only contrary to the laws it administers, it will have economic consequences in West Virginia alone that a Marshall University study concluded will be "as great or greater than those of the Great Depression." Earlier in the same litigation, the federal agencies (EPA, OSM & COE) settled the claims related to the use of section 404 permits to authorize these fills under the Clean Water Act. The agencies agreed to conduct a programmatic Environmental Impact Statement which addresses environmental and economic consequences of different actions, as well as evaluate the better coordination of overlapping regulatory programs.

STATUS: The appeal in the 4th Circuit has been briefed and was argued on December 7, 2000. In the meantime, the EPA, OSM and COE are preparing a Draft EIS. EPA and COE also have pending a proposed rule published on April 20, 2000 clarifying that excess spoil is fill material subject to section 404 and not section 402 of the CWA. This rule would remove the ambiguity in the agencies' programs that the district court relied on to reach its erroneous conclusion that these fills as well as other activities that have the effect of replacing waters of the United States are not authorized by section 404.

KEY DECISIONS: Should any part or form of a Draft EIS be publicly released before the completion of the underlying technical, economic and other studies?
OPTIONS: * Delay public release of Draft EIS in any form until all the underlying studies are complete and have been subject to some form of peer review. This option is completely defensible and will assure that the EIS process on this matter will not be subject to criticisms related to its credibility and integrity.

*Allow the agencies to release an executive summary or other form of a draft EIS that purports to provide an overview of the current analysis of complex technical questions. This option will appease few and invite strong criticism from industry and, perhaps, the West Virginia state legislature that has funded part of the studies.

KEY DECISIONS: Whether EPA and COE should adopt as a final rule the proposal clarifying the scope of the section 404 program with respect to excess spoil and other activities that have the effect of replacing waters of the United States.
OPTIONS: * Proceed to adopt as final the proposed rule published on April 20, 2000. The rule is an important part of maintaining the integrity of the 404 program by clarifying a longstanding ambiguity that has caused grave uncertainty for the regulated community and the agencies. It not only addresses the excess spoil issue but other activities as well, e.g. landfills.

* Await the decision of the 4th Circuit to determine whether it would require any modification of the proposal to address the central features of the rule. At some point, the EIS on mountaintop mining will have to analyze how excess spoil fills are to be addressed within the prevailing regulatory schemes under the CWA and SMCRA and whether any conflicts exist.

Public-Private Fuel Efficiency and Emissions Partnerships

WHAT SHOULD BE DONE?	Establish a public-private partnership involving the federal government, railroads, and railroad suppliers designed to increase the fuel efficiency of, and reduce emissions from, diesel locomotives. The partnership should be similar to the "21st Century Truck Initiative" now underway.
WHY?	The partnership would encourage conservation of natural resources and reduced emissions by the nation's largest freight transportation provider. Moreover, the "21st Century Truck Initiative" will use hundreds of millions of dollars of federal funds to sharply increase fuel efficiency and lower emissions for motor carriers that compete against railroads. Equity demands that railroads receive the same support.

ISSUE OVERVIEW

In April 2000, the Clinton Administration announced the creation of the "21st Century Truck Initiative," a public-private research partnership involving many of the nation's largest heavy-duty engine and truck companies; the U.S. Departments of Defense, Energy, and Transportation; and the Environmental Protection Agency.

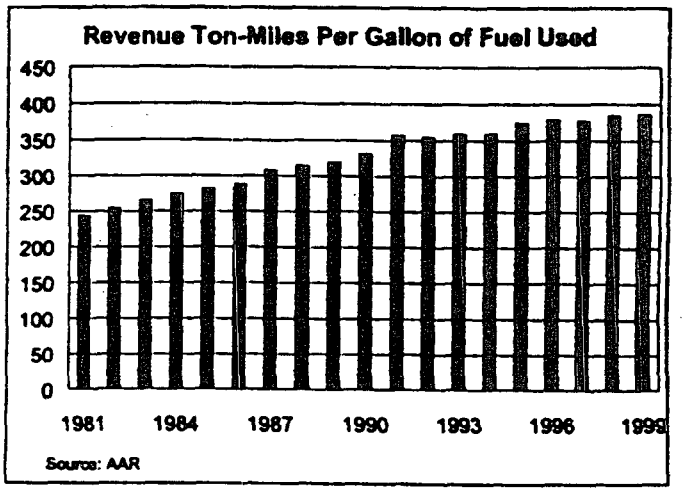
The goals of the Truck Initiative include developing truck and bus technologies that increase fuel economy, improve safety, reduce emissions, and lower costs. The partnership is designed to lead, within 10 years, to prototypes that double existing fuel economy for long-haul trucks and significantly reduce truck emissions of nitrous oxide, particulates, and other air pollutants.

Because of the Truck Initiative, the fiscal year 2001 budget saw an increase of $31 million in truck research spending to a total of $137 million.

Railroads account for more than 40 percent of the nation's freight ton-miles, considerably more than trucks' 29 percent share. Therefore, increases in rail fuel efficiency would significantly benefit our economy and environment. However, there is no public-private program involving railroad locomotives similar to the Truck Initiative. Instead, railroads and their suppliers must fund research and development efforts aimed at increasing fuel efficiency and reducing emissions on their own. For example, the Burlington Northern and Santa Fe Railway and the Union Pacific Railroad are spending more than $1 million apiece on these issues, while the Association of American Railroads is funding an industry-wide emissions research program.

JUSTIFICATION FOR DESIRED POLICY

- A federal program to increase fuel efficiency and reduce emissions from diesel locomotives will provide public benefits to the environment similar to those of the 21st Century Truck Initiative.
- By providing motor carriers a major federal subsidy through the Truck Initiative, the federal government will artificially reduce motor carrier costs. This imbalance between trucks and railroads will encourage shippers to use trucks, even where railroads provide more efficient services.
- The U.S. Department of Transportation's *Moving America: New Directions, New Opportunities — A Statement of National Transportation Policy* notes that "Federal programs and policies must treat modes and carriers fairly." This condition is clearly violated if motor carriers receive federal benefits not made available to their competitors.
- A federal program will magnify the substantial strides in both fuel efficiency and emissions control already accomplished by the railroads. Railroad fuel efficiency is up 16 percent since 1990 and 58 percent since 1980. Railroads are also committed to substantial reductions in atmospheric emissions, having endorsed an EPA proposal that calls for a 60 percent reduction in nitrogen oxide emissions from locomotives manufactured beginning in 2005. With federal support, the railroad industry can build on its own voluntary achievements and foster improved conservation and emissions control.



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USAEE

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TELECOPIER TRANSMISSION SHEET

NAME:	Hon. Spencer Abraham Attention: Greg Williams
FAX:	586-7573
FROM:	John W. Jimison President, National Capital Area Chapter
DATE:	March 23, 2001
SUBJECT:	Speaking Invitation

John Felmy of API spoke to you and mentioned that this would be coming. The original will be messengered on Monday. If you do not receive 7 pages in their entirety (including this cover sheet), please call **(202) 955-6067** and ask for me. Thank you.

This was faxed Friday pm @ 6:45

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USAEE

March 23, 2001

Via Fax: 202-586-5753

Hon. Spencer Abraham
Secretary
U.S. Department of Energy
Forrestal Building
Washington, D.C.

Dear Secretary Abraham:

This letter invites you to be the luncheon speaker at the annual Energy Policy Conference of the National Capital Area Chapter of the U.S. Association for Energy Economics on Thursday, April 5th. We expect to be breaking from the morning session for the luncheon at 12:45 pm. The program will be held at the Kenney Auditorium of the Johns Hopkins School of Advanced International Studies at 1740 Massachusetts Avenue, NW. The general title of the conference this year is "Making the Trade-Offs for a Comprehensive U.S. Energy Policy."

We are very embarrassed to be approaching someone of your stature for this occasion at such a late date. We had obtained Andrew Lundquist's agreement to appear, but Vice President Cheney recently informed him that he required him to be out of Washington on that day, and we just learned of the need to fill this key hole in our program. Needless to say, we had no expectation that your schedule might permit you to appear, but calling your office out of sheer wishful thinking, we learned from your scheduler that you indeed did not have a conflict, so we were certainly willing to run the risk of an embarrassing refusal for even a small chance of persuading you to join us.

I am attaching the conference program to this letter, and hope you will take a moment to review it before you decide, because I think you will see that you would be highlighting a very significant day of high-powered reflection on the process and problems of divining a comprehensive national energy policy. We start with former Secretary of Energy (and Defense, and Director of the CIA) James Schlesinger, whose talk is entitled "What we have learned in twenty-five years of trying to develop a national energy policy, and what we still don't know." We follow with panels of experts focusing on how to balance the competing but legitimate objectives energy policy must serve. Your presentation at lunch would be the lynch-pin to our day, focused on the energy policy priorities the Bush Administration recognizes and how you intend to serve them.

As you can see in the program, the USAEE is a non-profit professional organization of individuals who focus on energy issues and particularly on their economic aspects. The audience will consist of 150 to 200 persons, mostly professionals connected with energy industries, consultancies, and government agencies, prominently including your Department, and including some students and diplomatic personnel. Press is not excluded, but is not solicited. We're happy to answer any questions about the conference or our organization.

Energy policy issues are now very prominent in the news and public consciousness, and can potentially be divisive, but this conference is focused on recognizing that there are multiple valid objectives that cannot all be equally well served, and on the process of identifying the consensus policy that makes the best sense for the nation. Knowing that this Administration has set as a prime goal the making of policy in such a unifying, consensus fashion, we would be very eager to hear your evolving thoughts about the content of such an energy policy and your plans to achieve its enactment.

We will look forward to hearing back from you, and hope that you can accept this fervent although late-hour invitation.

Sincerely yours,

John W. Jimison
President
National Capital Area Chapter
U.S. Association for Energy Economics

cc: Andrew Lundquist, Energy Policy Task Force, White House
John Felmy, API
Shirley Neff, Senate Energy Committee Staff

Fifth Annual Washington Energy Policy Conference

Making the Trade-Offs for a Comprehensive U.S. Energy Policy

The Annual Energy Policy Conference of the
National Capital Area Chapter, U.S. Association for Energy Economics
presented in cooperation with the
International Energy and Environment Program,
Nitze School of Advanced International Studies, Johns Hopkins University

Thursday, April 5, 2001

Kenney Auditorium, 1740 Massachusetts Avenue, NW

Developing a comprehensive energy policy is all about making trade-offs among valid public policy objectives. Consensus energy policy objectives include: (1) low-cost energy for our economy, (2) security from unreliable foreign energy, (3) avoiding major impacts on the environment from energy production and use, (4) use of competitive market mechanisms avoiding monopoly market power, and (5) achieving sustainable and stable energy supplies into the future. We seek a policy to do all this and stand the test of time as well.

Our policy options to serve any one of these objectives tend, however, to offend other objectives from the same list. Our cheapest and most abundant domestic fuel is also the most environmentally harmful to produce and use. Competitive market pricing means integration with world markets and exposure to cheap imports from unreliable sources. Limiting access to domestic supplies for environmental reasons means greater reliance on imports. Taking action to keep prices low may prevent a transition to longer-term and more sustainable energy supplies. Cheap energy encourages consumption (and therefore emissions) and discourages investments in efficiency.

The NCAC's Annual Energy Policy Conference is a one-day event focusing on the process of making the trade-offs, finding the right balance of policy, and serving the highest priorities without trampling on other key priorities. A group of tested experts, sometimes with starkly differing views, will explore in give-and-take dialogue how our government should make the trade-offs among competing policy objectives. They won't spout their party line or serve up standard rhetoric, but will instead jointly confront questions designed to expose the critical energy judgments we face as a nation.

Making the Trade-Offs for a Comprehensive U.S. Energy Policy

Thursday, April 5, 2001

Kenney Auditorium, Nitze School of Advanced International Studies
Johns Hopkins University
1740 Massachusetts Avenue, NW

Conference Sponsorship:

The National Capital Area Chapter (NCAC) is one of the most active chapters of the **U.S. Association for Energy Economics**, based in Cleveland, Ohio. The USAEE, in turn, is an affiliate of the **International Association for Energy Economics**. The NCAC sponsors a series of monthly luncheons focusing on topical energy economic and policy issues.

The Nitze School of Advanced International Studies (SAIS) is a graduate division of the **Johns Hopkins University**, offering advanced degrees in international affairs. This conference is co-sponsored by the International Energy and Environment Program of SAIS.

8:00 AM **Coffee and Registration**

9:00 AM **Welcome**
Professor Wil Kohl
Director, International Energy & Environment Program, Nitze School of Advanced International Studies

9:05 AM **Introduction and Explanation of Panel-Discussion Format**
John Jimison
NCAC President;
Partner, Berliner, Candon & Jimison

9:15 AM **Introduction of Keynote**
Guy Caruso
NCAC Vice President, CSIS/USEA

Keynote Address
Hon. James Schlesinger
"What we should have learned from twenty-five years of trying to develop a comprehensive national energy policy, and what we still don't know"

9:45 - 11:15 AM **Panel I –The Right Balance of Policies Affecting Energy Supply and Demand**

Panelists:
Charles Ebinger
Vice President and Director
Nexant, Inc.
Jeff Seabright
Vice President, Policy Planning
Texaco, Inc. (invited)
Ellen Berman
Director, Consumer Energy Council of America (invited)
Howard Geller
Former Executive Director,
American Council for an Energy Efficient Economy

Moderator: ***David South***
Vice President,
Energy Resources International

Panelists will answer the following questions. How should energy policy be designed to:
1. Assure adequate supplies of energy at reasonable prices while recognizing longer-term realities and trends?
2. Assure that U.S. national security is not threat ened while keeping our energy market integrated with world energy markets?
3 Assure that the local, regional, and global environment is not threatened while recognizing the political and economic realities of the American lifestyle?
4. Find the right balance between competitive market forces and government regulation or intervention?

11:15– 11:30 AM **Break**

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Making the Trade-Offs for a Comprehensive U.S. Energy Policy

To register: Please mail the form below with your check (payable to NCAC/USAEE) to: Ms. Pamela Tomski, Treasurer, NCAC, c/o Wampler Associates, 1130 17th St. NW, Ste. 312, Washington, DC 20036. To register by e-mail: ptomski@erols.com

Please accept my registration for the Washington Energy Policy Conference on April 5, 2001

Name_____ Title _____

Company/Organization_____

Address: _____

_____

Phone_____Fax _____E-mail_____

Please check the registration appropriate for you:

NCAC/USAEE Member $75 _____

New Member NCAC/USAEE $95 _____

Non-Member $110 _____

Don't miss this special opportunity to save on membership fees! Join NCAC today!

NCAC
c/o Wampler Associates
1130 17th St. NW, Ste. 312
Washington, DC 20036

27878

The Secretary of Energy
Washington, DC 20585
March 26, 2001

2001-002767

Dr. Stephen O. Dean
President
Fusion Power Associates
2 Professional Drive. Suite 249
Gaithersburg, MD 20879

Dear Dr. Dean:

Thank you for your letter of January 31, 2001, concerning energy policy and the role of energy R&D, in particular the role of fusion energy research, in a long-term energy strategy.

As I noted at my confirmation hearing in January, I am deeply committed to developing an energy policy that includes increasing domestic production of energy in an environmentally responsible manner, increasing our use of renewable energy, decreasing our reliance on imported oil, and developing new technologies that will reduce energy-related pollution. I also noted the importance to the Nation of the Department's support to science and technology. The Office of Fusion Energy Sciences' work to provide the knowledge needed for an economically and environmentally attractive source of energy and to advance our understanding of plasma science and fusion science is an important part of our efforts in science and technology.

I appreciate your views on the important role fusion energy can play in the long-term energy mix of the Nation and your organization's support of the Department's Fusion Energy Science program.

Sincerely,

Spencer Abraham

Spencer Abraham

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ULTRAMAR DIAMOND SHAMROCK
CORPORATION

2001-008787 Mar 30 p 4:11

Jean Gaulin
Chairman, President
and Chief Executive Officer

March 27, 2001

Honorable Spencer Abraham
1000 Independence Avenue, S.W. - Forrestal Bldg.
Washington, DC 20585

Dear Honorable Abraham:

As Chairman and Chief Executive Officer of one the country's largest independent refining and marketing companies, I am very concerned about the future direction of our National Energy Policy. In my opinion, no other issue being debated today will have as profound an effect on both national security and continued economic prosperity as that of future energy supplies.

While energy discussions to date have focused on many important subjects, one critical element that has not received much attention is refining and distribution. The North American Refining & Marketing (R&M) business occupies a unique position in today's industrial landscape. No other business is as strategically important, directly affecting virtually every citizen, but, nevertheless, is so universally misunderstood. Despite the fact that refineries supply virtually 100% of our transportation energy needs, most industrialized nations, including the U. S., have focused their time, and money on developing other forms of energy to provide for future growth. In fact, most government policies are actually dis-incentives to sustained petroleum product availability. As a result of this tendency, the U. S. has not adequately addressed either the problems of the R&M industry or the opportunities the U. S. has available to it to support economic prosperity by providing for our ever-increasing energy needs through petroleum products. This is the problem that I would like to address.

As a starting point to the development of a National Energy Policy, I believe that we must first recognize certain fundamental facts concerning future energy supply:

1. **Petroleum will continue to provide the vast majority of our transportation fuel needs for at least the next 20 years.** A recently released study by the Center for Strategic and International Studies, and which was supported by a bipartisan group of congressional leaders and energy experts, concludes that industrial nations will require oil from the Middle East in the next 20 years. The study further states that there are no breakthroughs in technology or energy conservation on the horizon that will significantly reduce the world's need for fossil energy over this two-decade period. According to the Department of Energy, alternate fuel vehicles are only expected to grow from 2/10 of 1% of the vehicle population

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today to 4% by 2020. This means that in 20 years, 96% of all vehicles will still be powered by petroleum fuels.

2. **OPEC will continue to be the primary supplier of crude oil and cooperation with OPEC nations is vital to energy availability.** While domestic oil exploration and production should be encouraged, it will not significantly reduce our dependency on foreign supplies of crude oil. Of the over 1 trillion barrels (42 trillion gallons) of proven oil reserves in the world today, OPEC nations account for almost 80%. By contrast, U.S. reserves amount to only 2% of the total. The above mentioned study calculated that Persian Gulf nations and other producers must expand their production by almost 80% in the next 20 years to satisfy world demand. The proposed National Security Act of 2001 (S 388 and S 389) only sets goals for reducing dependence on foreign oil sources to 54 % in 2005, 52 % in 2008, and 50 % by 2010.

3. **Crude oil will continue to be plentiful and has historically been priced not only to sustain economic prosperity but to encourage it.** At today's crude oil consumption rate of 75 million barrels per day, the current world reserves would last for another 37 years even if no new oil were found. While we need a continued flow of OPEC oil, the OPEC countries in turn need large consuming countries like the U.S. in order to sustain their economies. They need competitively priced fuels and sound consuming economies as much as we do. The Saudi oil minister has made it clear that OPEC does not intend to allow crude prices to exceed $28 a barrel and will take the action necessary to achieve this goal. After crude oil costs, the second largest determinant of gasoline prices is taxes. Combined federal and state taxes now average almost 40 cents per gallon in the U.S., or about 29% of the price paid at the pump. In real terms (1997 constant dollars), gasoline taxes rose more than 25% between 1986 and 1998. During this same time period, the pre-tax price of gasoline actually declined by almost 40%. Even with the rapid rise in crude prices since 1998, the pre-tax price of gasoline today is the same as it was in 1986 in constant dollars. With taxes being the cause of real price increases for gasoline, we shouldn't be surprised that OPEC members are offended when we ask them to reduce their crude oil prices.

Based on the above three fundamental facts, I believe that **the cornerstone for our National Energy Policy must be to recognize and plan for oil products to be the fuel of the future for our transportation needs**. Alternate fuels, however desirable, can no longer be the focal point for energy policy. In the past, our focus on non-petroleum energy sources has resulted in government policies that have actually been disincentives to sustained petroleum product availability. These policies were based on the mistaken assumption that petroleum would be replaced by other fuels. This is what has lead us to our current crisis. As President Bush recognized, what we need now are policies which will encourage the growth of our domestic refining and marketing industry, not policies that will continue its decline. To accomplish this goal, our new National Energy Policy should address the following specific areas of concern:

1. **While petroleum fuel changes have produced tremendous strides in improving air quality in the past, they can no longer be the focal point of environmental regulation.** Since passage of the 1990 Clean Air Act, total air pollutants have declined by 25% and are projected to decline by another 10% by 2010. The majority of the costs to achieve

these reductions, some $28 billion, have been born by the R&M industry alone. Future fuels will be even cleaner. Within the next 4 to 5 years, regulations already on the books will reduce the sulfur content of gasoline by 90% and on road diesel fuel by 97%. Further changes to off road diesel fuels are also under consideration. In addition, many states are enacting their own fuel regulations to deal with local environmental requirements that are different in rural than in heavily populated areas. Efforts to make petroleum fuels even cleaner and more responsive to regional requirements should continue and should be embraced by all refiners as a basic business necessity. Hydrocarbon chemistry, however, tells us that we are rapidly approaching a zone of diminishing returns for achieving cleaner air through fuel changes alone. Engine technology, exhaust treatment, as well as non-automotive pollution sources should be reviewed under a cost benefit analysis to determine their potential roles in improving air quality. All the participants in the transportation energy sector; producers, refiners, automobile manufacturers, and governments must cooperate to provide the fuels needed to support future economic prosperity.

2. **Unnecessarily burdensome permitting requirements must be eliminated to reduce the time and cost of expanding our refining and marketing infrastructure.** Under current rules, no construction activities can begin until a full permit has been issued , a process that can take 6 months to a year. Having the ability to do basic construction work, such as foundation preparation and support installation, while a permit is being reviewed would greatly reduce project execution times. The risk that a permit would not be granted or that it would change the scope of the project, thereby stranding pre-permit activities, is a risk that our industry should be willing to bear.

3. **While setting air quality standards is a proper governmental function, determining how refineries should produce qualifying fuels is best left to the free marketplace.** Today's refineries are some of the most complex and efficient manufacturing facilities in the world, but every refinery is different. At one of our California refineries we have plans to replace MTBE through the use of ethanol. Due to this refinery's configuration, ethanol is a very desirable gasoline blendstock and we would intend to use it regardless of a government oxygenate mandate. At our other refinery in California, however, the addition of ethanol appears to be a less efficient way to produce clean gasoline but we may be forced to add it due to government fuels mandates. As long as we make a fuel that meets government performance standards, should the government really care how we make the fuel?

4. **Differing regional air quality needs require different regional fuel specifications.** Our company alone provides transportation fuels to markets as diverse as Los Angeles and Amarillo. Each of these markets have their own unique air quality characteristics and fuel needs. Since differing regions have the authority to address their own unique challenges, many require differing qualities of their fuels. Clearly, maintaining regional fuel specifications puts some stress on our distribution infrastructure that requires attention. However, the additional cost a single national fuel specification would impose upon consumers, who would realize no benefit, and upon refiners, as they once again are

required to make investments with no prospect of realizing a return, is nothing but a continuation of the command and control environmental policies of the last eight years.

Please notice that missing from the above recommendations is the need for government subsidies for the refining and marketing industry. Under the above framework, our industry can function quite well in a free marketplace. The market itself will provide an adequate return and access to lower cost capital if petroleum fuels are recognized as the fuel of the future.

For your use, I have enclosed an article that will appear in the next issue of World Energy magazine that makes many of the same points I have outlined here.

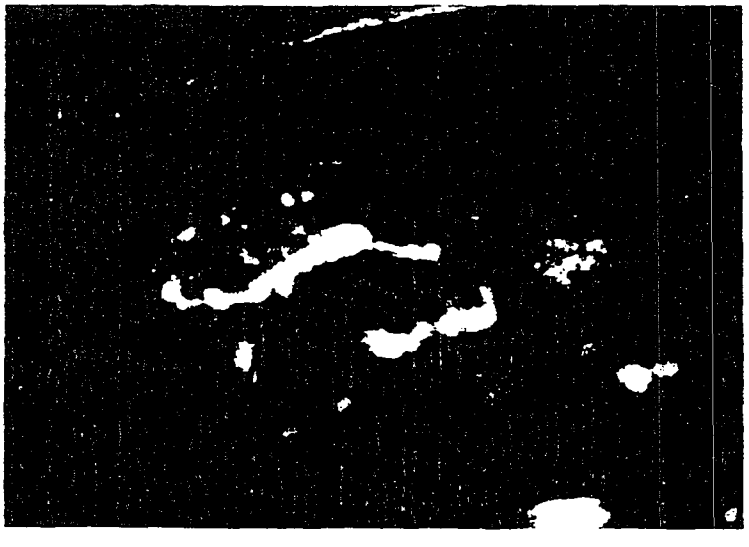
The refining and marketing industry has worked very hard to reduce costs while supplying the increasing demand for energy in North America and has made good progress in improving our environment despite limited access to capital. In order to continue to deliver reliability, convenience, and affordability at the gas pump, we need governments to work with us as partners and to recognize the strategic importance that the domestic refining and marketing industry must have in the determination of our National Energy Policy.

Very truly yours,

Supporting Economic Prosperity Through Petroleum Products

by Jean Gaulin
Chairman, President and CEO
Ultramar Diamond Shamrock Corp.

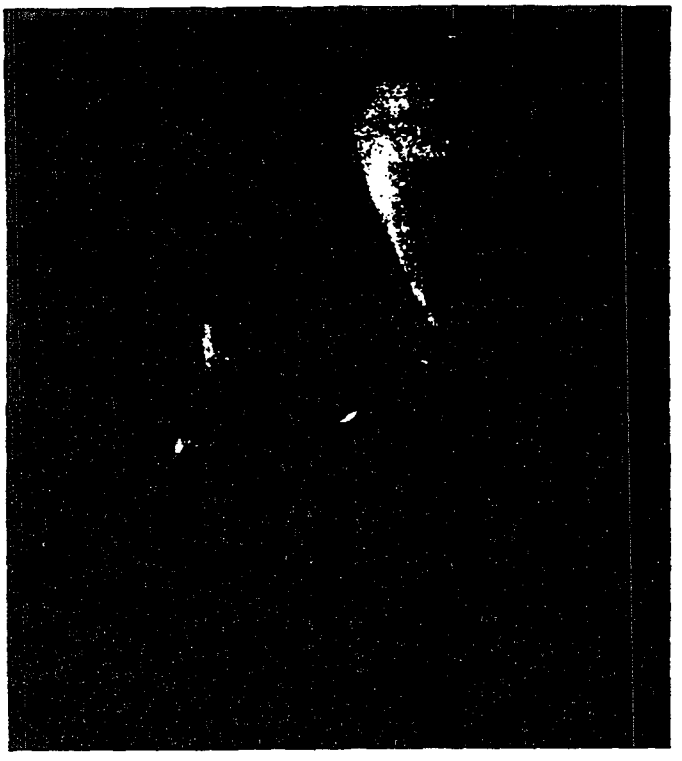
The North American refining and marketing (R&M) business occupies a unique position in today's industrial landscape. No other business is as strategically important or directly affects virtually every citizen but is nevertheless so universally misunderstood. Despite the fact that refineries supply virtually 100 percent of our transportation energy needs, most industrialized nations have focused their policies, their time and their money on developing other forms of energy to provide for future growth. In fact, most government policies are actually disincentives to sustained petroleum product availability. As a result of this tendency, we have not adequately addressed either the problems or the opportunities available to support economic prosperity by providing for our ever-increasing energy needs through petroleum products. We need to convince our governments to develop policies that recognize and plan for oil products to be the fuel of the future.



Petroleum Price Factors

Contrary to common belief, the R&M industry has little control over petroleum prices and furthermore has exhibited low profits and low returns since at least the mid-1980s. Today, 45 percent of the cost of a gallon of gasoline at the pump is the cost of the crude oil that refiners purchase to produce it. The members of OPEC, not R&M companies, control most of this crude.

Of the more than 1 trillion barrels (42 trillion gallons) of proven oil reserves in the world today, OPEC nations account for almost 80 percent. By contrast, U.S. reserves amount to only 2 percent of the total and the entire non-OPEC western hemisphere to only 7 percent of the total. However, at today's consumption rate of 75 million barrels per day, these reserves will still last for another 37 years even if no new oil were to be found. While we need a continued flow of OPEC oil, the OPEC countries in turn need large consuming countries like the U.S. in order to sustain their economies. For the foreseeable future, this co-dependence with OPEC will only continue to grow. A recently released study by the Center for Strategic and International Studies, which was backed by a bipartisan group of congressional leaders and energy experts, concludes that industrial nations will increasingly require oil from the Middle East in the next 20 years. The study further states that there are no breakthroughs in technology or energy conservation on the horizon that will significantly reduce the world's need for fossil energy over this two-decade period. Alternate fuel vehicles only account for two-tenths of 1 percent of the vehicle population today and are only expected to grow to



grow, capacity is severely hampered by either government policies or access to capital, and cost-reduction opportunities are becoming less available. Without change there can be only one outcome: refining capacity to supply our energy needs will increasingly shift to other countries. Not only will we continue our dependence on OPEC for crude oil but we may well become dependent upon others for our daily transportation fuel needs.

Oil: The Cleaner Burning Fuel of the Future

Most arguments against supporting the growth of petroleum products portray them as dirty fuels and fail to recognize the tremendous steps taken in the last several years to make them cleaner burning. Since passage of the 1990 Clean Air Act, total air pollutants have declined by 25 percent and are projected to decline by another 10 percent by 2010. The majority of the costs to achieve these reductions, some $28 billion, have been borne by the R&M industry alone. Future fuels will be even cleaner.

Most arguments against supporting the growth of petroleum products portray them as dirty fuels and fail to recognize the tremendous steps taken in the last several years to make them cleaner burning.

Within the next four to five years, regulations already on the books will reduce the sulfur content of gasoline by 90 percent and on-road diesel fuel by 97 percent. Further changes to off-road diesel fuels are also under consideration. As well, many states are enacting their own fuel regulations to deal with local environmental requirements that are different in rural than in heavily populated areas. Efforts to make petroleum fuels even cleaner and responsive to regional requirements should continue and should be embraced by all refiners as a basic business necessity. Hydrocarbon chemistry, however, tells us that we are rapidly approaching a zone of diminishing returns for achieving cleaner air through fuel changes alone. Engine technology, exhaust treatment and non-automotive pollution sources should be reviewed under a cost-benefit analysis to determine their potential roles in improving air quality. All the participants in the transportation energy sector – producers, refiners, automobile manufacturers and governments – must cooperate to provide the fuels needed to support future economic prosperity. And to fund the necessary fuel improvements and increase petroleum product output, refiners must have an adequate return. However, no subsidies should be introduced. Rather, the market will provide an adequate return and access to lower-cost capital if petroleum fuels are recognized as the fuel of the future and the R&M industry is included as part of a comprehensive national energy policy.

Additionally, federal and state permitting requirements should not unnecessarily add to the cost of construction by delaying projects where funding is available. Current rules prevent any construction from proceeding until a full permit has been obtained, a process that can take six months to a year. In some cases, government agencies have actually encouraged private lawsuits to further disrupt and lengthen this process.

RON THORNBURGH
Secretary of State

First Floor, Memorial Hall
120 SW 10th Ave.
Topeka, KS 66612-1594
(785) 296-4564

STATE OF KANSAS

March 28, 2001

Secretary Spencer Abraham
U S Department of Energy
1000 Independence Ave SW
Washington DC 20585

2001-008856 A[pr 2 A 11:42

Dear Secretary Abraham:

Senate Concurrent Resolution Number 1607, adopted by the 2001 Kansas Legislature, is a resolution urging the United States government to establish a federal energy policy. Our office is directed to provide you with a copy of the resolution, which is enclosed.

Please contact our office if you have questions.

Respectfully,

RON THORNBURGH
Kansas Secretary of State

Brad Bryant

Brad Bryant
Deputy Assistant Secretary of State

Enc.

ministration: (785) 296-0498
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FAX: (785) 296-4570

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FAX: (785) 296-3659

Senate Concurrent Resolution No. 1607

A CONCURRENT RESOLUTION urging the United States government to establish a federal energy policy.

WHEREAS, The nation faces a growing shortage of domestic oil and the world may face petroleum shortages in the next fifty years; and

WHEREAS, Natural gas has risen dramatically in price because demand has increased faster than supplies are discovered; and

WHEREAS, Domestic consumers are faced with ever-increasing price spikes and lowered expectations of the market meeting the demand for energy; and

WHEREAS, The American association of petroleum geologists, in concert with other scientific professional learned societies, is convening in Washington, D.C., on April 23, 2001, to address the need for a national energy supply and to look for new sources of energy; and

WHEREAS, The United States does not have a public policy on energy: Now, therefore,

Be it resolved by the Senate of the State of Kansas, the House of Representatives concurring therein: That the legislature of the state of Kansas encourages the development of a federal energy policy that considers all possible future sources of energy; and

Be it further resolved: That the Secretary of State be directed to send enrolled copies of this resolution to the President of the United States; the Vice-President of the United States; Majority Leader and Minority Leader of the United States Senate; the Speaker, Majority Leader and Minority Leader of the United States House of Representatives; the Secretary of the United States Department of Energy; to each member of the Kansas Congressional Delegation; and to the American Association of Petroleum Geologists, P.O. Box 979, Tulsa, Oklahoma, 74101-0979.

I hereby certify that the above CONCURRENT RESOLUTION originated in the SENATE, and was adopted by that body

February 13, 2001

Dave Kerr
President of the Senate.

Pat Saville
Secretary of the Senate.

Adopted by the HOUSE March 15, 2001

Kent Glasscock
Speaker of the House.

Judith B. Jones
Chief Clerk of the House.

JACK KEMP

March 28, 2001

Secretary Spencer Abraham
Department of Energy
1000 Independence Avenue , S.W.
Washington, D.C. 20585

Dear Mr. Secretary:

You are doing a terrific job, needless to say, and I'm particularly proud of the way you and Dick Cheney are handling the very tough issues we face in trying to bring a true supply-side approach to energy policy. You and the President handled the issue of CO2 regulation superbly, with boldness, logic, and sensitivity.

While many people provided tactical, logistical, and moral support to you on the CO2 issue (and many more are now trying to take credit!), I'm sure you agree that Fred Smith and his Competitive Enterprise Institute did yeoman work in giving the President intellectual support and political cover to 'do the right thing'. I also know that Fred is one of your biggest fans in the free-market public policy community.

For that reason, and many others, I sincerely hope you will accept Fred's invitation to be C.E.I.'s honored guest at their annual Warren Brookes dinner. I know Fred has written you on this subject, so you know that this event is scheduled for May 24, 2001 (but Fred assures me he has some flexibility on the date if that is needed to accommodate your schedule).

Fred and C.E.I. put on a great show and get a great crowd (at least 400 most years, probably more if you agree to join Fred). The Warren Brookes dinner is also a great opportunity to promote the administration's energy strategy, since it attracts a lot of media (some of it even sympathetic) and many industry folks and think tank analysts who have a great deal of influence on energy and environmental policy.

In short, this is a win-win opportunity for you, the administration, and C.E.I. I hope you can join us.

Sincerely,

Jack Kemp

1701 Pennsylvania Avenue, N.W., Suite 900, Washington, D.C. 20006

27888

JOHNS HOPKINS
UNIVERSITY

SAIS
The Paul H. Nitze School
of Advanced International Studies
Energy, Environment,
Science, and Technology
1619 Massachusetts Avenue NW
Washington DC 20036-2213
(202) 663-5700 / FAX (202) 663-5769

March 28, 2001

Mr. Greg Williams
Office of the Secretary
U.S. Department of Energy
Washington, D.C.

Dear Mr. Williams:

I wanted to support the invitation extended to Secretary Spencer Abraham to speak next week on **April 5** at the **Fifth Annual Washington Energy Policy Conference** to be held at Johns Hopkins University's Nitze School of Advanced International Studies here in D.C.

As the conference cosponsor, **the Johns Hopkins International Energy and Environment Program** has for a long time had ties to the Department of Energy. Established in the early 1980s, the IEEP supports graduate teaching and research and organizes regular monthly professional seminars and periodic conferences on energy markets and policy issues. DOE staffers are frequent participants in our events. And on several occasions over the past fifteen years, keynote speakers at our conferences have included either the secretary or deputy secretary of energy (Paul Hodel and Linda Stuntz are the names I can immediately recall.) Moreover, DOE and EIA have hired a number of our graduates, as have the energy industries.

The other sponsor of the conference is, of course, the capitol area chapter of the **U.S. Association of Energy Economics,** which is the leading national association of energy economics and policy professionals in industry, government, consulting firms, and academia.

The Secretary should choose the topic on which he wishes to speak. But the audience would be very interested in his thoughts on elements of a Bush administration national energy policy (even though the policy is still in formation), or alternatively the electric power crisis in California and the possibility of it spreading to other parts of the country.

We would be very honored to have Secretary Abraham as our keynote luncheon speaker on Thursday, April 5. We hope very much that he can accept the invitation.

Yours sincerely,

W. L. Kohl

Wilfrid L. Kohl
Professor and Director, IEEP

encl.

Joseph Carlton Petrone
Knollwood Farm
Dublin, New Hampshire 03444-1037
Tel/Fax 603/563-8664

29 March 01

The Honorable Spence Abraham
Secretary of Energy
1000 Independence Avenue, SW
Washington, DC 20585
VIA FAX: 202/586-7573

ATTN: Sherrill Alford or Robin Johnson

Dear Spence,

Augusta and I are uplifted by many of the President's appointments, but none more than that of Secretary of Energy. Thank you for serving.

May I request an appointment for a gentleman who is, I'm reliably informed, a world-class authority on energy and power, who would like to discuss some ideas on meeting the energy needs of the populace in the coming century.

Mr. Cary Wasden, PhD, is the managing partner with Reed, Wasden & Associates LLC (reedwasden.com), a dedicated energy technology merchant bank. Mr. Wasden has been intimately involved with the deregulation process throughout most of the world. He has some innovative ideas, particularly on technological opportunities that he would like to share with you. He would like to discuss the Bush Administration energy policy and the role that new technologies should play in that policy. I understand that they have a truly unique view and understanding of the full range of energy technologies, and Mr. Wasden assures us that your time will be well spent.

I am reliably informed that Mr. Wasden is a man of integrity, and highly ethical, and well-travelled.

Mr. Wasden is available for a half hour appointment, at the pleasure of your schedulers. However, the last week in April or the first week in May would be best for him.

Warm Best Wishes and my thanks, Spence.

Sincerely,

PhoneTools

BVRP software

PO Box 1037
Dublin, NH 02333-1037

Phone: 603/563-7135
Fax: 603/563-8664

Message :

My assistant (and wife), Augusta, will call Robin or Sherrill on Monday afternoon to be sure this letter has been received.

From:	To: Secretary of Energy
Augusta Petrone	The Honorable Spence Abraham
Date: 3/29/2001	Page(s): 2

2001-009070 aPR 3 a 10:08

National Mining Association

Jack N. Gerard
President and CEO
(202) 463-2647

March 30, 2001

The Honorable Spencer Abraham
Secretary of Energy
1000 Independence Ave., S.W.
Washington, D.C. 20585

Dear Mr. Secretary:

On behalf of the National Mining Association, which represents the nation's coal and uranium producers, I would like to commend you for your leadership as we work to develop a viable long-term national energy strategy that ensures the availability of reliable and affordable energy for all citizens of our country.

Coal and uranium are uniquely important in the nation's energy supply picture. Over one-half of the nation's electricity requirements are supplied by affordable coal fired power and another 20 percent is met with nuclear power. Both fuels must be major factors in the future as electricity use increases.

We have developed a series of recommendations for actions that can be taken to assure that coal and uranium remain viable options as we move forward. These have been given to the White House Energy Policy Development Task Force and I have enclosed a copy for your information and use. I would particularly like to draw your attention to the recommendations we have made for the commercialization of advanced clean coal technologies and for acceleration in the Department's coal and coal utilization research programs. Both are very important elements in our efforts to increase coal fired electricity generation while meeting the equally important goal of advancing environmental protection.

Our Association's members look forward to working with you, and with other members of the Administration's Energy Policy team, to craft a balanced and effective energy policy for the nation.

Sincerely,

Jack N. Gerard
President and CEO

1130 17TH STREET, N.W. WASHINGTON, D.C. 20036-4677
(202) 463-2647 • FAX: (202) 463-3258 • jgerard@nma.org

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ENERGY POLICY
AN ACTION AGENDA FOR COAL AND URANIUM

Reliable affordable energy is necessary for both economic growth and national security. All domestic energy resources – coal, natural gas, petroleum, nuclear (uranium) and renewables – will be required and each is essential to meeting the nation's future energy needs. The United States must develop, produce, and use domestic energy resources more efficiently and cost effectively while simultaneously maintaining and improving the quality of our environment.

Energy policy must be based on several underlying principles: economic efficiency and support for market based policies; continued protection of the environment; development and commercialization of advanced energy technologies; use of additional regulations only if based on sound science and relative risk assessments; and, expanded use of incentives to promote investment in technology and infrastructure. Policy must be able to recognize, and react to, the rapidly changing energy requirements of our society as well as to advances in technology. As recent events clearly illustrate, energy policy must address both energy supply and energy demand.

The need for a dynamic energy policy is underscored by the rapid electrification of our economy. Affordable and reliable electricity has supported much of the economic expansion of the past several years and affordable and reliable electricity is necessary to support the economy of the future.

Coal is electricity as is uranium. Over one-half of the nation's electricity requirements are met with coal-fired power and another 20 percent is met with nuclear power. Coal is the nation's largest domestic energy resource and the most affordable. Our nation has a large uranium reserve that is not being used effectively. Both coal and uranium must be major factors in the future, as demand for electricity will continue to increase at a rapid pace.

Coal generating capacity and coal use must increase to support a growing demand for electricity; efficiency and environmental performance must continue to improve

The nation's electric generating fleet is not sufficient to meet current, let alone future, demands for electricity. Regulatory and other administrative barriers to construction of generation and transmission infrastructure must be removed. Regulatory certainty with respect to criteria pollutants is necessary. Incentives to improve both the environmental performance and the power generation efficiency at power plant are necessary to spur investment in advanced clean coal technologies and to upgrade existing plants. Fuel diversity, and affordability are essential for economic growth and coal must be an important part of the fuel mix.

To support coal use:

- Legislation is necessary to:
    - Provide a measure of burden sharing to improve efficiency and environmental performance at existing coal plants; and,
    - Establish tax incentives for the construction of a limited number of commercial applications of advanced clean coal technologies.

- Regulatory and/or administrative actions are necessary to:

    - Harmonize air quality regulations currently pending at EPA; and
    - Develop and implement a well-defined and integrated strategy to optimize control and minimize costs, should future regulation of criteria and hazardous air pollutants from coal-based electricity generation be warranted by sound economic and scientific considerations.

- Develop a responsible climate policy that:

    - Rejects any command and control regime or caps on emissions as methods to control or reduce greenhouse gas emissions;
    - Encourages aggressive voluntary actions to reduce emissions;
    - Enhances research and development of new technologies;
    - Accelerates research on carbon sequestration technologies;
    - Recognizes the global nature of the issue; and,
    - Supports responsible international agreements that focus on technology transfer and on energy efficient economic development throughout the world.

Facilitate Investments in Coal Production Capacity

Coal output is approaching 1.1 billion tons annually. Production is forecast to increase by 250 million over the next decade to meet demand. To support this increase, action must be taken to:

- Remove regulatory and other administrative barriers that prohibit access to, or development of, coal reserves; and,
- Enact income tax policies that encourage rather than discourage investments in expanding capacity.

Support for the domestic uranium industry is essential for both energy and national security reasons

The United States uranium recovery industry is important to the nation's energy independence and is essential to national security. At present, over 20 percent of the nation's electricity requirements are met with nuclear power, which translates into the consumption of about 45 million pounds of uranium per year. Due to the collapse in uranium prices, the viability of the United States uranium recovery industry is in question. Today, only 3 million pounds of uranium, about 6 percent of the utilities needs, is produced domestically. Energy policy must include actions that maintain and strengthen the domestic uranium recovery industry. These policies must include changes in tax policy, limitations on sales of government uranium stockpiles; purchase of certain United States Enrichment Corporation materials; reduction in, or elimination of, regulatory fees; and an increase in federal research programs.

CONTENTS

- Regulation of Diesel Particulate Matter Exposure in Underground Metal/Nonmetal Mines

- Black Lung Disability Benefits Program Final Regulation Employment Standards Administration

CROSSCUTTING

- Federal Government Coal Research Programs

- Modifications in Corporate Income Tax Policies

- Reliable, Timely and Complete Energy Data A Requirement for Sound Public Policy

URANIUM

- Changes to NRC Fee Structure

- Uses of the National Strategic Uranium Reserve

- Limitations on Sales of Government Uranium Stockpiles

- Domestic Nuclear Fuel Cycle Short Term Mitigation

- Extend Dates of USEC Privatization Act

- Domestic Uranium Research and Development

- Uranium Product Tax Credit

OVERVIEW

COAL AND URANIUM
THE FOUNDATION FOR THE US ENERGY/ELECTRIC ECONOMY

ENERGY DRIVES THE US ECONOMY. Energy, whether it is from coal, oil, natural gas, uranium or renewable sources, is the common denominator that is imperative to sustain economic growth, enhance environmental protection, maintain and improve standards of living and, simultaneously, support an expanding population. The significant economic expansion that has occurred in the United States over the past two decades, and especially over the last five years, was in no small measure due to reliable and affordable energy, much in the form of electricity, much in the form of coal-fired electricity.

According to the Energy Information Administration[1], the trends experienced in the US over the last 20 years - economic growth, greater efficiency and a move to electricity - are expected to continue over the next two decades. Economic growth is forecast to increase by an average 2.3 percent per year. Reflecting greater efficiency, the use of energy will grow by an average 1.3 percent per year or by a total of 32 percent to 127 quadrillion Btu by 2020. Consumption of all sources of energy are expected to increase: petroleum by 33 percent, natural gas by 62 percent, coal by 22 percent and renewable energy by 26 percent. The economy will become even more dependent upon electricity over the next 20 years. During the next two decades consumption of electricity will increase by an average 1.8 percent per year or by over 40 percent.

THE GAP BETWEEN ENERGY SUPPLY AND DEMAND. Many policies will have to change to make this forecast a reality. There is a growing gap between the expected demand for energy and the nation's capacity to supply that energy on a reliable, affordable basis. Since 1980 consumption of energy has increased by 20 quadrillion Btu (Quads) or by 25 percent to 98.5 Quads. Production of energy in the United States has not kept pace, increasing by a mere 5 quadrillion Btu or by only 7.6 percent, to 72.6 quads. The "gap" in 2000, 26 quadrillion Btu, was made up by importing energy.

Over the next twenty years the gap will widen. Energy consumption is expected to increase by 29 quads but US energy production will increase by only 14 quads widening the "gap" to 41 quadrillion Btu. This gap can only be filled through an increase in energy imports.

The energy policies of the past eight years have exacerbated the US demand –supply imbalance. Domestic policies have actively discouraged, and even prevented, investments in domestic energy production capacity, in our electrical grid, in our nation's energy delivery infrastructure. As pointed out, the increase in energy use in the United States during this time was fueled in large part by an increase in imports - a trend expected to continue. The increase in the generation of electricity was possible because generating capacity had been over built in the 70's and 80's giving the US substantial reserve margins. Those reserves are gone. The benefits of past investment have run out. The energy supply industry has not been able to make the investments or develop and maintain the infrastructure that is necessary for the future.

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[1] Annual Energy Outlook 2001, Energy Information Administration, December 2000.

The US is fortunate to have a large domestic energy resource within our borders and an established, although aging, energy delivery structure. To meet expected future demands our national energy policy must be redirected to encourage efficient, environmentally sound development of our nation's vast energy resource base and to promote the use of technologically advanced methods to process, transport and use that energy.

COAL IN THE ENERGY MIX. Coal reserves, which are geographically distributed throughout the US, comprise the greatest share of the nation's energy resource base. The demonstrated coal reserve is over 500 billion tons with economically recoverable reserves of over 275 billion tons. This is a reserve large enough to support a growing coal demand for over well over 200 years.

Coal is the only domestic energy resource to INCREASE production levels over the last two decades. In 1980, coal production was 830 million short tons. In 2000, 1.1 billion tons of coal were produced in mines located in 26 states and the EIA projects coal production of 1.3 billion tons in 2020. During the past two decades average productivity in the coal industry has increased by nearly 250 percent reflecting in part shifts from underground to surface production and, in part, technological advances in mining operations. The average price of a ton of coal at the mine has declined in both real and nominal terms. The US coal industry is proud to pay wages to our miners that are among the highest of any industrial worker in the country. The US industry is the safest coal industry in the world, a record of which we are all proud, but a record on which we will not rest as the goal of the industry is zero injuries and fatalities.

Coal, or electricity generated from coal is used in all 50 states. The coal industry contributes some $161 billion annually to the economy through payroll and purchases of goods and services. Coal industry tax payments add at least $2 billion annually to state and local government revenues. The industry directly and indirectly employs nearly 1 million people.

The primary market for coal is the electric generator. Last year 1.026 billion tons of coal were used to generate over 50 percent of all electricity used in the US. The industrial market, at approximately 32 million tons per year, and the domestic market for coking coal of 28 – 29 million tons are both very important, but small in comparison. The United States also exports coal, approximately 57 million tons in 2000. Coal use in the industrial and coking markets and for export will remain relatively unchanged over the next 20 years.

<u>At the bottom line, coal is electricity.</u>

The Energy Information Administration forecast referenced above shows that by 2020 electricity use will increase by over 40 percent as compared to today's levels. Coal use for electricity will total at least 1.25 billion tons in 2020 some 250 million tons,or 20 percent, more than is currently burned.

The reasons are straightforward: coal is domestic, coal is reliable and coal is affordable. To illustrate, in 2000 electric rates in regions dependent upon coal for

electricity were, on average, at least one-third lower than rates in regions dependent upon other fuels for electricity.[2]

And, coal is increasingly clean. Although coal use for electricity has tripled since 1970, emissions are lower by more than a third. New advanced clean coal technologies will enable this trend to continue and to accelerate, permitting greater use of coal while increasing combustion efficiencies and lowering emissions of the regulated criteria pollutants (SO2, NOx, and Particulate Matter). Emissions of carbon dioxide both overall and per unit of electricity generated will be lower as well.

Coal serves an indispensable role in the United States energy equation and not only can, but will, provide a major part of the nation's energy requirements in the future.

US URANIUM IS ALSO AN IMPORTANT PART OF THE US ENERGY/ELECTRIC ECONOMY. The United States uranium recovery industry is also important to the nation's energy independence and is essential to national security. Today, nearly 23 percent of America's electricity comes from clean nuclear power, which translates into the consumption of about 45 million pounds of uranium each year. However, the collapse in uranium prices since 1980 has produced a sharp decline in the viability of America's uranium mining industry. America's remaining uranium miners produce only about 3 million pounds of uranium annually, just 6 percent of nuclear utilities' needs. The balance of the uranium comes from rapidly declining inventories in the hands of the utilities, the federal government and foreign entities.

Under the current policy direction, the amount of electricity generated by nuclear plants is expected to decline over the next twenty years. However, this forecast may prove to be incorrect. Licenses for nuclear plants are being renewed and it is expected that almost all nuclear plants operating in the US today will apply for, and obtain, renewals to allow operation for 20 years beyond the original date at which licenses were due to expire. There is some consideration of construction of at least one new nuclear plant. Thus, demand for uranium for will not decline but is likely to increase.

Historically, the United States was the world's leading producer of uranium and still has extensive proven reserves of natural uranium that offer the potential for secure sources of future supply. Only a strong domestic uranium recovery industry can assure an adequate long-term supply of uranium for the nuclear power component of the nation's long-term energy policy and preclude threats of foreign supply disruptions or price controls that could adversely affect the nation's common defense and security. Therefore, the federal government must foster energy policies that ensure a strong and viable domestic uranium recovery industry and must remove barriers to domestic production of existing sources of uranium.

DEVELOPMENT OF AN ENERGY STRATEGY MUST BE A PRIORITY IF FUTURE DEMANDS ARE TO BE MEET. A change in policy direction is required if affordable energy is to be reliably available in the future. At the core, American's energy strategy must be grounded in market-based policies that lead to adequate, diverse and secure

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[2] According to the Energy Information Administration electric rates in the New England and Middle Atlantic States averaged 9.9 cents per Kwh through October 2000, 9.0 cents in California. As comparison, electric rates in the East South Central region (dependent upon coal for over 70% of generation) averaged 5.2 cents per Kwh in the same time frame.

energy supplies. A balanced energy policy will be anchored in economic efficiency, will promote new energy technologies, will limit use of regulation and will support use of market based incentives. A responsible energy policy will achieve a balance between the benefits of energy use and the benefits of responsible environmental protection.

Polices are needed to:

- Enhance energy supply and encourage use of all energy sources;
- Provide certainty for investment in energy infrastructure (environmental controls, generation and transmission);
- Balance energy production and use with environmental concerns;
- Promote energy efficiency and conservation;
- Assure free and competitive energy markets that in turn work to provide energy at affordable costs; and,
- Promote energy technology development and long-range R&D initiatives.

A comprehensive energy policy should include tax and fiscal policies, trade policies environmental policies, and land use policies. Finally, an energy policy needs to be predictable and must make certain that the policies and activities of the various government agencies are coordinated and complementary rather than working towards goals that are conflicting.

Although many policies will be similar or even identical for all fuel sources, many will be fuel specific. The issues that follow are issues that must be resolved if coal is to continue to be a major part of the nation's energy mix.

COAL USE

- New Coal Generation Capacity is Required to Meet Future Demands
  National Electricity and Environmental Technology Act
- Harmonizing Ozone Rules Under the Clean Air Act
- Regulation of Mercury Emissions from Coal- and Oil-Based Power Plants
- New Source Review
  Older Power Plants Not Exempt From Clean Air Act
- Regional Haze Regulations
- Rulemaking to Establish BART Guidelines
- Use of the CALPUFF Model for Impact Analysis
- The Importance of Fuel Diversity in Establishing a National Energy Policy and a Sound Climate Change Strategy

NEW COAL GENERATION CAPACITY IS REQUIRED TO MEET FUTURE DEMANDS NATIONAL ELECTRICITY AND ENVIRONMENTAL TECHNOLOGY ACT

PRINCIPLE: Incentives to improve efficiency and environmental performance at existing power generating facilities and to encourage new plant construction using advanced clean coal technologies are necessary to ensure fuel diversity and an affordable, reliable electricity supply.

BACKGROUND: The economy of the 21st century will require reliable, clean and affordable electricity to keep the engine running, the lights on and the computers humming. The Department of Energy forecasts that by the year 2020, U.S. electricity consumption will be over 40% higher than today. A large number of new base load electric generating plants will be required to meet this new electricity demand at affordable prices.[1] Today, more than one-half of U.S. electricity is generated from abundant, low cost, domestic coal but new coal based generating plants are not being built. To illustrate, over 43,000 megawatts (MW) of coal capacity came on line between 1980 and the end of 1984. In the past five years, only 3,500 MW of new coal capacity have been brought on line. This is largely due to uncertainty about new environmental requirements and the risks associated with large investments as the utility industry becomes more competitive. The development and commercialization of more efficient and lower emitting clean coal technologies is necessary to continue the improvement in emissions from coal-based generation and to maintain the option for new coal-based generating plants. Coal-based electricity generation needs to be preserved and expanded to ensure a diversity of fuel supply, produce affordable and reliable electricity, maintain a strong economy, and help stabilize the balance of payments.

DESCRIPTION: In the short term the challenge is twofold: first, to expand the use of newer more advanced NOx and SO2 control technologies in existing plants through retrofits and secondly, to move new advanced clean coal technologies that have been proven at the demonstration stage to, and through, placement in the commercial marketplace. The National Electricity and Environmental Technology Act (NEET) was developed to meet this dual challenge. The proposed legislation has three important programs:

- A financial incentives program that designed to cushion the financial burden of applying advanced technologies to existing coal units;
- A demonstration program that provides tax incentives and/or financial assistance for initial commercial scale application of advanced coal based generating technologies contingent upon achievement of specificed requirements for efficiency gains; and,
- An R&D program that addresses long-term technology needs.

These programs would result in significant reductions of emissions. NOx emissions would be reduced by 631,000 tons, SO2 emissions by over 1.9 million tons and CO2

[1] The Energy Information Administration forecasts show that nearly 400 GW of new and replacement capacity will be required by 2020, the equivalent of 1,300 plants at 300 MW each. Some 378 MW of the needed capacity is still in the "unplanned" stage.

emissions by over 1.2 million tons. This is because advanced technologies are cleaner burning and are more efficient in the process of turning coal into electricity.

STATUS: The NEET bill has bi-partisan support. It was introduced by Senators Byrd and McConnell in January 2001 as S.60. The NEET provisions are included in Senator Murkowski's comprehensive energy bill, S. 388/389. Introduction in the House is expected soon as a bi-partisan bill.

RECOMMENDATION: The Administration should support legislation as described above that meets the President's commitment to Clean Coal Technology and that (1) enhances funding for coal-based R&D; (2) provides a measure of burden sharing to improve the efficiency and environmental performance of existing coal-based generating facilities; and (3) implements a set of financial incentives and risk sharing for a limited number of early commercial applications of advanced clean coal technology.

HARMONIZING OZONE RULES UNDER THE CLEAN AIR ACT

PRINCIPLE: Provide certainty by administratively synchronizing the NOx reduction compliance deadlines of 2003 in the EPA Section 126 rule and the 2004 court ordered "SIP call" deadline.

DESCRIPTION: In January 2000, EPA issued its Clean Air Act "section 126" rule, requiring power plants and some industrial sources in 13 states to make significant cuts in nitrogen oxide (NO_x) emissions to help four states (Connecticut, Massachusetts, New York and Pennsylvania, all of which filed petitions under section 126 requesting source-specific reductions) reduce their ozone levels. EPA insists targeted sources must comply by May 1, 2003, even though this date would make compliance very difficult because of the lead time needed to engineer, purchase, install and test emission control equipment. More importantly, this deadline conflicts with a court-ordered May 31, 2004 compliance date for EPA's "SIP call" rule. The SIP call requires NO_x reductions from power plants and some other sources in 22 eastern states, including those subject to the section 126 rule, and will necessitate capital costs in excess of $13 billion and associated O&M costs of at least this much. The North American Electric Reliability Council has issued a study concluding that pending NO_x reductions will require many Midwestern coal-fired plants to retrofit with sophisticated new technologies, thus significantly increasing planned maintenance outages (on top of projected low reserves), and hence some reliability risks in the next several years. NO_x controls are imminent, but it is imperative that reductions occur in the least burdensome and most economically responsible manner possible.

The section 126 rule also removes state flexibility to decide which sources to control and by how much. Many states want the section 126 rule deadline to be the same as the SIP call compliance date, or made inapplicable for states that implement the SIP call. Some northeast states, companies and environmental groups want the section 126 rule and its deadline retained. Congressional appropriators have repeatedly urged EPA to harmonize the section 126 rule and SIP call implementation dates.

STATUS: The Supreme Court denied an appeal by parties challenging the underlying merits of the SIP call rule; however, this did not affect the May 31, 2004 compliance date. Legal challenges to the section 126 rule are pending in the D.C. Circuit Court of Appeals. A decision is expected by spring 2001, but may not resolve the SIP call/section 126 conflict. In the interim, states face significant uncertainty in developing implementation plans. Similarly, regulatory certainty is *critical* to companies, yet affected sources currently do not know which deadline and what controls apply.

DECISION: The Section 126 and SIP call rules must be harmonized.

RECOMMENDATION: Congress clearly intended that the SIP call process would drive state compliance with Clean Air Act emission reduction requirements. The section 126 rule explicitly provides the Administrator authority to deny, or withdraw prior approval of, any section 126 petition targeting sources in a state where EPA approves that particular state's implementation plan. The Administrator should clarify immediately that the SIP call implementation schedule is controlling and that NO_x reductions must be made by the May 31, 2004 compliance date.

REGULATION OF MERCURY EMISSIONS FROM COAL- AND OIL-BASED POWER PLANTS

PRINCIPLE: Review the EPA mercury regulatory determination to ensure it is based on sound science, provides flexibility for use of market based programs in compliance; ensures technological feasibility of any controls required, and, harmonizes compliance schedules with other rulemakings to criteria pollutants (SO2, NO x, PM) so as to maximize efficiency and minimize cost of compliance.

DESCRIPTION: On December 14, 2000, EPA made a "regulatory determination" under the Clean Air Act that regulation of mercury and possibly other hazardous air pollutants (HAPs) is "appropriate and necessary" for coal- and oil-based power plants. This decision automatically triggers a formal rulemaking, and EPA is scheduled to issue a proposed rule in late 2003 and a final rule in late 2004. EPA has estimated costs of a mercury control program to be about $5 billion annually, while DOE and others have estimated significantly higher costs. Members of Congress from both parties have raised concerns about the adverse consequences of mercury regulation, including impacts to the fish industry. A stringent mercury control program could impact fuel diversity and coal-based generation in the same manner as mandatory CO_2 reductions.

Unfortunately, the language of the regulatory determination could severely limit the Administrator's future options. EPA's designation of a specific regulatory approach -- even though the regulatory determination is not a formal rule -- means that *new* coal- and oil-based plants, as well as *existing* coal- and oil-based plants that are "reconstructed," will be regulated immediately in accordance with the stringent, source-by-source control program called for in the determination. Ironically, this harsh impact occurs at the outset of a multi-year regulatory process during which EPA will be attempting to establish a scientific record that justifies a stringent mercury control rule. Note that a decision today to modify the regulatory determination would neither affect the regulatory schedule, nor hinder ongoing mercury-related health effects, fate-and-transport, and emission reduction technology research critical to making sound regulatory decisions.

STATUS: EPA's regulatory determination was published in the *Federal Register* on December 20. The agency indicated it did not want more input on the determination, instead noting that a proposed rule will be subject to public review and comment. Legal challenges have been filed in the D.C. Circuit by the utility industry. An administrative Petition for Reconsideration also has been filed with EPA, in effect requesting the agency to withdraw that portion of the regulatory determination that prescribes a specific control program and immediately impacts new and reconstructed units.

ISSUES: Electric utilities are explicitly treated differently under the CAA than other major sources of HAPs, in that EPA's assessment of power plants "shall" address "alternative control strategies." However, language in EPA's determination sets in motion the regulation of mercury emissions under a strict, source-by-source control program that eliminates flexibility and use of market mechanisms. The Administrator should avoid this unnecessary limitation on possible regulatory options.

RECOMMENDATION: The Administrator should (1) reconsider that portion of the regulatory determination that prescribes a specific control program and immediately impacts new and reconstructed units; (2) clarify that EPA does not intend to limit regulatory options when proposing a rule; and (3) clarify further that the regulatory determination applies only to mercury and not other HAPs.

NEW SOURCE REVIEW

PRINCIPLE: Initiate administrative action to ensure that the EPA's New Source Review program complements national energy policy objectives.

DESCRIPTION: The Clean Air Act imposes stringent "new source" control technology requirements on new units, and on existing sources if they are extensively modified. In 1996, EPA reinterpreted the new source review (NSR) program in a way that redefines when an existing source is considered to have been "modified," and issued a proposed rule consistent with this reinterpretation. EPA's approach presents an obstacle to efficiency improvement projects, safe operations and reliable generation, which is inconsistent with a sound national energy policy and the need to continue to ensure affordable and reliable electricity.[1]

In addition, EPA has initiated litigation against over 40 investor owned power plants and 10 TVA plants to force installation of new control technology on plants that EPA alleges have been modified. EPA's litigation and enforcement strategy is inconsistent with past interpretations and implementation of the NSR program.

STATUS: EPA has not yet finalized its proposed NSR rule, but, on December 12, 2000, the agency published a *Federal Register* notice regarding a Detroit Edison project that has national implications because it interprets the existing NSR rule to cover reliability and efficiency improvement projects. In that notice, EPA claims, contrary to the language of the current NSR modification rules, that electric utility sources must get state (or EPA) approval before undertaking necessary maintenance, repair, and replacement projects. An administrative petition has been filed requesting that the Administrator reconsider the Detroit Edison notice and confirm that EPA's 1992 WEPCo rule and pre-1996 policies remain in effect. Regarding ongoing EPA enforcement efforts, additional notices of violation and lawsuits are expected unless policy changes are initiated.

ISSUES: How can the NSR program be reformed to complement national energy policy objectives, and to avoid being an impediment to efficient, safe and reliable plant operations?

RECOMMENDATION: The Administrator should grant the Detroit Edison petition and publish notice of this action in the *Federal Register*. In that notice, EPA should confirm that the WEPCo rule and pre-1996 policies remain in effect pending a reevaluation of regulatory and policy options. The Administrator also should initiate true NSR reform. The industry is ready to work cooperatively with EPA on this effort.

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[1] See also attached discussion "Older Power Plants not Exempt from the Clean Air Act."

NEW SOURCE REVIEW SUPPLEMENT

PRINCIPLE: Contrary to environmental assertions, older power plants are not exempt from Clean Air Act requirements.

Some in government and the public hold the belief that older plants are exempt from the requirements of the Clean Air Act (CAA) because they typically are not subject to New Source Review (NSR). To close the so-called "loophole that exempts grand fathered power plants from the Clean Air Act," EPA has attempted to redefine the meaning of (NSR) to expand its application. This is inappropriate and not necessary to protect the environment. Emissions of older plants are regulated under numerous provisions of the current Act, thus there is little rationale to regulate older plants engaged in routine operations through NSR rulemaking, enforcement actions, or legislation.

Despite nearly a tripling of coal consumption since 1970, air emissions of criteria pollutants and their precursors have been significantly reduced. In fact, total emissions per ton of coal consumed at utility plants have decreased nearly 70 percent since 1970. Much of this is due to the regulatory structure stemming from the CAA's provisions that foster compliance and emission reductions. The belief that older power plants are exempt from the CAA is erroneous.

Significant provisions that impose (or may impose) substantial regulatory requirements on older power plants include:

- National Ambient Air Quality Standards (NAAQS) B primary and secondary NAAQS
- Nitrous Oxides (NOx)
- Sulfur Dioxide (SO2)
- Particulate Matter (PM)
- Carbon Monoxide (CO)
- Lead
- Ozone
- Acid Rain program (annual reductions of 10 million tons SO2 and 2 million tons NOx)
- State Implementation Plans (SIPs; e.g. NOx SIP Call)
- Non-attainment area requirements B Reasonably Available Control Technology (RACT)
- Section 126 provisions B mechanism to reduce emissions that contribute to downwind non-attainment
- Protection of Prevention of Significant Deterioration (PSD) increments
- Visibility Protection Program (SO2)
- Best Available Retrofit Technology (BART)
- National Emission Standards for Hazardous Air Pollutants (NESHAP)
- Mercury Regulatory Determination
- Tall Stack Regulations – limits emissions based on good engineering practice@ stack heights
- Toxic Air Pollution
- Maximum Achievable Control Technology (MACT)
- Residual Risk Standards
- Prevention of Accidental Releases
- Title V permitting requirements

In addition, these older facilities are subject to regulatory and reporting requirements under other statutes (e.g. CWA, RCRA, EPCRA, CERCLA). Many states also impose regulations beyond those within the Clean Air Act.

REGIONAL HAZE REGULATIONS

PRINCIPLE: Proposed regional haze regulations should be reconsidered to conform with the clear Congressional intent which affords individual states flexibility to facilitate construction of badly needed generation facilities.

DESCRIPTION: In July 1999, EPA promulgated regulations under the Clean Air Act to address the problem of regional haze in the major national parks throughout the U.S. All relevant stakeholders have sought judicial review of the regulations. Industry has challenged the regulations on the grounds that the rule re-writes the Clean Air Act by establishing a national visibility goal (i.e., natural visibility conditions) that plainly conflicts with the carefully crafted congressional program for protecting clean air resources, ignores the D.C. Circuit's remand of the National Ambient Air Quality Standards (NAAQS) for PM-2.5 (thus elevating visibility protection ahead of health protection), and unduly constrains state discretion to develop and implement regional haze programs. Some states (West Virginia and Michigan) have challenged the rule because they believe the regulations unduly constrain their discretion, and because they, together with most other states, have not been afforded the opportunity, as provided in the Clean Air Act, to participate in Visibility Transport Commissions and to make recommendations regarding the nature and scope of a regional haze program before developing regional haze programs under a federal directive. Environmentalists have challenged the regulations on the grounds that the new rule does not require attainment of natural visibility conditions quickly enough.

STATUS: Review of the regional haze regulations has been held in abeyance pending action by EPA on several administrative petitions for reconsideration that were submitted in the summer of 1999. The reconsideration petitions assert that EPA adopted the regulations without statutory authority to do so and without affording the public an adequate opportunity to review and comment upon major elements of the regulations that appear in the final rule, but which did not appear in the proposed rule, including the goal of natural visibility conditions and a variety of provisions that illegally constrain state discretion. The reconsideration petitions request that EPA withdraw the regulations and re-propose them for further public comment. EPA denied two of the petitions on January 10, 2001.

ISSUES: From a general perspective, should EPA and Federal Land Managers be allowed to use the aesthetically based visibility program as a means to impose emission controls not contemplated by the other major programs of the Clean Air Act, including those designed to protect public health? More specifically, should the regional haze regulations be reconsidered to conform the regulations with the plain terms of the Clean Air Act and to ensure that, as a matter of sound public policy, the regulation of PM-2.5 proceeds, at least initially, on the basis of health-driven NAAQS rather than on the basis of the aesthetic-based visibility program?

TIMING: In the absence of a decision to reopen the regional haze rule for further public review and comment, briefing in the case will likely commence in summer, 2001.

RECOMMENDATION: Seek to stay or settle litigation of the regional haze regulations to allow for (a) public review of, and comment upon, major elements of the rule that have not previously been the subject of public comment; and (b) revisions to the existing rule, as appropriate.

RULEMAKING TO ESTABLISH BART GUIDELINES

PRINCIPLE: BART regional haze requirements are not consistent with the state flexibility provisions of the Clean Air Act.

DESCRIPTION: On January 12, 2001, EPA issued a notice of proposed rulemaking to establish guidelines that would govern how states must implement the best available retrofit technology (BART) requirements under the regional haze rule issued in July of 1999. EPA's BART proposal would severely restrict State prerogatives and burden the nation's energy infrastructure at a time when the ability of electric generators in California and other regions of the country to meet rising demand is at risk. The BART proposal is premised upon regulations that are currently the subject of litigation, but that have not yet undergone judicial review despite the fact that review was sought by industry, states, and environmental groups in August of 1999. Since the filing of petitions for review of the regional haze rule, legal proceedings have been held in abeyance pending action by EPA on several administrative reconsideration petitions, each of which asserts that EPA adopted the regional haze rule without affording the public an adequate opportunity to review and comment on major elements of the regulations, including those that pertain to implementation of the BART requirement. On January 10, 2001, only two days before EPA issued the BART proposal, EPA finally responded to two of the reconsideration petitions by denying them. EPA's delay in responding to the reconsideration petitions insured that the disputed legal issues on which the BART proposal is based would not be resolved before close of the public comment period on the BART guidelines.

STATUS: EPA's BART proposal has not yet appeared in the *Federal Register*. The Bush Administration's Regulatory Review Plan dated January 20, 2001 should ensure that the BART proposal will not appear in the *Federal Register* unless first approved by officials appointed by the Bush Administration.

ISSUES: Should EPA proceed with issuance of binding BART guidance before disputed legal issues on which the guidance is based are resolved in the pending legal challenge to the regional haze regulations? Alternatively, should EPA reconsider both the proposed BART guidance and regional haze regulations in one integrated proceeding before proceeding with litigation of the regional haze regulations?

TIMING: Absent a decision to reopen the regional haze regulations for additional public comment, briefing of the regional haze regulations is likely to commence in the summer of 2001.

RECOMMENDATIONS: Reopen the Regional Haze rulemaking to allow for (a) public review of, and comment upon, the disputed legal issues on which the BART guidance proposal and the existing regional haze rule are similarly based (and with respect to which there has not previously been adequate notice and opportunity for public comment); and (b) revisions to the existing regional haze rule as appropriate

USE OF THE CALPUFF MODEL FOR IMPACT ANALYSIS

PRINCIPLE: Limit long-range transport modeling of the effects of new power sources to areas currently required by regulation. EPA's requirement of modeling beyond those areas is delaying construction of new state of the art clean coal power plants.

DESCRIPTION: Several companies are seeking permits to construct coal fired power plants in the Midwest using state-of-the-art technologies. These plants will be among the cleanest, most modern plants in the nation. The plants will use the best available control technology (BACT) and will have significantly lower emissions than required under New Source Performance Standards as prescribed by regulations promulgated under the Clean Air Act.

ISSUE: The National Park Service and U.S. Forest Service have proposed that plant developers be required to project the impact of the proposed plants on National Parks which are outside the impact areas covered by current regulations.

DISCUSSION: The National Park Service has asserted that these proposed plants are "large sources" relative to other power plants and is insisting that the companies use the CALPUFF model, a relatively new long-range transport model developed to predict model visibility and other impacts at a range of approximately 50-200 km from a source, even though its reliability at distances approaching 200 km and beyond is not well established. There are several reasons that CALPUFF should not be used:

- CALPUFF has not been officially recognized in federal statutes or regulations or in state statutes or regulations; [1]
- Normally, long-range transport modeling is required by EPA guidance only for distances up to 100 km except for "large sources," which has not been defined;
- CALPUFF is the subject of a current rulemaking; however, it has not been the subject of a final rule. The protocols for conducting CALPUFF modeling have not been established by regulation, and the proposed protocols may be modified by the final rule.

Federal Land Managers have an affirmative duty to protect air quality around large federal lands called Class I areas. By statute and regulation, they should have the burden of proof to demonstrate that the power plant will have a detrimental impact on Class I areas. The companies planning the project should not have the burden of proof.

RECOMMENDATION: Until the CALPUFF is required by law, its use should not be required as part of the permitting process. Projection of impacts of power plants should be limited to the areas surrounding the plant as defined by current regulation.

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[1] In one case, the Kentucky Division of Air Quality has concluded that the developer is not required to run the CALPUFF model as part of the permitting process. The Federal Land Mangers ("FLMs") indicate they believe the Kentucky plant, for example, could have a detrimental impact on air quality in the "affected" Class I areas: Linville George Wilderness Area and Great Smoky Mountain National Park. The closest borders of the Class I areas are approximately 200 km from the proposed power plant. However, the FLMs have not provided supporting documentation. They argue that Kentucky Division of Air Quality must compel the developer to run a CALPUFF screen in order to "prove them wrong."

THE IMPORTANCE OF FUEL DIVERSITY IN ESTABLISHING A NATIONAL ENERGY POLICY AND A SOUND CLIMATE CHANGE STRATEGY

PRINCIPLE: United States' climate policy, recognizing the global nature of the issue, should be based on voluntary, flexible, inclusive and cost-effective approaches to reducing greenhouse gas emissions. Climate policy should promote the principle of fuel diversity and be complementary to the national energy policy. Climate policy should promote development and global use of more efficient technologies and be designed to promote economic development in the United States and throughout the world. Policy should support an accelerated scientific research program. Voluntary programs should establish incentives for improved energy efficiency and encourage participation and reporting. US climate policy should reject regulation of, or specific reduction targets or caps on, emissions of CO2 or any other greenhouse gas.

The U.S. economy is highly dependent on affordable electricity. Since 1970, electricity growth has closely tracked the rise in GDP. To meet increased demand and to offset retirements of existing power plants, the Department of Energy forecasts that 1,310 new power plants – with 393 gigawatts of capacity – will be needed by 2020.[1] A sound national energy policy is needed to continue to ensure the affordability and reliability of electricity, and to meet future energy demands.

The Coal-Based Generation Stakeholders (CBGS) group, of which National Mining Association is a member, believes that fuel diversity – coal, natural gas, nuclear energy, oil, hydropower and other renewables, to generate electricity – must be maintained as a matter of national energy policy and national security. An energy policy that maintains fuel diversity can appropriately balance continued utilization of coal, the most essential fuel for reliable and affordable electricity, with a sensitivity to the climate change issue that reflects both economic and environmental objectives.[2]

The industries that comprise CBGS have long supported voluntary, flexible, cost-effective and inclusive approaches to reducing greenhouse gases.[3] For example, under the Climate Challenge program, the electric utility industry was projected to reduce 174 million metric tons of carbon dioxide (CO_2)-equivalent greenhouse gases in 2000. The electric power industry is currently developing a voluntary climate initiative that would serve as an extension of the Climate Challenge program. The industry expects to partner with the federal government – particularly the Department of Energy – and other

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[1] Energy Information Administration (EIA), "Annual Energy Outlook 2001 with Projections to 2020" (Dec. 2000).

[2] Coal-based generation is increasingly clean. Since 1970, coal-based electric generation has increased 234 percent and coal use in power plants has increased 270 percent, yet criteria pollutant emissions have steadily declined. EIA, "Annual Energy Review 1999."

[3] "Voluntary" recognizes that the climate change issue merits policy responses that explore economically sustainable measures should any legally binding agreement to address greenhouse gases be adopted. Full "flexibility" encompasses emissions trading, project-based offsets, forestry and soils projects, and banking, which will be critical in the event of any domestic or international agreement. "Inclusive" encompasses all greenhouse gases; all sources and sinks; and all locations, domestic and international. "Reduce" means reduce, avoid, sequester or otherwise mitigate greenhouse gases, whether domestically or internationally.

industries to pursue approaches to further reducing greenhouse gases. This initiative will reduce greenhouse gases in the near term, and promote a technology research, development and deployment (R, D & D) program that will lead to the development of cost-effective options to reduce greenhouse gases.

CBGS supports continued scientific research to evaluate if human activity is adversely affecting the climate, and, if so, to evaluate the causes, costs, policies and adaptation strategies to address possible solutions. Consistent with the President's March 13 letter to several Senators, CBGS opposes ratification of the Kyoto Protocol because it would cause serious harm to the U.S. economy and lacks binding commitments for all nations. Also consistent with the President's letter, CBGS strongly opposes regulation of CO_2 or any other greenhouse gas as a pollutant under the Clean Air Act or other legislation.

Because there is currently no cost-effective control technology for greenhouse gas emissions, compliance with stringent, mandatory targets and timetables such as those contained in the Protocol would cause massive fuel switching in the electric utility industry from coal to natural gas,[4] which would be enormously expensive and dramatically increase electricity prices,[5] and which would further exacerbate the fuel diversity issue. A Kyoto Protocol-type scenario would also raise serious problems in natural gas supply, prices and infrastructure, and would cause significant job losses in CBGS industries and among our suppliers. Stringent targets and timetables other than those contained in the Protocol also could be harmful to our nation's economy and energy policies. Moreover, they could have a chilling effect on badly needed investment in new coal-based generation because of a legitimate concern that such investments would become stranded in the event legally binding regulations were imposed in the future.

As currently envisioned, a sound voluntary climate initiative would consist of three major elements:

1. In the short term, the climate initiative is expected to achieve credible, verifiable emission reductions or offsets of greenhouse gases facilitated by certain policies and incentives from the federal government, including those that encourage full flexibility for emission credit and trading programs.

2. Further reductions of greenhouse gases in the medium to long term would result from the development and application of more energy-efficient, cost-effective electricity supply options, such as clean coal technology and renewables, that allow for a reliable and affordable supply of energy.

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[4] See, e.g., the reference study that demonstrates that under a Kyoto Protocol-type scenario, coal would decline from 50 percent of electric generation to as low as 13 percent in 2010, while natural gas would rise from 25 percent to 50 percent in the same time frame. Research Data International, Inc., U.S. Gas and Power Supply under the Kyoto Protocol, Vol. I at 1-9 (Sept. 1999).

[5] A recent EIA report (which actually understates costs because mercury has not yet been analyzed) found that reductions in sulfur dioxide, nitrogen oxides and CO_2 consistent with recent legislative proposals would increase electricity prices by 17-33 percent in 2005, and by 30-43 percent in 2010. EIA, Analysis of Strategies for Reducing Multiple Emissions from Power Plants: Sulfur Dioxide, Nitrogen Oxides and Carbon Dioxide xvii, 27 (Dec. 2000). The bulk of the cost increases are due to CO_2 restrictions.

3. A climate technology R, D & D program is needed to ensure that cost-effective technologies are developed in the long term. This program should complement overall U.S. energy policy and the Framework Convention on Climate Change.

   - In accordance with legislation introduced in the 106th Congress – such as S. 882, S. 1776, S. 1777 and S. 3253 – and public-private studies,[6] the R, D & D program could focus on 1) advanced technologies in electric generation and transportation, 2) cost-effective direct carbon capture and removal from powerplant and other emission sources, and 3) carbon sequestration in natural "sinks" such as forests, soils and oceans.

   - Two program goals could be to 1) fast track such climate technologies to market, and 2) promote export of such technologies overseas, particularly to developing countries such as China and India that could greatly benefit from more energy-efficient electric generation technology.

   - In partnership with the federal government, the climate initiative would be expected to adequately fund the climate technology R, D & D program and to provide appropriate financial incentives, with periodic reassessment. Industry partners that install new climate technologies would be interested in recouping any substantial investments over a reasonable period of time.

The climate initiative should be consistent with government policies that encourage full flexibility, both domestically and internationally, in emissions trading, project-based offsets, forestry and soils projects, and banking. Financial and policy-oriented government incentives should be explored as a means to jump start credit and trading programs, offset projects, and the climate technology program.

Development of a voluntary climate initiative presents an opportunity not only for innovative emission reduction programs, but also for the inclusion of a broader number of partners involved in the life cycle of coal-based generation. For example, credit could be given to environmental improvements from extracting coal at the mine and delivering it to the generator.

CBGS believes that a climate change strategy premised on a voluntary climate initiative would achieve both environmental and economic objectives, and would help maintain fuel diversity. The strategy would reduce greenhouse gases in the short term as technological responses are developed for long-term availability, all the while maintaining the viability of coal as a vital component of electric generation. In short, environmental policy would complement energy policy, which is consistent with the President's goal of ensuring that global climate change issues are addressed "in the context of a national energy policy that protects our environment, consumers, and economy."

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[6] See, *e.g.*, Battelle's Global Energy Technology Strategy – Addressing Climate Change (2000).

COAL PRODUCTION

- The Coal Mine Valley Fill Issue
- The Forest Service Roadless Area Conservation Rule Will Eliminate Coal Reserves from Development
- The Powder River Basin Resource Development Act of 2000
- Coal Leasing – The Need for an Orderly, Predictable Process
- Advance Royalty Payments in Lieu of Continued Operations
- Revitalizing the Abandoned Mined Lands Program
- MMS Administrative Appeals Process
- U.S. Forest Service Management Plan Revisions
- Regulation of Diesel Particulate Matter Exposure in Underground Metal/Nonmetal Mines
- Black Lung Disability Benefits Program Final Regulation Employment Standards Administration

THE COAL MINE VALLEY FILL ISSUE

PRINCIPLE: Support coal industry operations and employees in Appalachia by adopting proposed rules that clarify the scope of, and remove the ambiguities in, the Clean Water Act Section 404 program with respect to excess spoil. Delays in adopting these rules are restricting coal operations in Appalachian states at a time when coal is needed to provide fuel for affordable electricity.

DESCRIPTION: In October 1999, a federal district court in West Virginia stunned the Nation's coal industry with a decision barring the longstanding practice of building valley and hollow fills to dispose of the dirt and rock generated during coal mining. *Bragg v. Robertson*, 72 F. Supp. 2d 642 (S.D. W.Va. 1999), *appeal pending*, No. 99-2443 (4th Cir). Notwithstanding the fact that these engineered fill structures are both a necessary part of coal mining operations and expressly authorized by federal laws regulating coal mining, the court interpreted regulations issued under those laws as prohibiting their construction in hollows and valleys that inevitably contain stream courses. While the decision remains pending on appeal, the past Administration abandoned the working men and women of America's coal industry and announced that it now agreed with the court's view. The past Administration's action in this regard is not only contrary to the laws it administers, it will have economic consequences. A Marshall University study concluded that the effects in West Virginia alone would be as great or greater than those of the Great Depression.
Earlier in the same litigation, the federal agencies, the Environmental Protection Agency, Office of Surface Mining and the Corps of Engineers (EPA, OSM & COE), settled the claims related to the use of section 404 permits to authorize these fills under the Clean Water Act (CWA). The agencies agreed to conduct a programmatic Environmental Impact Statement that addresses environmental and economic consequences of different actions, as well as evaluates the better coordination of overlapping regulatory programs.

STATUS: The appeal in the 4th Circuit has been briefed and was argued on December 7, 2000. In the meantime, the EPA, OSM and COE are preparing a Draft EIS. EPA and COE also have pending a proposed rule published on April 20, 2000 clarifying that excess spoil is fill material subject to section 404 and not section 402 of the CWA. This rule would remove the ambiguity in the agencies' programs that the district court relied on to reach its erroneous conclusion that these fills as well as other activities that have the effect of displacing waters of the United States are not authorized by section 404.

DECISION: Should any part or form of a Draft EIS be publicly released before the completion of the underlying technical, economic and other studies.
RECOMMENDATION: Delay public release of the Draft EIS in any form until all the underlying studies are complete and have been subject to some form of peer review. This is completely defensible and will assure that the EIS process on this matter will not be subject to criticisms related to its credibility and integrity.

DECISION: Should EPA and COE adopt, as a final rule, the proposal clarifying the scope of the section 404 program with respect to excess spoil and other activities that have the effect of replacing waters of the United States.
RECOMMENDATIONS: 1) Proceed to adopt as final the proposed rule published on April 20, 2000. The rule is an important part of maintaining the integrity of the 404 program by clarifying a longstanding ambiguity that has caused grave uncertainty for the regulated community and the agencies. It not only addresses the excess spoil issue but other activities as well, e.g. landfills, OR 2) Await the decision of the 4th Circuit to determine whether it would require any modification of the proposal to address the central features of the rule. At some point, the EIS on mountaintop mining will have to analyze how excess spoil fills are to be addressed within the prevailing regulatory schemes under the CWA and SMCRA and whether any conflicts exist.

THE FOREST SERVICE ROADLESS AREA CONSERVATION RULE WILL ELIMINATE COAL RESERVES FROM DEVELOPMENT

PRINCIPLE: Implementation of the Forest Service Roadless rule will preclude development of the energy resources, including coal, that are located on these lands. The rule must be modified through administrative action or through existing litigation so that resource development is not precluded.

BACKGROUND: In January 2000, the Clinton Administration declared 58.5 million acres of Forest Service land off limits to mineral development by prohibiting road construction and reconstruction activities, including even temporary road construction on lands subject to this rule.

The Department of the Interior (DOI) is the largest owner of western minerals, while the U.S. Forest Service (USFS) in the Department of Agriculture is responsible for the management of the surface. Under the roadless rules, the actions of the surface owner will have a profoundly negative impact on the development of coal, oil and gas found under these lands. This is particularly important as 90 percent or more of the increase in coal production through 2020 is expected to come from federal lands including lands affected by this rule.

IMPACTS: As stated in the Final Roadless Environmental Impact Statement (EIS), several serious impacts have been identified, including: "...preclude future development of leasable minerals within inventoried roadless areas...[which would result in] decreases in jobs, income, and payments to states." The Department of Energy found that both expansion of existing mines, and tracts of coal of near term commercial interest will be affected.

Among all of the multiple users of the National Forest, coal mining has the distinct and unique requirement -- pursuant to the terms of the Surface Mining Act -- to restore all surface disturbances to at least as good a condition as the pre-mining condition. This requirement applies to all roads developed in conjunction with exploration or development activities. In short the Surface Mine Control and Reclamation Act already provides the protections the roadless rule purports to safeguard.

EXAMPLES: Two areas of federal coal production have been specifically identified as being impacted by this rule: the Manti-La Sal National Forest in Utah and the Grand Mesa, Uncompahgre, and Gunnison (GMUG) National Forests in Colorado. The impact on the West Elk Mine, located in the GMUG National Forest is discussed as an example. This underground coal mine, which produces about seven million tons of high BTU, low sulfur federal coal per year, is located in western Colorado's North Fork Valley -- the fastest growing coal producing region in Colorado. The mine employs about 360 people and has an annual payroll of $26 million. Just over 93% of West Elk's coal is shipped to eastern utilities which need its unique quality characteristics to meet Clean Air requirements. The West Elk mine will be significantly and adversely impacted by the Roadless Area designation in several ways:

- As existing coal leases are modified or renewed, they will become subject to the roadless area prohibitions;
- The roadless boundary includes adjacent areas of unleased federal coal reserves. That would be excluded from potential development since necessary exploration drilling and mine development would be prohibited;
- Approximately $3 billion of federal coal could be impacted by the Roadless Area rule in this one area alone.

RECOMMENDATIONS: The Energy Task Force must consider the effects of this rule on development of resources needed to meet future energy demand. Should the rule go into effect, the Administration should actively engage in the litigation to assure that final settlements do not preclude resource development.

THE POWDER RIVER BASIN RESOURCE DEVELOPMENT ACT OF 2000

PRINCIPLE: Enact legislation that provides for orderly development of all energy resources located on federal lands to ensure that development of one resource does not preclude economic development of a co-located resource.

BACKGROUND: In the 2nd Session of the 106th congress, the entire Wyoming delegation sponsored legislation (The Powder River Basin Resource Development Act of 2000 - S. 1950 and H.R. 4297) to resolve conflicts between oil and gas and coal developers which arise as a result of simultaneous resource development on federal lands in the Powder River Basin (PRB) of Wyoming and Montana. The proposed legislation (as reported by the Senate Energy Committee) was the result of lengthy negotiations between the Administration, coal producers and oil and gas developers. Unfortunately, on December 15, 2000 the Clinton White House insisted that the bill be excluded from the Omnibus Appropriations package, thus preventing passage and leaving an uncertain future to coal, coalbed methane (CBM) and oil and gas production in the PRB.

THE PRB of Wyoming and Montana is one of the world's most productive energy resource regions. It contains the largest reserves of low sulfur coal in the United States. Coal mined in Campbell County, Wyoming itself now represents approximately 1/3 of all U.S. coal production. The PRB is also rich in oil and gas, including CBM that lies within and adjacent to the coal seams. Virtually all of the coal and approximately 50% of the oil and gas in the PRB is owned by the federal government and managed by the BLM, under the Mineral Leasing Act of 1920.

ISSUE: The BLM has issued and continues to issue separate federal coal leases and federal oil and gas leases for the same locations in the PRB. In those areas leased both for coal and for oil and gas (common areas), disputes over timing of mineral development have arisen. The sequence of development in the common areas frequently becomes a critical issue. No clear statutory direction exists to resolve disputes over the sequence of mineral development.

LEGISLATIVE SOLUTION: Last session's negotiated Senate legislation would provide the missing statutory direction to resolve these mineral development disputes and would establish a formal procedure to be used only in the conflict areas of the PRB. By its expressed terms, the bill would have no impact whatsoever outside the PRB.

The bill would require competing mineral developers to negotiate first, and urges the BLM to use its regulatory authority to achieve a possible resolution to each conflict. If both negotiations and regulatory efforts fail, either the coal developer or the oil and gas developer could invoke the formal resolution process established by the legislation by filing a petition in the local federal district court and with the Secretary of the Interior. The bill's process then would require a public interest determination first by the Secretary, then by the court, as to which mineral will be developed first. There would follow a temporary suspension or termination of rights to develop the conflicting mineral. The court, with the aid of an expert panel, would determine the amount to be paid to the non-prevailing mineral developer.

RECOMMENDATION: The Bush/Cheney White House should encourage early passage and enactment of legislation similar to S. 1950 as approved by the Senate Energy Committee in the 106th Congress. Until such legislation is passed, conflicts involving simultaneous development of competing fossil fuel resources in the PRB will continue to threaten or delay orderly development of much needed environmentally favorable domestic energy resources.

COAL LEASING – THE NEED FOR AN ORDERLY, PREDICTABLE PROCESS

PRINCIPLE: Implement procedures to shorten the time required to process applications for leases for federal coal reserves and take steps to process lease applications now pending. The reserves included in these applications will be required in the future to fuel increasing demand for affordable electricity.

DESCRIPTION: Since the 1970's, leasing of federal coal has been marked by controversy, lawsuits and long periods of leasing moratoriums. Since the decertification of the Powder River Basin ("PRB") coal producing region in the late 1980's, the Bureau of Land Management ("BLM") has actively used the Lease-By-Application ("LBA") process, which allows an existing coal mining operation to nominate a tract for the express purpose of prolonging the life of the existing mine. The leases are offered to any qualified bidder at the time of sale on a competitive basis through a bid process (termed a bonus bid). This process has been effectively used in Utah, Colorado and Wyoming. This discussion is limited to the PRB of Wyoming.

To date, the LBA process has been highly successful. Since the LBA process was put in place, the BLM has sold ten (10) coal leases in the Wyoming PRB that contained over 2.7 billion tons of coal. These lease sales have generated over $612 million in bonus bids, even before the payment of 12½% production royalties commence. This process has been critical as the PRB of Wyoming now produces a third of the nation's demand for low sulfur coal..

THE LBA PROCESS: The LBA process has allowed for the orderly and predictable leasing of federal coal reserves for the last decade. After a federal coal lease application is filed with the BLM, but before the actual competitive lease sale. The lease applicaiton goes through a series of economic, environmental, resource recovery and fair market value procedures and reviews by both state and federal officials. Currently, this process takes three to five years to complete

After the lease is issued the state and federal regulatory agencies begin the permitting process. The federal agencies involved include the Office of Surface Mining (mining and reclamation plan approval) and the BLM (Resource Recover and Protection Plans). Historically, this process has taken about an additional three years – or six to eight years from lease application to permit issuance.

KEY ISSUES: Coal production in the PRB has jumped dramatically since the Clean Air Act Amendments of 1990. With this dramatic increase has come the need for continued and orderly access to federal coal reserves. Western coal producers clearly recognize this need and make their leasing plans accordingly. In the PRB of Wyoming there are currently eight coal lease applications on file with the BLM totaling over 23.2 billion tons of coal. While this appears to be a large quantity of coal, it only represents about seven years of production from the PRB.

The BLM is now processing and holding only one federal coal lease sale per year. As a result, the most recent coal lease application filed may not be offered for sale for eight years. Permitting requirements will then add another three years. There is an excessive backlog of federal coal lease applications on file, and that the time frame for processing and issuance is impeding orderly development of important domestic energy resources.

RECOMMENDATION: Consolidate the NEPA process and combine several LBAs into one EIS. Evaluate the workload of other BLM offices to determine if there are any personnel available to help work through this backlog. Seek coal industry and the State of Wyoming support for additional Federal funding for the processing of lease applications.

ADVANCE ROYALTY PAYMENTS IN LIEU OF CONTINUED OPERATIONS

PRINCIPLE: Legislation is needed to provide greater flexibility in the way that requirements for payments of advanced royalties are implemented.

BACKGROUND: On August 4, 1976, the Federal Coal Leasing Act Amendments (FCLAA) were enacted. Section 6 of the FCLAA inserted a new Section 7(b), providing, in part, that the Secretary, upon determining that the public interest will be served thereby, allow the coal operator to pay advanced royalties rather than require continued operation of a mine.[1]

The current "advance royalty" provisions provide that:

- Advance royalties may be paid in lieu of the statutory obligation to maintain continued operations, but that they may not be paid for more than an aggregate of 10 years;
- Advance royalties paid during the initial 20-year term of the lease may not be carried over past the twentieth year of the lease; and,
- The Secretary may unilaterally cease to accept advance royalties and require that production continue.

ISSUE: Based upon experience since 1976, the current statutory provisions are counterproductive as these provisions do not give the coal operators the flexibility needed to be able to react to changing market conditions. If market conditions are such that coal is in "over supply", the operator needs the flexibility to slow or stop production for a period of time. Conversely, when coal demand increases the operator needs the flexibility to expand production.

RECOMMENDATIONS: Federal legislation is needed to provide operational flexibility for Western coal operators. Such legislation will also promote the ultimate recovery and conservation of federal coal. While limited to scope, the following amendments to provide operational flexibility to the current lease holders:

- Extend the aggregate authority pay advance royalties in lieu of continued operations from 10 years to 20 years;
- Provide that advance royalty payments are based on the average sales price for coal sold in the spot market from the same region during the month in which the request to pay advance royalties is submitted to the BLM;
- Delete the current prohibition on the carry-over of advance royalty payments made during the initial 20-year period of the lease;
- Delete the current unilateral authorization for the Secretary to cease to accept advance royalties in lieu of continued operations; and
- Delete the last sentence of Section 39 of the MLLA of 1920 (Section 14 of FCLAA) prohibiting the waiver, suspension or reduction of advance royalties.

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[1] This provision requires that leases produce one percent of a mining unit's recoverable reserve each year.

REVITALIZING THE ABANDONED MINED LANDS PROGRAM

PRINCIPLE: Work with industry to reform the Abandoned Mine Land program to ensure that funds are effectively used to complete reclamation work outstanding so that the program can come to a successful conclusion thus meeting SMACRA's original environmental goals.

DESCRIPTION: The 1977 Surface Mining Control and Reclamation Act (SMCRA) mandates that lands disturbed by coal mining be restored to their pre-mining condition. The Act addresses mining sites inactive before 1977 through the Abandoned Mine Land (AML) provisions. SMCRA requires coal operators to pay a fee to the Office of Surface Mining's AML Fund to clean up pre-law abandoned sites. The fee was set at 35¢ per ton for surface mined coal, 15¢ per ton for underground coal and 10¢ for lignite and has been extended twice, most recently in 1992. The fee is levied exclusively on coal production; no other mineral pays an AML fee. The fee is set to expire at the end of FY-2004.

In 1992, interest from the AML Fund was set aside to pay for the health benefits of certain retired coal miners and their widows under the Coal Industry Retiree Health Act.

STATUS: There is a mismatch between the amounts paid into the fund and the amount used for reclamation. To date, $5 billion in contributions have been paid by the coal industry into the AML Fund but only $1.3 billion in Priority 1 and 2 reclamation work has been completed.

Approximately $2.5 billion in Priority 1 and 2 coal reclamation work remains to be completed, yet the AML Fund has an unappropriated balance of $1.5 billion. This mismatch reflects annual appropriations have been significantly less than the fees paid by the industry and a distribution formula that does not reflect an effective use of the fees collected.

There are excessive federal and state administrative expenses of approximately $45 million annually.

RECOMMENDATION: The coal industry believes that 2001 provides a unique opportunity to reform the AML program. The coal industry is prepared to support an extension of the AML fee, *if* the additional funds are dedicated to the clean up of the remaining Priority 1 and 2 projects, and **only *if*** the current fee structure is reduced beginning in FY-2002. The fee structure would be the subject of negotiation. Suggested program reform should include a major reduction in administrative costs and a freeze on the inventory of eligible reclamation projects. Legislation to support these recommendations should be introduced in 2001 to give long-term financial stability to the various state AML programs. The proposed changes in the program would ensure that the SMACRA's original environmental goals are achieved and that reclamation is completed more quickly and effectively.

MMS ADMINISTRATIVE APPEALS PROCESS

DESCRIPTION: In 1973, the Department of the Interior (DOI) promulgated administrative procedures for the appeal of final orders and decisions of officers of the Minerals Management Service (MMS), directing that appeals would be made to the Director of MMS. The MMS is the only DOI agency with an intermediate appeal to the Director of the agency. All other DOI agency appeals go directly to the Interior Board of Land Appeals (IBLA).

In 1995, the DOI established the Royalty Policy Committee (RPC) to provide advice to the Secretary on the management of Federal and Indian mineral leases, revenues, and other minerals-related policies. The RPC includes representatives from states, Indian tribes and allottee organizations, minerals industry associations, other Federal agencies, and the public. At its first meeting in September 1995, the RPC established eight subcommittees, including the Appeals and Alternative Dispute Resolution (ADR) Subcommittee (Subcommittee). In February 1997, the Subcommittee submitted a consensus report for consideration by the RPC.

ISSUE: The Subcommittee agreed that the principal purpose of the MMS administrative appeals process should be the expeditious and independent review of cases involving disputed facts, legal issues, or policy upon request of the adversely affected party. The Subcommittee recognized that the MMS appeals process has been under criticism and serious review since 1991 and that substantial reform is needed.

While the Subcommittee was working, the Federal Oil and Gas Royalty Simplification and Fairness Act was enacted, establishing among other provisions, a 33-month time limitation for the DOI to make final decisions on appeals involving royalties due on federal oil and gas leases. This provided a further impetus to the Subcommittee's efforts to reduce the overall time for making final DOI decisions on appeals. In addition, MMS proposed a draft regulation that would place a 16-month time limitation on the MMS appeals process, leaving the rest of the 33-month period for review at the IBLA. The Subcommittee strongly urged that the recommendations in its report be substituted for MMS's proposed regulation.

The Subcommittee developed a number of specific steps involving both the appeals and ADR processes, incorporating them into a one-stage IBLA administrative appeal process. In March 1997, the RPC approved the Subcommittee report and forwarded it to Secretary Babbitt for his consideration. By letter dated September 22, 1997, Secretary Babbitt informed the RPC that he largely agreed with the report's recommendations. However, by Memorandum dated June 1, 2000, to the MMS Director, Secretary Babbitt stated that contrary to the RPC's recommendation, he had decided to retain the current two-tier appeals procedures.

RECOMMENDATIONS: The DOI should initiate administrative procedures which implement the Subcommittee's one-stage royalty appeals' recommendations. Otherwise, mineral developers that disagree with MMS decisions will continue to be subjected to a two-stage process which can extend administrative appeals from five to seven years, even before its controversy can enter the courts.

U.S. FOREST SERVICE MANAGEMENT PLAN REVISIONS

BACKGROUND: On a regular basis the U.S. Forest Service (USFS) reviews and, as necessary, revises its Forest Service Management Plans. Over the last year, the proposed revisions to various management plans have steadily moved away from a multiple use concept in favor of a position that favors conservation and recreation and disfavors mining and development. Currently, the USFS is proposing to revise the Thunder Basin National Grasslands management plan. The Thunder Basin National Grasslands is home to the largest coal producing region in the United States – the Powder River Basin of Wyoming (PRB). This region now produces a third of the nation's coal supply and in this time of high and unstable energy prices is a source of reliable, low cost, environmentally friendly coal. Pending lease sales of nearly 2.3 billion tons of mineral resources are in areas that would be affected by the revision. Availability of these reserves is necessary to continue long term operations at existing mines.

ISSUE: The proposed revision to the Thunder Basin National Grasslands management plan includes the establishment of a new wilderness area (pending Congressional approval) and other "special interest areas." These areas would likely trigger requirements that are more stringent than necessary to protect air quality and air quality related values (flora, fauna, etc.). The coal industry is one of the most heavily regulated in the country, and the PRB in particular more air quality monitors per square mile than any other region of the United States. There has never been a monitored violation of the PM_{10} (particulate matter less than 10 microns in size) National Ambient Air Quality Standard in this area. However, the demonstration for protection of air quality would not be based on data from actual air quality monitors, but rather would be based on hypothetical computer models that significantly over-predict emissions.

Unfortunately, these specially designated areas are located 5 to 35 miles downwind of existing coal mining operations in the PRB. As new federal coal leases are issued and as coal operators apply for air quality permits, these specially designated areas have the very real potential of impacting the ability to permit new areas or limiting production of existing operations.

A further Federal Land Managers' proposal would authorize the creation of areas where threatened and endangered species could be re-introduced. In this case, these areas are located immediately east of the existing PRB coal mining operations and would be used to re-introduce black-footed ferrets. There is no discussion of the impact to the mining operations should these animals migrate onto the minesites.

RECOMMENDATION: Revisions to the Forest Service Management Plans should be undertaken in concert with all relevant federal agencies, including the Department of Interior, and should be structured to assure continued access to coal resources on federal lands.

REGULATION OF DIESEL PARTICULATE MATTER EXPOSURE IN UNDERGROUND METAL/NONMETAL MINES

DESCRIPTION: In 1998 the Mine Safety and Health Administration (MSHA) published two proposed rules intended to reduce the exposure of miners to the constituents of diesel fuel combustion in underground mines - one for underground coal and one for underground metal/nonmetal (m/nm). The proposals, while similar in intent, departed dramatically on the options available to mine operators to comply with the proposals. Moreover, the rules proposed for m/nm mines the use of unproven sampling technology and the application of yet unproven and not commercially available for mining applications, after-treatment control technology. It is important to note that concerns regarding both the sampling technology and the availability of after-treatment control technology were raised during the public comment period by the National Institute for Occupational Safety and Health (NIOSH), mining research branch, the principal federal government mine safety and health research authority.

STATUS: The coal and m/nm proposed rules were forwarded to the Office of Management Budget for final approval on December 11 and 14, 2000 respectively. OMB approved the final regulations on January 8, 2001 for publication. The final rules were published on January 19, 2001. They were to become effective on March 20, 2001; however, they were extended until May 20, 2001 under the President's regulatory review directive.

ISSUE: Should The Department of Labor//MSHA, depending upon the effective date of the regulations, re-propose or stay the m/nm regulations in order to reevaluate the scientific, technologic and economic basis upon which the previous Administration proposed and finalized the regulations.

RECOMMENDATION: Immediately stay the rules and re-propose them in order to seek additional public comments and consideration by new Administration.

BLACK LUNG DISABILITY BENEFITS PROGRAM FINAL REGULATION
EMPLOYMENT STANDARDS ADMINISTRATION

DESCRIPTION: On December 20, 2000 the Department of Labor (DOL) issued final regulations that make sweeping changes to the Federal Black Lung Disability Benefits Program. The regulations were to be effective January 19, 2001. Despite extensive medical, economic and other evidence that the proposed regulations were severely flawed, DOL published the final rule. Unprecedented criticisms of the proposed rules were filed by the American Bar Association, Members of Congress, independent medical societies, and many others. The regulations will have significant economic impact on the coal mining and insurance industries (between $3.3 billion and $7.2 billion according to reputable estimates). Moreover, DOL concedes in its economic analyses that small coal mines will be closed with subsequent loss of jobs. Nonetheless, DOL summarily ignored the substantive objections, informed criticisms, and negative economic implications of the proposed regulations.

STATUS: On December 22, 2000 NMA and other parties filed a legal challenge to substantive parts of the final rules. The complaint charges that the final regulations violate the rights of litigants, create illegal presumptions, are arbitrary, capricious, inconsistent with existing laws, and violate the US Constitution. A preliminary injunction was granted on February 8, oral arguments are set for May 21.

OPTIONS:
1) If filed, consent to plaintiff's motion for summary judgment and remand of the final rules for reconsideration by the Secretary, or

2) Immediately propose to stay the effective date and re-propose the regulations in order to evaluate the previous Administration's motives to promulgate such severely flawed and economically damaging regulations, or

3) Engage in settlement discussions with the plaintiffs and consent to substantive settlement offer proposed, by plaintiffs, or

4) Continue with the litigation allowing the possibility of all evidence being open for full disclosure in the court, possibly to the enforcement of the Department and harmful to some employees.

RECOMMENDATION: Permit the regulations to be vacated and remanded by consenting to plaintiff's possible or propose to stay and re-propose the regulations.

CROSSCUTTING

- Federal Government Coal Research Programs
- Modifications in Corporate Income Tax Policies
- Reliable, Timely and Complete Energy Data A Requirement for Sound Public Policy

FEDERAL GOVERNMENT COAL RESEARCH PROGRAMS

PRINCIPLE: Support federal coal research programs that: accelerate demonstration of technologies; develop advanced technologies that are focused on greater efficiency and environmental improvement for coal generation; focus research on carbon sequestration technologies; improve mining efficiencies, safety and environmental performance; and, advance mining education.

DESCRIPTION: Federal government coal research programs related to coal utilization and mining (production) are centered within the Office of Fossil Energy, Department of Energy. The National Energy Technology Laboratory coordinates much of the research; some basic research is conducted through the other national laboratories. Most of the research programs are designed as industry-government partnerships with industry providing half or more of the cost of the research. The Fossil Energy program also supports academic research that increases our fundamental understanding and provides for undergraduate education and graduate research on coal utilization systems, but lacks a equivalent program for academic coal production (mining and mineral preparation) research.

Coal Utilization Research Program

The goal of the coal utilization research program systems research program is to develop advanced technologies that increase the efficiency and improve the environmental performance of coal use, principally for the production of electric power and liquid fuels. Among the key DOE programs are the following.

- The Clean Coal Technology Program (CCT) was begun in 1985. Thirty eight projects with a total value of $5.2 billion have been funded, and two-thirds of the funding - $3.5 billion – has been from industry. Many new and successful technologies were developed through the CCT program including the NOx reduction technologies that are now in commercial use on 75% of the coal fired power plants in operation today. Technologies demonstrated include advanced electric power generation systems, environmental control devices and pre-combustion technologies. This program is nearing completion.
- The Power Plant Improvement Initiative (PPII) program accelerates the demonstration of near-commercial technologies that can be installed on existing coal-fired power plants to improve their efficiency and environmental performance. In the FY 2001 appropriations, Congress directed DOE to use $95 million in unspent CCT money to begin the PPII. The initial PPII projects will be selected by the end of FY 2001. The program requires a minimum of 50% in industrial cost-sharing.
- The DOE Office of Fossil Energy, through its Coal and Power Systems program, conducts coal related R&D, including advanced coal gasification and combustion systems, materials development, environmental assessments of coal use, development of mercury control technology, management of solid byproducts from coal combustion, and production of ultraclean liquid fuels. Many of these program elements are combined in and support the Vision 21 concept, which seeks to integrate promising new technologies into highly efficient, low-emitting energy complexes, for the production of electricity, fuels and chemicals.
- A critical element of the Coal and Power Systems program is research on carbon sequestration. If reductions in carbon dioxide emissions from coal-based electricity generating systems become necessary, sequestration may become the only practical, long-term solution. In the near-term, it is essential to know the technical and economic feasibility of a variety of sequestration options to guide public policy. For that reason, it is essential that the DOE program be funded at a level sufficient to

move beyond current lab-scale research to practical field tests of the most promising options.

- The UltraClean Fuels program is developing new approaches to producing liquid transportation fuels from coal to meet increasingly stringent environmental standards, while reducing our dependence on imported petroleum and natural gas. An important aspect of the Clean Fuels program, is the integration of fuels production with advanced electric power generation systems (as in the Vision 21 concept) to allow the efficient coproduction of a variety of energy products from a single facility with coal as the ultimate fuel source.

Mining – Production

The Mining Industry of the Future program is a joint industry/DOE to develop technology that improves the production and processing of minerals, including coal. The goal is to develop new technologies that ensure the health and safety of employees, protect the environment, reduce energy consumption in mining, and produce high quality products at lower costs. Research is being conducted in three areas: exploration, mining and processing. To date 26 projects have been funded with the first results of this pre-commercial research expected in late 2001. The program has been funded at $3 million per year with matching funds from industry.

The DOE provides little support for research on mining at the academic institutions. This diminishes the national capability to develop fundamental science to improve mining practices, and impairs the abilities of the universities to train future generations of mining engineers. In addition to its programs in oil and gas production, the Fossil Energy office should institute a program to support academic research in mining.

RECOMMENDATIONS:

Coal Utilization: DOE's requests for the current coal utilization research and development programs should be fully funded, and the Power Plant Improvement Initiative should be continued at an annual funding level of $150 million . The DOE Vision 21 program should be established as a separate budget item so that its goals can be prioritized and accelerated. Coal and Power Systems research and development should be focused on supercritical and ultra-supercritical plants, advanced gasification and combustion hybrid systems. Funding for CO2 sequestration should be increased to allow field testing of promising options. Research should address the three criteria pollutants (SO2, NOx and mercury), solid waste and water management. DOE should organize research programs in accordance with the priorities identified by the coal and utility industries as defined in the Technology Roadmaps developed by the Coal Utilization Research Council, the Electric Power Research Institute and the Coal Based Generation Stakeholders Group.

Coal Production: The DOE request for Mining Industry of the Future funding should be increased to a minimum of $10 million annually. A program of university mining research should be established under the Office of Fossil Energy with an initial annual funding of $3 million to support academic research and graduate studies in mining.

Coordination: DOE should ensure that the mining related research currently being carried out in many locations within the department under different programs is coordinated and is not duplicative. This could be done by establishing a "coal center" at NETL but coordination should not require additional staffing.

MODIFICATIONS IN CORPORATE INCOME TAX POLICIES

PRINCIPLE: Modify federal tax policy to encourage investment in production of domestic energy and in electric generating facilities.

DESCRIPTION: Tax policy, including tax incentives, can be a major component of energy policy as they affect the development and production of energy including electricity. Several provisions of the Internal Revenue Code should be modified to address counterproductive policies previously put into place. These issues are also of significant importance to the oil and gas industry. At a minimum, any modifications to the areas of tax law outlined below which are accorded to one fuel should be similarly accorded other fuels in order to maintain a level playing field for attracting investment.

RECOMMENDATIONS:

- As identified in a separate paper, the most important changes in tax policy to address the nation's energy supply deficit – specifically electricity – are the investment tax credit and production tax credit components of the National Electricity and Environmental Technology (NEET) legislation. These incentives will provide the impetus to increase the supply of electricity, improve the environment through reductions of pollutants regulated under the Clean Air Act, and reduce the amount of carbon dioxide emitted per unit of energy produced through significant increases in the efficiency of converting coal to electricity.
- The corporate alternative minimum tax (AMT) should be repealed or modified. Mining is a capital-intensive business and the AMT works a hardship on such businesses. As measured by generally accepted accounting principles, most mining companies are not profitable. In recent years, most companies have been consistently unprofitable. The fact that mining companies are required to pay the AMT, even if they have no profit, has added to the difficulty of attracting capital to maintain, expand or construct new mines. While elimination of the AMT may not be politically or economically achievable in the near term, at a minimum, legislation should be supported to allow historical corporate AMT taxpayers, such as mining, to utilize accumulated AMT tax credits to offset prospective AMT tax liability. Legislation to effect such a change was enacted by the previous Congress, but was vetoed as part of a larger tax package by President Clinton. Separately, eliminate the 90 percent limitation on use of net operating losses and foreign tax credits applicable to corporate AMT taxpayers.
- Mining companies should be provided the opportunity to fully expense exploration and development costs just as the oil and gas industry. The current limitations on expensing result in mining companies being forced to capitalize a percentage of their exploration and developments costs. This tax treatment serves as a financial disincentive for the development of new mines to meet our nation's needs. The playing field should be leveled and mining companies should be permitted to fully expense such costs.
- As currently structured, the 10 percent depletion allowance for coal was reduced by 15 percent as part of an omnibus tax bill in 1986. The reduction should be repealed. Separately, the current 50 percent net income limitation per property on use of the depletion allowance should be eliminated or reduced as it was earlier for the oil and gas industry, thus leveling the playing field for capital investments.

RELIABLE, TIMELY AND COMPLETE ENERGY DATA A REQUIREMENT FOR SOUND PUBLIC POLICY

PRINCIPLE: Data on energy production and consumption, available on a timely basis and that is complete, accurate and reliable is necessary to support sound decisions by both the government and the private sector.

DESCRIPTION: Development and implementation of sound energy policy requires that accurate, complete and timely data on energy production and consumption be made available to government policy makers and to the public. The Department of Energy's independent Energy Information Administration (EIA) is responsible for the collection, reporting and dissemination of data on all energy sources: petroleum, natural gas, uranium, renewables, electric generators and coal. Data on production, use, prices, stockpiles, environmental performance in terms of quality and emissions, and international trade are among the valuable data series for which EIA is responsible.

The information is used by Congress, federal, state and local governments, business and industry, educational institutions and the general public in a number of areas. One of the most important is analysis of the effects of policy proposals on energy supply, demand and price. Another use is for forecasting and this data provide the basis for EIA's own energy supply demand forecasts upon which the Administration relies when making energy policy decisions. Yet another use for this important data is determining the current state of the energy picture throughout the nation – for example, will heating oil stocks be sufficient for the winter season, will gasoline stocks carry through the summer, will electric generating capacity be enough to meet immediate demands, do utilities have coal stocks to carry them through a peak generating period, and so on. What are the levels of emissions of SO2, NOx, or CO2? Timely, accurate and complete data can answer these questions and more and importantly allow a more informed public policy debate.

STATUS: The Energy Information Administration collects and publishes various data series on a weekly, monthly and annual basis. The Federal Regulatory Commission (FERC) collects data on the electric utility sector that in turn is complied and published by the EIA. The data on cost and quality of fuels delivered to utilities is collected on FERC "Form 423."

KEY ISSUES: Coal and electric utility data are no longer available on a timely basis nor are they accurate or complete. Data on coal production, employment, distribution and price (published on an annual basis) is more than ONE YEAR LATE. Data is not available at this point for even 1999. To compare – annual 1999 data on the petroleum industry was available in June 2000 and annual 1999 data on the natural gas industry was published in October 2000. Coal data has been treated as the "step-child" at the EIA and resources to collect and publish this data have been drastically reduced.

There is a different information issue affecting the electric generating sector. FERC does not have the authority to collect information from the non-utility generators (on Form 423) and as more of the industry becomes non-regulated, data on generation, fuel use and fuel purchases, inventories, etc. are increasingly incomplete. Additionally, OMB has been slow in acting on approval of the extension of authority to collect these data. As a result much of the data series required for sound energy policy decisions in the electric sector is simply not available. Not only is the federal government ignorant of coal inventories at power plants, for example, it does not have complete data on fuel prices and consumption.

RECOMMENDATION: Increase resources for collection and reporting coal data and take immediate steps to improve the timeliness of the information. Continue to authorize FERC collection of utility FORM 423 data and extend the information reporting requirements to the entire generating sector.

URANIUM

- Changes to NRC Fee Structure
- Uses of the National Strategic Uranium Reserve
- Limitations on Sales of Government Uranium Stockpiles
- Domestic Nuclear Fuel Cycle Short Term Mitigation
- Extend Dates of USEC Privatization Act
- Domestic Uranium Research and Development
- Uranium Product Tax Credit

CHANGES TO NRC FEE STRUCTURE

PRINCIPLE: Support for the domestic uranium recovery industry is essential for both energy and national security reasons. Legislation is necessary to eliminate fees for NRC uranium recovery.

BACKGROUND: NMA has consistently recommended changes to the Nuclear Regulatory Commission's (NRC) fee structure due to its impact on the domestic uranium recovery industry. There are serious inequities caused by the Omnibus Budget Reconciliation Act of 1990 (OBRA) mandate that NRC recover approximately 100 percent of its budget each year. In light of the current circumstances facing the uranium recovery industry, with the price of uranium hovering around $8/lb, the fees the uranium recovery licensees pay to NRC can be determinative of whether a company continues to produce uranium or instead proceeds to closure. These fees can also impact the amount companies can dedicate to reclamation.

DESCRIPTION: NRC's uranium recovery licensees pay an annual fee as well as an hourly fee for professional staff time. Unfortunately, with both types of fees, there is often no reasonable relationship between the cost to uranium recovery licensees of NRC's regulatory oversight program and the benefit derived from such services. The annual fee includes costs for activities not attributable to any existing NRC licensee or class of licensee such as international activities, Agreement State oversight, and licensing and inspection activities associated with other Federal agencies. This problem of the lack of reasonable relationship between annual fees and services rendered by NRC is exacerbated as more states become Agreement States, leaving fewer NRC licensees to bear an even greater share of the burden. Recent increases in NRC fees have resulted not from increases in the amount to be recovered but rather due mostly to more states becoming Agreement States. As more states become Agreement States and more sites are decommissioned, fewer NRC licensees bear an even greater share of the burden. Under this scenario, the last licensee could end up having to pay for the entire program.

The fees paid for professional staff time also often bear no relationship to services provided by NRC. Recent regulatory changes have required licensees to pay the full cost for all time accrued by the project manager assigned to their sites. In reviewing the NRC directives on such cost recovery, it seems virtually no activities the project manager engages in are excluded from cost recovery. Thus, licensees would not only pay for actual time the project manager spends on a their site but would also pay for other activities that have nothing to do with the licensees' sites, including support to other offices, support to other agencies, and international activities.

At a time when the domestic uranium industry is facing hardship due to low uranium prices, continued imports from the former Soviet Union and increased regulatory burdens, increased NRC fees are dealing a crippling blow to the domestic industry.

RECOMMENDATION: The Administration should support legislation that eliminates fees for NRC uranium recovery licensees until such time when the spot price of uranium (U_3O_8) has exceeded $14/pound (escalated) for one year.

USES OF THE NATIONAL STRATEGIC URANIUM RESERVE

PRINCIPLE: Support for the domestic uranium recovery industry is essential for both energy and national security reasons. The Administration should support removal of federal uranium stockpiles from commercial markets.

BACKGROUND: Immediately prior to the privatization of United States Enrichment Corporation (USEC), USEC's offering documents established the transfer of in excess of 70 million pounds of Department of Energy (DOE) uranium and uranium equivalents to USEC. These massive transfers had not been anticipated by the domestic mining and conversion sectors of the nuclear fuel industry.

DESCRIPTION: In order to mitigate against the material adverse impact DOE's transfers had on these industries, DOE agreed not to sell or transfer additional uranium or uranium equivalents for a ten year period. The proposed amendment would codify the DOE action and extend the time of the stockpile requirements. Taking the remaining federal uranium stockpiles out of circulation would mitigate against the material adverse impacts previous sales and transfers have created, thereby reducing government fostered damage.

RECOMMENDATION: Amend 42 U.S.C. 2296b-1 National Strategic Uranium Reserve to read:

There is hereby established the National Strategic Uranium Reserve under the direction and control of the Secretary. The Reserve shall consist of natural uranium and uranium equivalents contained in stockpiles or inventories currently held by the United States for defense purposes all natural uranium and uranium equivalents acquired or obtained by the United States in the future, and all natural uranium and uranium equivalents of Russian origin previously purchased or to be purchased in the future by the United States government pursuant to the Russian HEU Agreement. Effective on the date of enactment of this amendment and for a period of ten years thereafter, use of the Reserve shall be restricted to military purposes and government research. Use of the Department of Energy's stockpile of enrichment tails existing on the date of enactment of this amendment, shall be restricted to military purposes or to being processed as an alternate feed material by the domestic uranium recovery industry for ten years thereafter.

DOMESTIC NUCLEAR FUEL CYCLE SHORT TERM MITIGATION

PRINCIPLE: Support for the domestic uranium producers is essential for both energy and national security reasons. The Secretary of Energy should be authorized to purchase the USEC's uncommitted inventory of natural uranium.

BACKGROUND: The Department of Energy was required to transfer certain quantities of natural uranium and uranium equivalents to USEC as part of the privatization process. (See 42 U.S.C. 2297 h-10.) The sale of this material by USEC was restricted to no more than 4 million pounds per year to reduce the impact of this material on domestic producers and uranium equivalents produced pursuant to the Russian HEU Agreement. The Department made additional liabilities in lieu of cash payments to USEC owed due to liabilities remaining with the Department as a result of the Privatization Act. USEC sold this material into the commercial marketplace in addition to the amounts specifically authorized by congress in the Privatization Act.

DESCRIPTION: USEC's sales of restricted and non-restricted uranium derived from governmental stockpiles has damaged uranium producers resulting in a drop in the spot market price from $16.15 per pound at the time of privatization to an historic low of $7.10 in Dec. 2000.

RECOMMENDATION 1: Legislation on Domestic Nuclear Fuel Cycle Short Term Mitigation should be enacted to address the following. (Recommendation 2, an alternative to Recommendation 1 is discussed below.)

Section 1. In General.
Recent sales and transfers of government uranium inventories related to the Privatization of USEC and ramifications arising from the implementation of the Russian HEU Agreement have caused a material adverse impact on the mining, conversion and enrichment components of the domestic nuclear fuel industry.

Section 2. Purchase of USEC's Uncommitted Uranium Inventory.
The Secretary is authorized to purchase USEC's uncommitted inventory of natural uranium and uranium equivalents of up to _____ pounds.

(a) These purchases shall be at the current spot market price as established by the Secretary or the price obtained by the Secretary when the natural uranium or uranium equivalent was transferred to USEC during the privatization of the United States Enrichment Corporation, whichever is higher.

Section 3. Use of Purchased Uranium.

The natural uranium and uranium equivalents purchased under this section shall be placed in the National Strategic Uranium Reserve.

Section 4. Authorization and Funding.

(a) In General
There is authorized to be appropriated $_____ to carry out this part.

(b) Source
Funds described in subsection (a) of this section shall be provided from:

RECOMMENDATION 2: As an alternative to recommendation 1, legislation could be passed that only requires the repurchase of certain contaminated materials from USEC by DOE as outlined below.

Amend 42 U.S.C. 2297-h – 10(C) USEC Privatization Act to read as follows:

New Subsection (3) Certain transfers from the Department made pursuant to this section and otherwise were contaminated by *technetium* existing in the material containers. The Secretary is authorized to purchase this material from USEC.

(A) The Secretary's purchases shall be at the current spot market price as established by the Secretary or the price determined by the Secretary when the natural uranium or uranium equivalent was transferred to USEC during the privatization of the United States Enrichment Corporation, whichever is lower.

(B) In the event the material purchased by the Secretary can be decontaminated or available for sale to commercial nuclear reactors, it shall be placed in the National Strategic Uranium Reserve.

(C)Authorization and Funding.

(i) In General – There is authorized to be appropriated _____ to carry out this part.

(ii) Source – Funds described in subsection (a) of this section shall be provided from _____.

LIMITATIONS ON SALES OF GOVERNMENT URANIUM STOCKPILES

BACKGROUND: In order to mitigate against the material adverse impact DOE's transfers to USEC had on the domestic uranium recovery and conversion industries, DOE agreed not to sell or transfer additional uranium or uranium equivalents for a ten year period. Taking the remaining federal uranium stockpiles out of circulation would mitigate against the material adverse impacts previous sales and transfers have created, thereby reducing government fostered damage.

DESCRIPTION: Action is needed to limit the sales of government uranium stockpiles once such uranium is released from the ten year restriction on government sales. This limitation will prevent government stockpiled uranium from entering the commercial market in such quantities as to disrupt the market thereby enhancing the value of government owned uranium.

RECOMMENDATION: Limit the sales of government uranium stockpiles to four million pounds per year, once such uranium is released from the ten year restriction on government sales by amending 42 U.S.C. 2297h-10(d) Inventory Sales as follows.

(d) Inventory sales.

Subject to the restrictions required under Section 2296b-1 of this title, the Secretary may, from time to time, sell up to four million pounds per year of natural and low-enriched uranium (including low-enriched uranium derived from highly enriched uranium) from the Department of Energy's stockpile.

(2) No sale or transfer of natural or low-enriched uranium shall be made unless:

(A) the President determines that the material is not necessary for national security needs,

(B) the Secretary determines that the sale of the material will not have an adverse material impact on the domestic uranium mining, processing, conversion, or enrichment industry, taking into account the sales of uranium under the Russian HEU Agreement and the Suspension Agreement, and

(C) the price paid to the Secretary will not be less than the fair market value of the material.

EXTEND DATES OF USEC PRIVATIZATION ACT

BACKGROUND: Section 3112(b)(2) of the USEC Privatization Act requires the Department of Energy to sell uranium hexafluoride into what is now an already oversupplied market due in major part to overly aggressive transfers of government stockpiles.

DESCRIPTION: A simple date extension will avoid exacerbating the governmentally fostered market damage. This extension will assist domestic producers to the front end of the nuclear fuel cycle.

RECOMMENDATION: Amend USEC Privatization Act, Section 3112(b)(2) to read:

"(2) ~~Within 7 years of the date of enactment of this Act, t~~The Secretary ~~shall~~ may sell, and receive payment for, the uranium hexafluoride transferred to the Secretary pursuant to paragraph (1). Such uranium hexafluoride ~~shall~~ may be sold –

(A) ~~at any time for use in the United States~~

(~~B~~A) at any time for end use outside the United States;

(~~C~~B) in 1995 and 1996 to the Russian Executive Agent at the purchase price for use in matched sales pursuant to the Suspension Agreement; or,

(~~D~~C) in calendar ~~2001~~ 2008 for consumption by end users in the United States no prior to January 1, ~~2002~~ 2009, in volumes not to exceed 3,000,000 pounds U308 equivalent per year."

DOMESTIC URANIUM RESEARCH AND DEVELOPMENT

PRINCIPLE: Support for the domestic uranium industry is essential for both energy and national security reasons. A federal research program to support advanced exploration, mining and milling technologies is required to assure the long term viability of the domestic industry.

BACKGROUND: The domestic uranium mining and conversion service industries have been unintentionally adversely affected due to the privatization process in actions taken by the Department of Energy and the U.S. Enrichment Corporation in the management of government uranium inventories. Due to current excess inventories, including material available from the U.S.-Russia agreement on the conversion of weapons grade highly enriched uranium (HEU), worldwide production of uranium and conversion has declined to less than half of annual consumption, and domestic production of uranium is currently less than 10% of annual U.S. requirements. The utilization of existing inventories has greatly benefitted the U.S. government by avoiding the need for cash payments in the hundreds of millions of dollars from the Treasury to the USEC, and has benefitted consumers of nuclear power, due to the reduction in the market price of uranium fuel feedstock material. The United States Enrichment Corporation Privatization Act stated the public interest in mitigating adverse impacts to the domestic mining.

DESCRIPTION: Funds should be allocated for cooperative agreements to mitigate the impact of government inventory sales and transfers that have devastated the domestic uranium industry. These cooperative agreements can be used to mitigate the cost of compliance with environmental safety and health laws and regulations for certain domestic uranium production facilities. The proposed cooperative agreements will ensure full environmental compliance where costs would normally be defrayed through production revenues. The cooperative agreements can also assure the preservation of domestic reserves by assisting in land and lease costs and promoting the exploration for new domestic reserves. Finally the cooperative agreements can be made with existing producers to enhance mining and milling technology and remediation activities to promote a strong competitive domestic uranium industry.

RECOMMENDATION: Legislation on Domestic Uranium Research and Development should be enacted addressing the following.

Section 1. The Secretary of the Department of Energy is authorized to enter into multi-year cooperative agreements with domestic uranium producers to:

(a) ensure compliance with all applicable federal, state and local requirements for the protection of environment, safety and health;
(b) assure the preservation of existing uranium reserves and leases;
(c) promote uranium mining and milling techniques and innovations;
(d) promote exploration techniques and activities to increase the domestic natural uranium reserve.

Section 2.

(a) there is authorized to be appropriated $_____ to carry out this part. The aggregate amount in the preceding sentence shall be increased annually, based upon an inflation index to be determined by the Secretary;

(b) Funds described in subsection (a) of this section shall be provided from the USEC Privatization Expense Fund established by Section 3104(e) of the Privatization Act;

Section 3. Domestic uranium producers shall mean individuals, companies, partnerships, joint ventures and other business entities that owned, controlled, operated and/or managed a uranium recovery facility (including conventional mills, in-situ leaching operations, heap leaching operations or any other type of uranium recovery facility) that possessed an operating Nuclear Regulatory Commission (NRC) or agreement state license on or after July 28, 1998 and are capable of future operation..

URANIUM PRODUCT TAX CREDIT

PRINCIPLE: Support modification of the federal tax laws to provide a credit for the purchase of domestic uranium products.

BACKGROUND: The United States uranium recovery industry has long been recognized as vital to United States energy independence and essential to United States national security, the domestic uranium industry has been found to be "not viable" by the Secretary of Energy under provisions of the Atomic Energy Act of 1954, as amended. Transfers and sale of government uranium inventories including those related to the United States/Russian HEU Agreement and the privatization of the United States Enrichment Corporation have had material adverse impacts on the United States uranium industry to the extent that the current spot market price of uranium is at an historical all time low. The unfettered introduction of government inventories has caused domestic uranium producers to either cease or curtail production;

DESCRIPTION: At such time as the price of natural uranium recovers to approach a reasonable cost of production, the United States uranium industry can be competitive with foreign producers due to advances in technology. Providing assistance to the domestic uranium industry is essential to mitigate the impacts on a private industry from government disarmament policies and government transfers of excess uranium reserves as well as to assure an adequate long-term supply of domestic uranium for the Nation's nuclear power program to preclude an undue threat from foreign supply disruptions or price controls.

RECOMMENDATION: To amend the Internal Revenue Code of 1986 to allow a credit for the purchase of uranium products within the United States, and for other purposes.

SECTION 1. SHORT TITLE.

This Act may be cited as the "United States Uranium Employment and Production Incentive Tax Credit Act".

SECTION 2. FINDINGS AND PURPOSE.

(a) FINDINGS.—The Congress finds that—

(1) although the United States uranium industry has long been recognized as vital to United States energy independence and essential to United States national security, the domestic uranium industry has been found to be "not viable" by the Secretary of Energy under provisions of the Atomic Energy Act of 1954, as amended;

(2) transfers and sale of government uranium inventories including those related to the United States/Russian HEU Agreement and the privatization of the United States Enrichment Corporation have had material adverse impacts on the United States uranium industry to the extent that the current spot market price of uranium is at an historical all time low;

(A) the unfettered introduction of government inventories has caused domestic uranium producers to either cease or curtail production;

(B) at such time as the price of natural uranium recovers to approach a reasonable cost of production, the United States uranium industry can be competitive with foreign producers due to advances in technology; and

(C) at the present time approximately 23 percent of United States electricity is produced from uranium fueled power plants and this number is expected to increase;

(3) the United States has historically been the leading uranium producing nation and holds extensive proven reserves of natural uranium that offer the potential for secure sources of future supply; and

(4) providing assistance to the domestic uranium industry is essential to—

(A) mitigate the impacts on a private industry from government disarmament policies and government transfers of excess uranium reserves;

(B) preclude an undue threat from foreign supply disruptions that could hinder the Nation's common defense and security; and

(C) assure an adequate long-term supply of domestic uranium for the Nation's nuclear power program to preclude an undue threat from foreign supply disruptions or price controls.

(b) PURPOSE.—It is the purpose of this Act to—

(1) ensure an adequate long-term supply of domestic uranium for the Nation's nuclear electric power program and for the Nation's common defense and security; and

(2) provide assistance to the domestic uranium industry by creating a domestic utility purchase incentive to ensure the continued existence of the domestic uranium industry and this industry's infrastructure.

SECTION. 3. CREDIT FOR PURCHASE OR URANIUM PRODUCED WITHIN THE UNITED STATES.

(a) IN GENERAL.—Subpart B of part IV of sub-chapter A of chapter 1 of the Internal Revenue Code of 1986 (relating to foreign tax credit, etc.) is amended by adding at the end thereof the following new section:

SECTION 30. CREDIT FOR PURCHASE OF URANIUM MINED OR PRODUCED AS A BY-PRODUCT WITHIN UNITED STATES.

"(a) ALLOWANCE OF CREDIT.—There shall be allowed as a credit against the tax imposed by this chapter for the taxable year an amount equal to the product of $7 multiplied by the number of pounds of qualified uranium purchased by and delivered to the tax payer during such taxable year for use by a domestic utility.

"(b) LIMITATIONS AND ADJUSTMENTS.—

"(1) CREDIT ALLOWED ONLY ONCE.—If a credit was allowed under subsection (a) with respect to qualified uranium, no credit shall be allowed under subsection (a) with respect to any subsequent purchase of such uranium.

"(2) APPLICATION WITH OTHER CREDITS.—The credit allowed by subsection (a) for any taxable year shall not exceed the excess (if any) of—

"(A) the regular tax for the taxable year reduced by the sum of the credits allowable under subpart A and sections 27, 28, and 29, over

"(B) the tentative minimum tax for the taxable year.

"(3) INFLATION ADJUSTMENT.—The $7 amount in subsection (a) shall be adjusted by multiplying such amount by the inflation adjustment factor for the calendar year in which the purchase occurs.

"(c) QUALIFIED URANIUM.—For purposes of this section, the term 'qualified uranium' means uranium ore the seller or producer of which certifies, in such manner as the Secretary may prescribe, as having been mined or produced as a by-product in the United States (within the meaning of section 638(1)) on or after January 1, 2000.

"(d) DEFINITIONS AND SPECIAL RULES.—For purposes of this section—

"(1) SALES BETWEEN RELATED PERSONS.—No credit shall be allowed under subsection (a) for any sale between related persons (as defined in section 29(d)(8)).

"(2) INFLATION ADJUSTMENT FACTOR.—The term 'inflation adjustment factor' has the meaning given such term by section 29(d)(2)(B), except that '2001' shall be substituted for '1979'.

"(e) APPLICATION OF SECTION.—This section shall apply to purchase after December 31, 2000, and before January 1, 2006, except that any purchase after December 31, 2000, pursuant to a contract entered into before January 1, 2001, shall be treated as a purchase on or before December 31, 2000."

(b) CONFORMING AMENDMENT.—The table sections for subpart B or part IV of subchapter A of chapter 1 of such Code is amended by adding at the end thereof the following:

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to purchases after December 31, 2000, in taxable years ending after such date.

2001-006068

Department of Energy
Washington, DC 20585

March 30, 2001

Mr. Carl L. Valdiserri
Chairman and Chief Executive Officer
3001 Miller Road
Dearborn, MI 48121-1699

Dear Mr. Valdiserri:

Thank you for your recent letter explaining the adverse impacts of rising energy prices on Rouge Steel and offering recommendations on how best to address some of the Nation's current energy problems.

One of President Bush's first acts was to create a National Energy Policy Development Group, headed by Vice President Cheney, to help the private sector and government at all levels promote dependable, affordable, and environmentally sound production and distribution of energy for our country. This group includes the Secretary of Energy, as well as the Secretaries of the Treasury, Interior, Agriculture and Commerce Departments, the heads of the Federal Emergency Management Agency, the Environmental Protection Agency, the President's Deputy Chief of Staff for Policy, and the Assistants to the President for Economic Policy and Intergovernmental Affairs.

The National Energy Policy Development Group will consider the ideas and recommendations of consumers, businesses, states and independent experts on how best to address the broad range of energy issues now facing the Nation. Your recommendation that National energy policy include actions to encourage the exploration and expanded production of energy to meet the growing demand will be given serious consideration.

Thank you for writing.

Sincerely,

Margot Anderson
Acting Director
Office of Policy

27943

Harding, Todd

: Dandy, Majida
Sent: Monday, April 02, 2001 12:04 PM
To: Harding, Todd
Subject: FW: Confirmation to Energy Task Force Meeting

-----Original Message-----
From: Nicole_E._Grodner@who.eop.gov%internet
[mailto:Nicole_E._Grodner@who.eop.gov]
Sent: Monday, April 02, 2001 11:50 AM
To: lfenton@doc.gov%internet; brian_waidmann@ios.doi.gov%internet;
dwm@usda.gov%internet; tim.adams@do.treas.gov%internet;
john.flaherty@ost.dot.gov%internet; McSlarrow, Kyle;
mcginnis.eileen@epa.gov%internet; liz.digregorio@fema.gov%internet;
Augustine_T._Smythe@omb.eop.gov%internet
Cc: Dandy, Majida; dan.mccardell@do.treas.gov%internet;
ray_joiner@ios.doi.gov%internet; Marlene.minix@usda.gov%internet;
lgros-daillon@doc.gov%internet; suzanne.scruggs@ost.dot.gov%internet;
patty.mchugh@ost.dot.gov%internet;
schwarz.denise@epamail.epa.gov%internet; wade.powers@fema.gov%internet;
Karen_E._Keller@omb.eop.gov%internet; Craig_Felner@who.eop.gov%internet
Subject: Confirmation to Energy Task Force Meeting

This confirms the NEPD Principals' Meeting scheduled for tomorrow April 3.

at 3pm in the Vice President's Ceremonial Office. The Invitees for meeting are provided below:

Invitees:

Secretary Paul O?Neill, Secretary of the Treasury
Secretary Gale Norton, Secretary of Interior
Secretary Ann Veneman, Secretary of Agriculture
Secretary Don Evans, Secretary of Commerce
Secretary Norman Mineta, Secretary of Transportation
Secretary Spencer Abraham, Secretary of Energy
Governor Christine Todd Whitman, Administrator of the Environmental Protection Agency
Mr. Joe Allbaugh, Director of the Federal Emergency Management Agency
Mr. Mitchell Daniels, Director, Office of Management and Budget
Mr. Josh Bolten, Deputy Chief of Staff to the President
Dr. Lawrence Lindsey, Director, National Economic Council
Mr. Ruben Barrales, Assistant to the President for Intergovernmental Affairs

Vice President?s Staff:

Lewis Libby
Dean McGrath
Mary Matalin
Cesar Conda
Karen Knutson
Juleanna Glover
John Fenzel
les Smith
sten Drager

White House Staff:

Joel Kaplan, Office of the Assistant to the President and Deputy Chief

A National Report on America's Energy Crisis

Remarks by U.S. Secretary of Energy Spencer Abraham U.S. Chamber of Commerce, National Energy Summit
March 19, 2001

I would like to congratulate the U.S. Chamber of Commerce for convening this two-day National Energy Summit and I appreciate your invitation to participate. As we all know, the topic of energy is as timely as the day's headlines. In just my first eight weeks as Energy Secretary, California has faced almost daily power alerts. Rising natural gas prices have punished consumers with bills that, in some cases, are double or triple last winter's. And forecasts for this summer suggest the possibility of rolling blackouts.

The good news is that America's energy problems can be solved. The bad news is that the situation in California is not isolated, it is not temporary, and it will not fix itself.

America faces a major energy supply crisis over the next two decades.

The failure to meet this challenge will threaten our nation's economic prosperity, compromise our national security, and literally alter the way we live our lives.

America has heard these dire warnings before – in fact, they seem to be a recurring theme in our nation's energy discussion, almost since "Colonel" Drake made the first oil strike near Titusville, Pennsylvania in 1859. "The amazing exhibition of oil," advised the State Geologist of Pennsylvania, "[is] a temporary and vanishing phenomenon -- one which young men will live to see come to its natural end." That was in 1885.

Around the same time, John Archbold -- who succeeded John D. Rockefeller as head of Standard Oil -- joked about the prospects for oil discoveries in Oklahoma: "Are you crazy?" Archbold said. "I'll drink every gallon produced west of the Mississippi."

I don't know if anyone ever called Mr. Archbold on that pledge. But for whatever reason, in 1914 the U.S. Geological Survey predicted that the U.S. would soon exhaust its available oil supplies. They issued the same warning in 1926. And again in 1939. And in 1949.

All of these warnings have proven false. Despite all these expert predictions, the world has not run out of oil or other resources. And yet here we are, faced with the most serious energy shortage since the days of oil embargoes and gas lines.

My point is, America's current energy supply crisis is not due to some inevitable neo-Malthusian depletion of resources. The United States -- and our North American and hemispheric neighbors -- are blessed with a rich abundance of natural resources. It's political leadership that has been scarce.

For the past eight years, Washington sat on the sidelines as our nation's energy needs mounted. During the 1990s, the Clinton Administration employed a policy of taxing demand, limiting supply, and ignoring the rapidly expanding needs of the future.

Their energy strategy boiled down to: you can't find it ...you can't transport it ... and even if you get it, we don't want you to use it. Through neglect or complacency or ideology, this approach has led us to the crisis we

face today.

The Bush Administration is fully prepared to respond to the broad set of challenges we inherited. But we must :andid with the American people about the magnitude of the problem -- which is what I'd like to talk about ay.

America's Energy Supply Challenges

Three overriding facts starkly define the challenge of America's energy needs over the next two decades:

First, demand for energy is rising across the board, but particularly for natural gas and electricity;

Second, supplies are being limited by a regulatory structure that, in many respects, has failed to keep pace with advances in technology and an uncertain political environment that often discourages investment in desperately needed facilities;

And third, our energy infrastructure – that network of the generators, transmission lines, refineries and pipelines that convert raw resources into usable fuel – is woefully antiquated and inadequate to meet our future needs.

Unless these challenges are addressed, America's energy supply will be continually at risk ... our citizens will encounter blackouts and other lifestyle-altering disruptions ... and our economy will be hobbled by rising energy prices. Let me briefly outline some of the major issues on the horizon:

Oil: Rising Consumption, Accelerating Dependence

In the next 20 years, according to estimates by the Energy Information Administration, America's demand for ~il is projected to increase by 33 percent. Yet as consumption surges, U.S. production continues to drop :ipitously. We now produce 39 percent less oil than we did in 1970, losing nearly 4 million barrels a day in e process. And unless energy policy is changed, production will slip further -- to just 5.1 million barrels per day by 2020 – down from a high of 9.4 million a day 30 years ago.

This widening gap between demand and domestic supply will make us increasingly dependent upon foreign imports. Back in 1973 -- at the height of the oil crisis -- America imported just 36 percent of its oil from abroad. Today, we import 54 percent. And, if we allow this trend to continue, we will soon be forced to look abroad for some 64 percent of our oil. This will put more power in the hands of foreign suppliers – power they are not reluctant to use, as we just saw when the OPEC cartel decided to reduce oil output by one million barrels a day.

While this administration does not agree with OPEC's decision, that decision demonstrates the importance of increasing America's production of oil. Securing an affordable, reliable and adequate supply of crude is a critical challenge. But it is only half the oil story.

Since 1980, the number of American refineries has been cut in half. There hasn't been a new refinery built in the United States in over 25 years. New regulatory interpretations limit the ability of existing refineries to expand capacity. Add to that regulations that require the production of more than 15 different types of gasoline – and you have a refining industry strained to capacity, leaving us dangerously vulnerable to regional supply disruptions and price spikes.

Refineries are so constrained that when President Clinton made the politically symbolic gesture of releasing 30 million barrels of oil from the Strategic Petroleum Reserve last fall, that oil had to be shipped overseas to be refined.

tural Gas: Rapidly Rising Demand; Constraints on Supply

Many of the same issues confront the future of natural gas. America's demand for natural gas is projected to rise even more rapidly than oil. If Department of Energy projections are correct, by 2020 Americans will

consume 62 percent more natural gas than we do today. More than 9 out of 10 of the announced new electric generating plants will be fired by natural gas.

; approaching wave of new demand begs the question: Do we have an energy policy and a regulatory ucture capable of meeting our natural gas needs? Consider just a few constraints in this market.

Right now, an estimated 40 percent of potential gas resources in the United States are on federal lands that are either closed to exploration or covered by severe restrictions. The last lease sale in the some areas of the Gulf of Mexico was more than a decade ago. New discoveries of natural gas in the United States have fallen for three straight years, creating increasing pressure for more imports.

The notion that we can rely so heavily on natural gas ... maintain severe restrictions on exploration ... and still enjoy low prices is a dangerous assumption.

Even if we find the supplies, moving that gas to market will require an additional 38,000 miles of transmission pipeline and 255,000 miles of distribution lines – at an estimated cost of $120-$150 billion.

Today's pipeline system can hardly handle the supplies we know exist. Alaska's Prudhoe Bay, for example, produces about 8 billion cubic feet of natural gas a day – approximately 13 percent of America's daily consumption. But that gas never reaches the market. Instead, it is just pumped back into the ground, waiting until a pipeline is built to connect the Alaska fields to the U.S./Canada distribution system.

Electricity: Powering the Information Economy

As everyone knows, we also face a real challenge in generating enough electricity to light out homes and run our businesses. Over the next 20 years, the Department of Energy estimates that electricity demand in the United States will increase by 45 percent. That rising growth rate will require the construction of over 1,300 new power plants -- about 65 every year. Yet, the last time we added that much power was 1985.

thermore, there is reason to believe that this could turn out to be a conservative estimate. During the 1990s, electricity consumption far outstripped projections, driven by the energy-hungry information economy. Some experts calculate that the demands of the Internet already consume some 8-13 percent of electricity. If demand grows at just the same pace as during the last decade, we'll need nearly 1,900 new plants by 2020 -- or more than 90 every year -- just to keep pace.

Hundreds of new generating plants will place even greater pressure on our already strained and aging power grid. America's network of transmission lines, substations and transformers was built when utilities were tightly regulated monopolies providing service to assigned regions. Interconnections between suppliers were strictly an emergency backup measure to guard against rare service interruptions. The system was simply not designed for long-haul swapping of power in a highly competitive market.

Consumers are already feeling the impact of a transmission systems stressed by rising demand. Transmission bottlenecks contributed to the blackouts that have swept through California and to price spikes in New York City last summer that cost consumers an estimated $100 million.

Coal, Nuclear, and Hydro-Electric Power

Coal has historically been American's number one source for affordable electricity; it currently powers half of America's electricity generators. And at today's recovery rates, our nation has enough coal to keep those plants running for the next 250 years.

Coal generators have already been called upon to make broad reductions in emissions. The Bush Administration supports those efforts – and we will back it up with greater incentives for investment in clean al technology.

But the administration will not regulate coal out of existence ... and we will not support measures that will threaten electricity supplies and significantly raise electricity prices. President Bush made the right decision

last week not to impose new federal mandates on the emissions of carbon dioxide. If America is to have reliable electricity over the next 20 years, coal must continue to play a major role.

coal is not the only energy source facing an uncertain future. There hasn't been a new nuclear power plant permit granted since 1979. Many of the 103 existing nuclear plants are not even expected to file for a renewal of their licenses as they expire over the next 15 years.

Even hydroelectric power generation is expected to fall sharply. Re-licensing a hydro facility can take a decade or more and cost millions. And now, even though consumers are faced with potential blackouts and chronic electricity shortages in the West, activists and some political leaders want to breach one or more of the four federal dams on the Snake River to help young salmon, on their trek to the sea.

The Dangers of Complacency

What are the dangers of complacency in light of these challenges? How does it all add up for our economy and our citizens?

This nation's last three recessions have all been tied to rising energy prices – and there is strong evidence that the latest crisis is already having a negative effect.

The National Association of Manufacturers estimates that soaring fuel prices between 1999 and 2000 cost the U.S. economy more than $115 billion -- shaving a full percentage point off our Gross Domestic Product. A January survey of its 5,500 members reveals that nearly one quarter were forced to curtail operations.

During a two-week period this past January, Californians lost an estimated $2.3 billion in wages, sales and productivity. Layoffs are already hitting workers in the West as companies shift production to states with more reliable energy sources. Then there are the jobs that will never be created. Intel's CEO Craig Barrett announced that the world's leading chipmaker won't be expanding in California: "As long as California is a d World country," Barrett said, " we won't build $2 billion manufacturing plants here."

The Food and Agricultural Policy Institute reports that farmers are likely to see their income drop 20 percent over the next two years due to higher energy costs.

Rising energy costs are hitting every family's checkbook, primarily affecting those who can afford it least. Gas bills for many homeowners in the Washington, DC area more than tripled this year. Some residents are reporting that their heating bills are higher than their food bills this winter.

The power crisis isn't just pinching our wallets, it's changing the way we live our lives. In California, power outages have shut down traffic lights, darkened schools and closed businesses. The governor has ordered local police to patrol the streets – not for criminals, but to make sure businesses keep their lights dimmed.

But California is not the only state facing a mismatch between supply and demand. With electricity shortages predicted for New York City and Long Island this summer ... low capacity margins threatening electricity reliability in the Midwest, Southeast and Northern Plains states ... and strained refinery capacity in the Midwest, Americans across the nation are feeling the energy squeeze.

The Need For A National Energy Policy

Rising demand ... tightening supplies ... an aging power infrastructure ... a decade of neglect from Washington: These are the trends that define America's emerging energy needs.

President Bush has committed this administration to meeting these challenges – a job that begins with the ment task of developing and implementing a long-term national energy policy.

o accomplish this, President Bush created an Energy Task Force headed by Vice President Cheney. He has asked us to define a clear strategy – a strategy that will allow environmentally responsible exploration and recovery of our domestic resources ... enhance our commitment to conservation and energy efficiency ... and

encourage investment in new technology to further the development of renewable energy sources.

I wish I could say that the energy crisis now sweeping the nation has shocked the political system into action. like other political discussions in recent years, the debate over energy seems as deeply polarized as ever.

On one end of the spectrum, some activists propose what amounts to a "zero tolerance" policy toward exploration and cling to the quixotic idea that new, undiscovered sources will somehow allow us to meet our energy needs. On the other end, some advocates place an almost limitless faith in special tax breaks for this favored activity or subsidies for that preferred industry.

The two extremes in our energy debate are founded on several enduring myths – myths that today conspire to block any true advance toward a rational and stable energy policy in the United States. Here are a few of the more prominent ones.

Myth Number 1: It is impossible to balance energy exploration and environmental protection.

Advances in technology have brought us a long way from the days when wildcatters punched holes in the ground based on the hunch they might hit a gusher. But from a regulatory standpoint, our view of oil and gas exploration hasn't changed much since we saw Jed Clampett strike "black gold" and split for Beverly Hills.

Today, satellites and computers are the tools of choice in the exploration business. Geologists can bounce acoustic and electrical vibrations off the earth's inner depths, gather the resulting mass of data into powerful computers and then create three dimensional and even four dimensional maps of resource fields miles below the surface.

Armed with these pinpoint accurate images, companies employ advanced equipment to drill vertically, horizontally and around corners -- allowing us to access supplies from previously unimaginable depths, up to six miles away.

marriage of oil and gas exploration with cutting-edge technology means fewer rigs, fewer roads and fewer pipelines. Drilling operations that required 65 acres in the 1970s need only 10 acres today. Technological improvements in just the past 15 years have generated success rate increases of 50 percent. America's national energy policy must reflect these staggering advances that have revolutionized the way we develop our resources.

Myth Number 2: All our current problems are due to an energy industry that is engaged in a massive conspiracy to gouge consumers by limiting supply to drive up prices.

This myth has been punctuated by calls for investigations into everything from last summer's Midwest gasoline price spikes, to recent allegations that power generators in the West have been withholding electricity. We have a fair and objective process for judging these claims – and action will be taken when it is merited. Over the past two weeks, for example, the Federal Energy Regulatory Commission ordered power companies to rebate some $124 million to California utilities. Meanwhile, the Federal Trade Commission recently cleared gasoline suppliers of all charges relating to last summer's price increases.

But charges of price gouging largely miss the point. There is no magic source of supply; no hidden pool of energy that can be turned on and off like a faucet. California – and other power-strapped states – will never solve the power crises they confront until they resolve the conflict between demand and supply.

Earlier this year, one company proposed building a $400 million power plant in California that would have provided enough additional electricity to light 600,000 homes in energy-starved Silicon Valley. The company pledged to plant 800 new trees to beautify the area. They proposed cloaking the power station in a brick facade to make it essentially indistinguishable from a high-rent office complex. They even promised to help intain the local habitat for the endangered bay checkerspoon butterfly.

neir environmentally-sensitive plans won the support of the Sierra Club, the American Lung Association and the NAACP. But city officials voted unanimously -- 11-0 -- to reject the plan. In an editorial, the local paper

called this move "Dumb and Dumber."

Meanwhile, further south, plans to build a 550-megawatt gas-fired generator in a Los Angeles suburb were pped after residents voted 2:1 against the project. The local mayor added a much-needed dose of reason maturity to the debate – by launching a hunger strike in opposition to the plant.

In California, workers are being laid off, companies are leaving the state, farmers and small businesses are losing millions, consumers are threatened with rolling blackouts, but local officials reject power plants with little regard for the consequences. Is it really any mystery why there hasn't been a single new power plant built in California in the last decade?

Myth Number 3: The Bush energy plan is focused almost exclusively on opening the Arctic National Wildlife Refuge (ANWR) to exploration – a move that would buy us only about 6 months worth of American consumption while destroying a pristine natural wilderness, not to mention disrupting the breeding ground of the Porcupine Caribou.

Let's separate fact from fiction when it comes to ANWR.

First, according to estimates by the U.S. Geological Survey, ANWR holds between 5.7 to 16 billion barrels of recoverable reserves – with a mean estimate of 10.4 billion barrels. And that assumes the use of drilling technology now nearly a decade old. This represents more than 300 times the amount of the oil President Clinton released from the Strategic Petroleum Reserve last fall. And based on December 2000 figures, it would free us from about 54 years of oil imports from Saddam Hussein and Iraq.

Second, exploration would impact only about 2,000 acres out of more than 19 million. To put that in perspective, the massive Arctic National Wildlife Refuge is about the same size as the entire State of South Carolina; the two thousand acres that would be affected is less than half the size of Dulles airport.

as for the caribou, the herd in the Prudhoe Bay area grew more than 9-fold over the past 20 years to an imated 28,000 in 2000 – seemingly irrefutable evidence that caribou mating and oil exploration can peacefully coexist.

The decision to open a small portion of ANWR should be made on the merits. But it should not be made on the mistaken assumption that opening ANWR will allow us to produce our way to full energy independence.

America first became a net importer of energy in the 1950s – and our economy will continue to depend, in part, on imported oil. However, closing off virtually every available new source of domestic supply, enhances the leverage and power of an oil cartel that cannot be relied on to put America's interests first. While the resources of ANWR won't make us energy independent, they will help increase America's energy security by ensuring a more diverse supply of oil.

Myth Number 4: Government subsidies and tax breaks are the best way to encourage new exploration and production of energy.

This administration will continue to support funding for energy research and development initiatives. But capital is best allocated to its highest uses through the workings of the free market, not manipulations of the tax code. Government regulatory policy should not be aimed at picking winners and losers in any market, including energy. Neither should tax policy.

Myth Number 5: We can forego traditional sources and instead meet rising energy demand by harnessing wind, geothermal, solar and other forms of renewable power.

Excluding hydro-power, renewable sources currently generate about 2 percent of America's electricity. Billions ve been invested in developing renewable energy – and will continue to be invested under the Bush ministration. But renewables have yet to overcome the economic advantages of conventional energy sources.

Even with promising advances in research and development, renewables will only provide, according to Energy Information Administration estimates, about 6 percent of our total electricity consumption by 2020. Even if renewables exceed our most optimistic expectations, they would still supply only a fraction of our needs over the next 20 years.

Myth Number 6: Price controls are the answer to today's energy crisis.

Memories are short, aren't they. So let me remind everyone. America imposed price controls on oil and gas in the 1970s. They were an utter failure. They led to shortages and rationing and the idea that America was gripped by malaise.

Let me be clear: The Bush Administration does not support price controls. Price controls on electricity will lead to more blackouts. Price controls on gasoline will lead to gas lines. Price controls will deepen America's energy crisis, because they won't reduce demand, but they will cripple incentives for desperately needed new investments in energy supply.

Charting a New Policy Course

The challenges are formidable ... the warning signs are obvious ... but I am optimistic because I know this administration's commitment is equal to the task.

Our national energy policy will be comprehensive. It will reach across every department that touches the energy marketplace - from the Interior Department and the EPA to the Transportation Department and the DOE.

Our national energy policy will be hemispheric. It will be based on the understanding that our policy cannot stand in isolation from our neighbors throughout the Americas.

Our national energy policy will stress the need to diversify America's energy supply. It will be founded on the understanding that diversity of supply means security of supply ... and that a broad mix of supply options - from coal to windmills, nuclear to natural gas -- will help protect consumers against price spikes and supply disruptions.

And our national energy policy will be balanced. It will leapfrog the myths that stifle change -- rejecting the notion that there is no middle ground between environmental protection, regardless of the cost and energy exploration, regardless of the impact.

Soon we will deliver our recommendations to President Bush. Later, we will introduce legislation aimed at winning bipartisan support for a national energy policy that matches the magnitude of the challenge. I am hopeful that men and women of good will -- from both ends of the political spectrum ... from environmental organizations to industry groups -- will then come together and transcend the stale debate that has characterized energy policy in recent years.

About 150 years ago, America faced a vastly different energy crisis. Supplies of whale oil were becoming more and more scarce. Few could afford to pay for the luxury of this or other costly methods of illumination. Sure, crude oil was available. In those days it was soaked up with rags, wrung out into small vials, and then sold as a treatment for toothaches ... until an entrepreneur lined up an investor and a chemist and launched an energy revolution that would light the world.

In America, resources become scarce only when our imagination languishes. By engaging that imagination, I am confident we can meet the challenges of today. If complacency yields to action. If we resolve to strike a rational balance between our energy needs and our environmental concerns. And if a national energy policy becomes an urgent priority.

Thank you.

009564

April 5, 2001

The Honorable Frank Murkowski
US Senate
Washington, DC 20510

2001-009564 4/9 A 11:53

Dear Senator Murkowski:

The undersigned applaud your foresight in addressing our nation's critical energy supply issues by introducing S. 389. We are an ad hoc consortium of associations representing hundreds of public and private energy utilities, equipment manufacturers, service companies and others advocating on behalf of highly efficient technologies in cooling, heating and power (CHP) systems. CHP technologies such as natural gas cooling and distributed generation can reduce peak electric demand in power-constrained regions such as California and bring efficiency and environmental benefits to the nation and its energy consumers as well.

With the advantages offered by CHP in mind, our analysis reveals some contradictory provisions in S. 389 that we would like to bring to your attention, along with our suggested solutions. The gist of our argument is as follows.

Consider:

- Natural gas delivers over twice the amount of equivalent energy to consumers as does electricity, with an overall efficiency of delivery that is over 2.6 times that of electricity. This delivery is accomplished with far fewer environmental impacts and less than 22% of the revenue that is attributable to electricity.
- A popular misperception is that natural gas-fired combined-cycle turbines offer the right environmental and economic solution to our energy problems. In fact, direct use of natural gas provides superior efficiency and environmental performance.
- Federal energy efficiency policies have measured "improvements" in energy efficiency in terms of Btus per square foot at the site of consumption, with the assumption that such "improvements" automatically improve the environment. In fact, these policies have *increased* source (total) energy usage to meet the unabated increase in electrical use, while efficient direct use of natural gas has been discouraged.

Energy Policy Recommendations

- Our nation's energy policy should promote the most efficient use of energy from the source to final point of consumption. Analysis of energy policies should measure results over this full cycle, including emissions of pollutants and carbon dioxide.
- Because the direct use of natural gas is so efficient, it should be encouraged over the relatively inefficient use of natural gas for electricity generation in central plants.
- Fuel diversity for electric generation must be an integral part of the nation's energy policy. Absent fuel diversity, price hikes and price volatility are almost guaranteed. Congress should revisit any statutes that promote today's almost exclusive reliance on natural gas as the "fuel of choice" for central plant electric generation.

We urge you to read the attached analysis and list of suggestions for modification of S. 389. Our suggestions are designed to increase the efficient use of energy by allowing full exploitation of natural gas for direct use in CHP systems and applications such as cooling and on-site power generation. Each of us stands ready to assist you with additional analyses or other requests that you may have.

27952

Sincerely,

Anthony J. Occhionero
Executive Director
American Gas Cooling Center
400 North Capitol Street, N.W.
Washington, D.C. 20001
(202) 824-7140

Daniel J. Dessanti
Chairman
Distributed Power Coalition of America
10 G Street NE, Suite 700
Washington, DC 20002
Phone: (202) 216-5944

Bob Cave
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American Public Gas Association
11094-D Lee Highway, Suite 102
Fairfax, Virginia 22030-5014
(703) 352-3890

c: Hon. Richard B. Cheney
Hon. Spencer Abraham
Hon. Joe Barton
Hon. Jeff Bingaman
Hon. John Dingell
Andrew Lundquist

ATTACHMENT: Analysis of S. 389

Problem	Solution
1. The elimination of barriers and provision of tax incentives for CHP contained within Section 112 and Subtitle F are undermined by Sections 602, 606 and 973, which effectively ban these types of emerging technologies.	1. The phrase "optimizes site potential" in Section 602, as well as the phrase "reduce energy consumption per gross square foot" in Section 606, should be changed or eliminated, and the term "geothermal" should explicitly exclude "ground-source" heat pumps.
2. The term "optimizes site potential" in Sec. 602 (j) (2) is not defined. If left unchanged, innovative technologies such as highly efficient CHP that can most viably provide improved indoor-air-quality (IAQ) for our schoolchildren could become prohibited.	2. should be replaced with "minimizes overall environmental degradation."
3. Sec. 606 (a): conflicts similar to those in Sec. 602 (j) (2).	3. Revise as follows: "IN GENERAL - Through cost-effective measures, each agency shall maximize use of renewable energy and efficient energy practices that are cost-effective on a life-cycle basis, use affordable, environmentally preferable, durable materials, enhances indoor environmental quality, protect and conserves water resources, and <u>minimize overall environmental degradation</u>."
4. Sec. 710, on page 124, line 16, reads "(F) geothermal." If left as is, this section will likely shift support from renewable technology to ground-source electric heat pumps, a relatively efficient, but not renewable, technology	4. Change to read "(F) geothermal (not including "geothermal' heat pumps)."
5. Sec. 973 intends to establish business credits for construction of new energy efficient homes. However, the California-centric "Residential Alternative Calculation Method Approval Manual" (ACM) mechanisms that have been proposed do not allow comparisons between electric homes and gas homes while only allowing for incremental improvements to status-quo technologies. This discriminates against consumer choice, distributed power and CHP.	

Federal Energy Efficiency Policies Are Biased Against The Direct Use of Natural Gas
According to the Energy Information Agency (EIA):

- Natural gas delivers over twice the amount of equivalent energy to consumers as does electricity
- The overall efficiency of natural gas is over 2.6 times that of electricity
- The direct use of natural gas is accomplished with far fewer environmental impacts and less than 22% of the revenue ($47 billion versus $218 billion) attributable to electricity.

Despite these attributes, energy policy to date has discouraged the direct use of natural gas, based on fallacious reasoning. Federal energy efficiency policies have contended that "improvements" in energy efficiency should be measured in terms of Btu per square foot at the site of consumption, and that such "improvements" automatically improve the environment. Such policies are a significant factor behind the stagnation of natural gas use in the residential and commercial sectors since the mid-1970's and the accompanying unabated increase in electrical usage.

While the U.S. Department of Energy (DOE) admits that energy use as measured at the site of consumption is not equivalent to total (source) energy use, and reductions in site-measured energy use do not necessarily lead to proportional reductions in emissions, DOE has neglected to use this knowledge, because they say the implications are too burdensome for energy managers.

> *By measuring progress toward the goals on a source-measured basis will show an increase in energy use of 1.4% rather than a reduction of 11.2% when measured at site....However, this adds complexity to decisions of thousands of energy managers.*[1] -- John Archibald, DOE

In fact, mandating that energy efficiency goals be measured solely on the basis of Btu per square foot explicitly instructs energy managers to switch from the direct use of fossil fuels to central plant-generated electricity. This results in increased total energy consumption and increased environmental degradation, since natural gas is generally more efficient on a source basis but less efficient on a site basis.

The following example for water heaters illustrates a typical site vs. source calculation:

Site-based calculation

Electric water heater efficiency of 0.88 EF	= 88%
Gas water heater efficiency of .54 EF	= 54%

Conclusion: electric is 62% more efficient (88/54= 1.62)

Source-based calculation

Electric water heater efficiency of 0.88 EF * 29.3%	= 25.8%
Gas water heater efficiency of.54 EF * 90.1%	= 48.7%

Conclusion: gas is 89% more efficient (48.7/25.8 = 1.89)

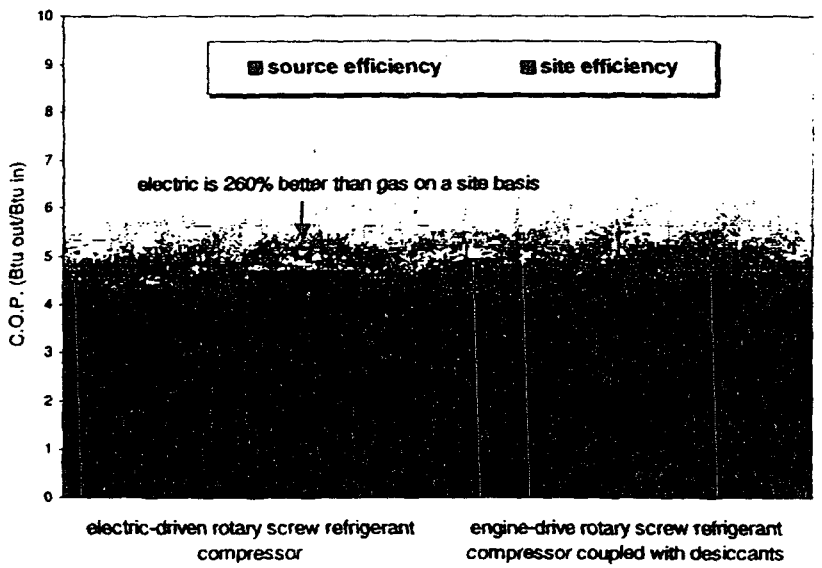
It's Better To Use Natural Gas Directly
A popular misperception is that gas-fired combined-cycle turbines for central plant electricity generation offer the right environmental and economic solution to our energy problems. However, as the following calculations show, direct use of natural gas provides superior efficiency.

[1] http://www.eren.doe.gov/femp/aboutfemp/coordination/minutes_may96.html

Efficiency of Natural Gas Use: Water Heater vs. Combined Cycle Turbine

Combined-cycle turbines overall efficiency		
gas wellhead to power plant	0.9	
power plant heat rate	0.5	
power plant to end-use meter	0.9	
electric resistance water heater efficiency	0.9	
cumulative efficiency	0.36	**36%**
Gas water heater overall efficiency		
gas wellhead to end-use meter	0.9	
gas water heater efficiency	0.6	
cumulative efficiency	0.54	**54%**

With advanced natural gas technologies, cumulative efficiencies increase. The following table compares site and source efficiency for electric versus natural gas-fueled chillers:



How Natural Gas Emissions Stack Up Against Traditional Coal

While we recognize that the term 'clean coal' is not necessarily an oxymoron, traditional coal still dominates central plant electricity generation in the U.S, as it should. Why squander natural gas to generate electricity when there is such an abundance of coal? All Btu's are not created equal. Rather, it is the emissions that accompany a given energy source that should be of primary concern. The following example shows why:

ATTACHMENT: ANALYSIS OF S. 389

Number of Gas Water Heaters Needed To Produce The Same Emissions As One Electric Resistance Water Heater[2]

SO_2	NO_x	TSP	CO	CO_2
5,041.5	11.1	36.0	2.4	3.1

Despite these efficiency and environmental advantages for using natural gas directly, electricity receives from 16 to 32 times the level of funding for research and development that natural gas receives. In addition, appliances that use natural gas directly bear the burden of DOE's energy efficiency improvement programs. Such biases pervade almost all present day "energy efficiency" programs and severely hamper innovations in true least-cost policy as well as highly efficient technology development. Such polices end up costing real consumers "billions of dollars"[3] while causing untold and unnecessary environmental degradation.

American Gas Cooling Center Stands Ready To Assist Policymakers

The American Gas Cooling Center (AGCC) and its members can provide you with additional information about our efforts to level the policy playing field. This includes an October 24th, 2000 presentation to DOE on the subject of fuel neutrality that overviews failed energy efficiency policies under the Clinton Administration. This presentation is available for your reference at http://www.regwarn.org/downloads/DOEfuelneutralityPPT24OCT2K.pdf. In addition, the attached appendix contains other counterproductive language in S. 389 and our proposed changes.

We appreciate your consideration of these issues and stand ready to provide you with additional analyses. Please contact AGCC's Executive Director, Tony Occhionero, with your questions about this analysis or to request additional analyses (202-824-7140; tocchionero@agcc.org).

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[2] Adapted from American Gas Association's "The Economic, Efficiency and Environmental Implications of More Stringent NAECA Standards for Residential Water Heaters," December 2, 1993 (based on coal being the marginal generation fuel)

[3] "A source-based standard could have cost the electric power industry billions of dollars." (EEI's *Washington Letter* Oct. 23, 1998)

009687

BUREAU OF ECONOMIC GEOLOGY
THE UNIVERSITY OF TEXAS AT AUSTIN

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10100 Burnet Road, Bldg. 130 • Austin, Texas 78758-4445

2001-009687 4/9 P 4:45

April 2, 2001

The Honorable Spencer Abraham
Secretary of Energy
United States Department of Energy
1000 Independence Ave., S.W.
Washington, DC 20585

Dear Secretary Abraham:

I applaud the message you delivered in your March 19 address to the Chamber of Commerce. My first reaction was "that's my speech." I agree with the balance between energy and environment, the avoidance of price controls, balancing across all energy supply sources, and the need for Federal support of energy research, especially in this time of diminished private sector investment in research. I encourage you to hold strong as you are challenged from the extremes on both sides.

If I can be of assistance, please do not hesitate to call.

Sincere best regards,

Scott W. Tinker
Director, Bureau of Economic Geology
State Geologist of Texas

SWT:wl

27958

10 ↘

Doug -
Perhaps you can help.
Thanks
Jean

DATE: 4/5/01

FAX TO: Joe Kelliher, 6-7210
Kevin Kolevar, 6-7169

Abe Haspel, 6-8177
Jay Braitsch, 6-4721

FROM: Jean Vernet, PO-21 (6-4755) Jean

RE: Input on EPA Draft NEP Option on "Streamlining Permitting"

reminder

Reference: E-mail message, 4/5/01, 3:09 pm: "Request for Input: EPA-Lead Effort on NEP "streamlining permitting" of energy-related facilities"

Pages: 4 incl cover

4-5-2001

As stated. Please call with any questions.

2006

2001-009465 4/6/01 3:10

009465

Secretary, The

From: Ward, Anne [ward@capp.ca]
Sent: Thursday, April 05, 2001 7:30 PM
To: Secretary, The
Subject: FW: Oil and Natural Gas Strategies in North American Energy Marke ts

Importance: High

CAPP_EDMS-#22875-1.PDF

cheneylet.pdf

- To Secretary of Energy Spencer Abraham,

Please find attached, a copy of CAPP's submission to Vice President Cheney's National Energy Policy Development Task Force.

We will be publicly releasing this tomorrow but wanted you to have an advance copy.

In summarizing the presentation to Vice President Cheney, we said that CAPP is a strong proponent of strategies that support both responsible resource development and the infrastructure to deliver those resources. They should:

build on and enhance the successes in energy trade;
recognize resource development in North America as a policy priority and reform regulatory practices to facilitate responsible, market-driven resource activity;
ensure competitive tax and royalty regimes for the energy industry; and
ensure consistent environmental policies and strategies among the various jurisdictions and agencies with the goal of maintaining the current high standards of protection.

If you or your staff have any questions about this document, please do not hesitate to call either myself (mailto:alvarez@capp.ca, (403) 267-1102) or Greg Stringham (mailto:stringham@capp.ca, (403) 267-1106).

Sincerely,

Pierre Alvarez
President, CAPP

> —Original Message—
> From: Ward, Anne On Behalf Of Alvarez, Pierre
> Sent: Thursday, April 05, 2001 4:47 PM
> To: 'vice.president@whitehouse.gov'
> Subject: Oil and Natural Gas Strategies in North American Energy Markets
> Importance: High
>
> Message sent on behalf of:
> Ray Woods, Chairman, Canadian Association of Petroleum Producers
> and
> Bill Friley, Past Chairman, Canadian Association of Petroleum Producers
>
> To: Vice President Dick Cheney

>
> Please find attached the submission of the Canadian Association of
> Petroleum Producers to the National Energy Policy Development Task Force.
> <<Oil and Natural Gas Strategies.PDF>>
>
> Pierre Alvarez
> President
> Canadian Association of Petroleum Producers
> mailto:alvarez@capp.ca
> (403) 267-1102
> <<Letter to VP Cheney.pdf>>

U096624

G. RICHARD WAGONER, JR.
President & Chief Executive Officer

General Motors

April 5, 2001

2001-009624 4/9 P 4:27

The Honorable Spencer Abraham
Secretary of Energy
100 Independence Avenue, SW
Room 7A257
Washington, D.C. 20585

Dear Mr. Secretary:

It was certainly a pleasure to finally get together with you in Washington. I know that you were disappointed in the outcome of the recent NCAA basketball tournament, but I must say I was proud of the way my Duke Blue Devils came through.

The task that faces the Administration to develop a comprehensive energy policy in the U.S. is certainly daunting. Everyone has his own ideas of what should or should not be done to address the concern that is of greatest importance to him. Still there are some logical steps that can and should be taken under any scenarios, and it sounds to me like you and your staff are focusing on many of them.

As we discussed, the role of fuel cells and the importance of moving toward a hydrogen-based economy are significant. Clearly, we want to work with you to shape an effective strategy and program to promote this work. In the nearer term, there are other steps that are also important to provide the bridges to that future. The work that we have jointly been undertaking on clean diesel engines and direct injection gasoline are among those steps. Let me reiterate the invitation to have you and your staff come and visit us to see what we are doing in each of these areas.

Thank you for the candidness of your comments. I heard you loud and clear and want to give you the support that you need as the Administration moves forward on energy policy. Please feel free to contact me or the GM Washington office as appropriate.

Sincerely,

General Motors Corporation
e-Mail: grwjr@gm.com

300 Renaissance Center
Mail Code 482-C39-B50

P.O. Box 300
Detroit, MI 48265-3000

313-667-3505
Fax 313-667-3133

27962

Canadian Association
of Petroleum Producers

CAPP

April 5, 2001

Mr. Dick Cheney
Vice President
United States of America

Dear Vice President Cheney,

Re: Oil and Natural Gas Strategies for North American Energy Markets

We are pleased that a review of North American energy matters has been initiated and welcome the opportunity to provide you and your National Energy Policy Development Task Force with our views. The Canadian Association of Petroleum Producers (CAPP) represents over 150 oil and natural gas producers or about 95% of the oil and natural gas production in Canada.

Oil and natural gas trade between Canada and the US works well within the existing framework. Overall, market forces are prevailing and driving the appropriate decisions. Both producers and consumers of oil and natural gas are receiving competitive prices that are leading to effective responses. We support continued reliance on market forces.

Canada's oil and natural gas resources are an important part of the global crude oil and continental natural gas markets. In order to continue the development of these supplies to meet the growing need for energy by consumers in Canada, the United States and Mexico, a renewed policy effort is needed to enhance the current market-based policies that already exist.

These strategies must support both responsible resource development and the infrastructure to deliver those resources. They should:

- build on and enhance the successes in energy trade;
- recognize resource development in North America as a policy priority and reform regulatory practices to facilitate responsible, market-driven resource activity;
- ensure competitive tax and royalty regimes for the energy industry; and
- ensure consistent environmental policies and strategies among the various jurisdictions and agencies with the goal of maintaining the current high standards of protection.

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230, 1801 Hollis Street, Halifax, Nova Scotia, Canada B3J 3N4 *telephone (902) 420-9084* facsimile *(902) 491-2980*
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internet home page: www.capp.ca general e-mail: communication@capp.ca

Again, we appreciate the opportunity to provide this input on matters of such importance to North America. We would be pleased to discuss these strategies with you and your task force colleagues.

Sincerely,

Raymond I. Woods,
Shell Canada Limited
Chairman, CAPP

William A. Friley, Jr.
Triumph Energy Corporation
Past Chairman, CAPP

Attachment

copy: US Energy Secretary Abraham

CAPP

CANADIAN ASSOCIATION
OF PETROLEUM PRODUCERS

A Submission by the Canadian Association of Petroleum Producers

Oil and Natural Gas Strategies for North American Energy Markets

A Submission by the Canadian Association of Petroleum Producers

April 2001

Contents

Note: The six graphics in this document are part of a presentation about Canada's oil and natural gas industry. They include data on pricing, demand, production, drilling activity, oil sands projects, as well as maps showing resource potential and pipelines. For a copy of the slides and notes, please go to www.capp.ca.

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A Submission by the Canadian Association of Petroleum Producers

About CAPP...

CAPP represents 150 companies whose activities focus on exploration, development and production of natural gas, natural gas liquids, crude oil, synthetic crude oil, bitumen and elemental sulphur throughout Canada. CAPP member companies produce approximately 95 per cent of Canada's natural gas and crude oil. CAPP has 120 associate members who provide the broad range of services that complete the infrastructure of this country's upstream crude oil and natural gas industry.

CAPP's Mission

To enhance the economic well-being and sustainability of the Canadian upstream petroleum industry in a socially, environmentally and technically responsible and safe manner.

Executive Summary

Canada's oil and natural gas resources are an important part of the global crude oil and continental natural gas markets. In order to continue the development of these supplies to meet the growing need for energy by consumers in Canada, the United States and Mexico, a renewed policy effort is needed to enhance the current market-based policies that are already working well.

Renewed energy strategies are needed:

- to support development of the oil and natural gas resources of North America, and
- to support the development of the additional infrastructure needed to bring oil and natural gas supplies to market.

Support means strategy and policy that are consistent with the operation of free markets and open competition, and provide the frameworks that facilitate responsible, environmentally sound development.

Key Strategies

Build on the success of free trade to increase non-discriminatory treatment of energy investment and trade in energy commodities.

- Build on and enhance the successes in energy trade in the North American Free Trade Agreement and the Canada/United States Free Trade Agreement.
- Continue market-oriented policies that respect and support freedom of contract and contract sanctity.

Recognize resource development in North America as a policy priority and reform regulatory practices to facilitate responsible, market-driven resource activity.

- Ensure coordinated and timely action for the development of frontier natural gas within a framework of inter-jurisdictional co-operation, recognizing the market will decide timing, routing, size and other aspects of development.

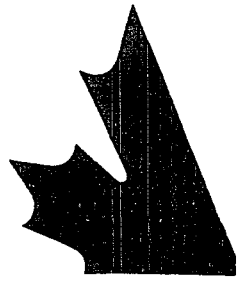
Ensure tax and royalty regimes are competitive compared to other jurisdictions or industries and also reflect the actual risk, cost or natural decline profile of the activity.

- Ensure tax competitiveness to encourage development of domestic resources.
- Tailor tax and royalty regimes to the risk and cost profile of the resource activity and to the decline profile of the resource.

Ensure consistent environmental policies and strategies among the various jurisdictions and agencies with the goal of maintaining the current high standards of protection and enforcement.

- Encourage joint and coordinated research and development in areas which facilitate beneficial technological change including energy efficiency, environmental sustainability, and enhanced resource recoveries (coal bed methane, carbon dioxide sequestration, enhanced oil recovery).
- Streamline the regulatory processes for the responsible development of new supplies.
- Encourage energy efficiency and conservation through policy and public education initiatives.

As we move forward in developing more global strategies to address energy production and consumption, it is critical that we do so in a manner that recognizes the continental and global nature of energy supply and the increasing inter-dependence of our economies.



Introduction

The fundamental strategic objective: a policy framework that supports and facilitates free trade and open competition.

The Canadian Association of Petroleum Producers (CAPP) welcomes the opportunity to contribute to discussions focused on improving North American energy markets and addressing the challenges of meeting continental energy requirements. Canada and the United States have long shared a huge and mutually beneficial trading relationship. Mexico is a valued partner in that relationship, becoming in 1992 a major feature on every trading map of North America with the signing of the North American Free Trade Agreement.

As we enter the 21st century it can be said, as never before, that North Americans share a common market, have common problems, and must work together to seek common solutions. The issues and the solutions now also cut across all energy commodities as a result of increased energy interdependence and electricity deregulation. For example, increasing the supply of natural gas contributes to solving the lack of electricity generating capacity. The solutions will involve every level of government. Some solutions will involve national, domestic actions: some solutions will involve international, North American actions. The fundamental goal, as always, is to achieve an overall framework of government policy that supports and facilitates free trade and efficient, competitive markets.

The main focus of this paper is on the supply of oil and natural gas to North American markets. Canada has established itself as a secure and reliable energy trading partner. The Canada/United States Free Trade Agreement and the North American Free Trade Agreement provide a firm foundation for the further evolution of free, non-discriminatory energy trade and beneficial competition. The market is working but governments can do more to support responsible market-driven resource activity.

Section A
Let's do more of what works

The market works — free trade and competition are good

Markets respond to change better than governments in a hard to predict, rapidly changing world.

It is important to remember that policies supporting free trade and competition in energy emerged from the failures of interventionist, command-control government policies. We know the consequences of policies, however well intentioned, that restrain and prevent markets from operating freely and competitively. The cost to society is huge and far outweighs any perceived short-term benefit.

What did the protectionist policies of the 1960s and 1970s with their market restrictions and price controls achieve? United States crude oil production went into decline. Canada went from being a net exporter of crude oil to being a net importer in the space of a decade. Natural gas supply shortages emerged in both the United States and Canada in the early 1970s. Natural gas markets shrank. Supply shrank as well. The supply shortfall persisted. Forecasters expected the supply shortfall to continue for the long-term even as real energy prices were forecast to steadily

increase. Consumers faced the worst of all worlds: increasing prices and declining supplies. In reality, energy prices have been well below those forecast in the era of regulated markets and controlled prices.

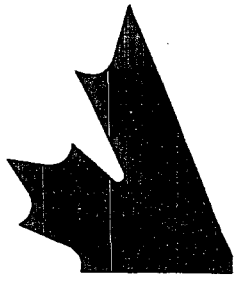
What have free trade and competition in crude oil and natural gas achieved? Natural gas markets have grown rapidly. Production in both the United States and Canada has increased significantly. United States natural gas producers have captured about 60% of the market growth compared to 40% for Canadian producers. Canada's oil production, which responds to global market forces, has also increased by 50%. The huge potential of Canada's oil sands has been unlocked. Canada's East Coast frontier regions have been opened as a result of the market forces and entrepreneurial spirit. These have been reinforced by public policy and fiscal regimes that recognized the front-end risk.

In the mid-1980s, no one would have predicted the magnitude of the impact of technological change on exploration and production, the productivity gains that new technology would yield, or the cost-savings resulting from streamlined operations.

Technology has streamlined exploration and production, improved productivity, and yielded significant cost-savings.

Dramatic improvements in drilling technology have reduced the time to drill wells. Horizontal drilling has become a standard industry tool enhancing the productivity of individual pools and reducing the number of drilling platforms and pads. New seismic technologies have increased success rates and led to new successes in older areas. New technologies have significantly reduced costs of oil sands development. Energy used and emissions per unit of production are dropping. Technology is also reducing the industry's environmental "footprint" both on land and offshore.

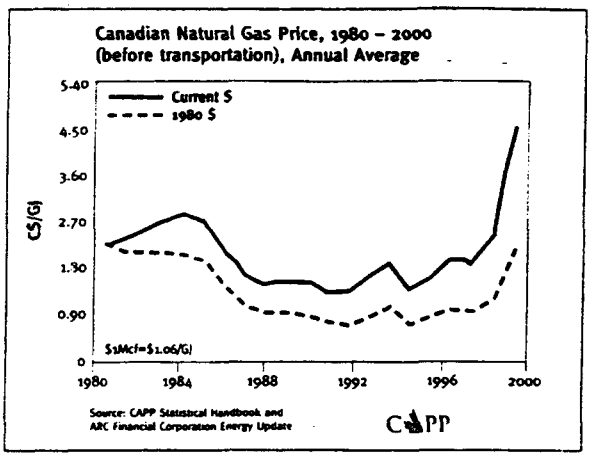
We have all been impressed by the gains in productivity. But should we be surprised? Once again, the world as it emerged has proved the truth of our fundamental principles. Competition fosters diversity of thought and approach, rewards risk-taking, encourages the adoption of innovations, is outward-looking, thrives on change, and drives continuous improvement.

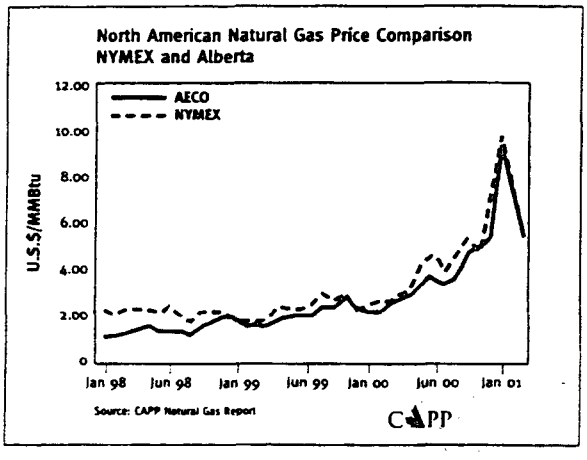


Competition has benefited consumers

Competition drives cost efficiency to the benefit of consumers.

Competition has done what people expect: prices came down. In contrast to the price escalations forecast in the era of regulated markets and controlled prices, lower prices have been the reality. A lower world oil price has been the reality of the past 15 years. The price of delivered natural gas in the United States declined substantially in real terms following deregulation and even in nominal terms have been flat or declining. In Canada, natural gas well-head prices declined in nominal terms and even more in real terms in the years following deregulation. Only now are natural gas prices in Canada approaching 1980 levels in real terms. Natural gas prices are set competitively in a continental supply and demand dynamic.





In the ten short years following 1985, the productivity of the upstream oil and gas industry doubled as measured in oil and gas production per employee. It is clear that competition has extracted much of the value of productivity from producers to the benefit of consumers. Producers are price takers in North American energy markets.

Over time, market forces will yield prices that support the cost of maintaining and increasing supply

Producers and consumers must receive accurate market price signals.

Energy prices that are too high for too long are not good for producers or consumers. Markets are lost. Economic growth is reduced. Ultimately, there is reduced, supply-oriented activity and a smaller number of competitors.

Similarly, energy prices that are too low for too long are not good for producers or consumers. Interest in energy conservation is reduced. Supply is not maintained. People and expertise needed to find and produce the supply are lost. Markets become complacent about energy security. Over time, it is the price signals transmitted through a functioning competitive marketplace that will balance supply and demand. Over time, the competitive price for supply will be paid.

Free markets require that buyers and sellers be able to decide the contractual arrangements that suit them

Market-oriented policies respect and support freedom of contract and contract sanctity.

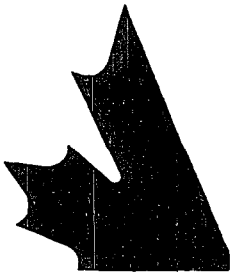
Deregulation of oil and natural gas markets was founded on the principle of freedom of contract. The freedom of the willing buyer and the willing seller is fundamental to the operation of a market. Buyers and sellers are free to structure contracts in any way they choose: long-term and short-term supply or purchase commitment; long-term or short-term price commitment; pricing driven off an index; etc. At any given time, there will be numerous supply and pricing arrangements in place in the market. This is an enormous strength of the oil and natural gas market that should be fostered and cherished.

Free trade and open competition also rest on the sanctity of commercial arrangements. Respect and support for the choices of buyers and sellers are basic to market-oriented policies and are the essence of "let the market decide".

Buyers and sellers must be able to access each other freely

It is time to extend full non-discriminatory, national treatment to energy investment and commodities.

The Canada/U.S. Free Trade Agreement and the North American Free Trade Agreement enshrine free market access for Canadian and U.S. oil and natural gas. They stand as monuments to farsighted government policy and international diplomacy. It is time to build on this foundation to expand opportunities for investment and to further reduce the potential for disruptive and unnecessary trade investigations of energy commodities. Energy investment and commodities should receive full, non-discriminatory national treatment. For example, exclusion of Canada from the U.S. Department of Commerce section 232 reviews of oil imports would be appropriate.



Section B
North America is resource rich — let's develop the energy

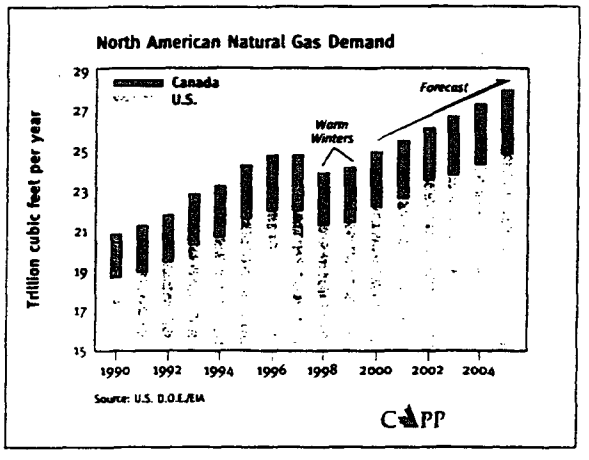
Higher current energy prices are a signal to the market

North America has the energy resources to support economic growth. Supply is capable of responding to demand in a safe, environmentally sound way.

Energy demand, driven by extraordinary economic growth in North America, has grown at a faster pace than the growth of supply. The slowing of economic growth may cool energy demand and higher energy prices will also spur conservation. However, the clear signal is that more supply is needed.

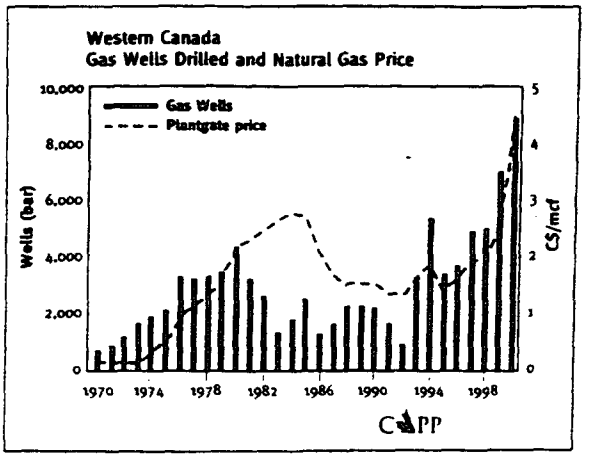
The current higher price signal is spurring the supply response

Drilling for oil and natural gas responds very quickly to changes in market signals. Current high prices have quickly taken rig utilization to record levels. Drilling is also at record levels. In 1992, with low prices, 920 natural gas wells were drilled in Canada. This year, almost 10,000 natural gas wells will be drilled.



Energy markets are demanding increased supply.

The focus of activity also responds quickly to changes in market signals. Lower natural gas prices lead to greater emphasis on development drilling, particularly in shallower or better known areas. The result is smaller pools with lower productivity. The current higher prices are driving greater exploratory activity and a shift in focus to deeper targets and to less-well-known areas. This is seen in the shift in activity in the Western Canadian basin to the higher cost, higher risk areas in western and northwestern Alberta, northeast British Columbia, and the southern Northwest Territories and Yukon. Equally dramatic is the interest and activity in the East Coast offshore areas and the Mackenzie Delta. These all result in larger pools with higher productivity.



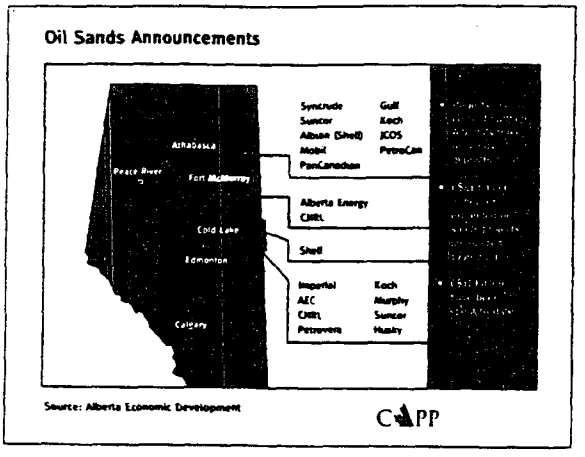
Investment in oil and gas exploration and production in Canada – excluding the massive investment in oil sands noted below – climbed past C$15 billion in 2000 and is expected to approach C$20 billion in 2001.

The market is working: oil and gas supply is responding.

Oil sands and Atlantic Canada will provide growing, competitive sources of supply

North American energy demand has spurred the technological innovation and cost efficiencies that are unlocking the potential of Canada's oil sands. Of the total 2.5 trillion barrels of reserves in place, an estimated 300 billion barrels are recoverable with current technology. This scenario rivals Saudi Arabia's proven conventional reserves of about 265 billion barrels.

Canada's oil sands are a significant and accessible strategic resource.



To develop this resource, massive investments are required. In the order of C$3 to C$5 billion per year have been invested since 1996. Investments in excess of C$40 billion have been announced for the current decade ending 2010. The positive investment climate must continue to be favourable or these new opportunities will be lost.

Canada's Atlantic offshore oil resources are being developed and have significant potential for further development. Hibernia is producing 150,000 barrels of oil per day and subsequent projects such as Terra Nova (production to commence in 2002), White Rose, Hebron and others are in the planning and development stages.

Canada has a large natural gas potential

Market forces will continue to dictate the pace of development of Canada's large natural gas resources and will push back the frontiers.

Canada's ultimate natural gas potential is large and underdeveloped. Canada's National Energy Board estimates the ultimate potential of the Western Canada Sedimentary Basin[1] to be 335 trillion cubic feet (Tcf) of which 121 Tcf has been developed. A further 323 Tcf of frontier potential is estimated and this is essentially untapped. Of that, 64 Tcf is in the Mackenzie Delta and 63 Tcf is off Atlantic Canada with the remainder in other frontier areas. The natural gas resources of Atlantic Canada have begun production. Sable Offshore Energy Project is currently producing over 400,000 Mcf per day, and the recent announcement of PanCanadian's deep Panuke project will see more natural gas production from offshore Nova Scotia by 2005.

The large resources of the Mackenzie Delta – 9 Tcf discovered and 55 Tcf undiscovered – and the enormous resources of neighbouring Alaska – 42 Tcf discovered (10 proved plus 32 reserve growth) and 195 Tcf undiscovered[2] are expected to find their way to market within the decade. It is pipeline connection to market that is needed. The cost and risks of such a massive development will be undertaken when producers see the time is right because they bear the ultimate brunt of the costs and risks.

1 *The WCSB comprises Alberta, Northeast British Columbia, Saskatchewan, a part of Manitoba and the Southern Northwest Territories and Yukon Territory. If the Northern frontier and the Southern Territories portion of the WCSB are combined, the potential "North of 60" is 175 Tcf of natural gas.*

2 *Source: U.S. Energy Information Administration 1999*

Section C
Markets function within the frameworks established by government policies — a renewed policy effort is needed to foster market-oriented activity

Bringing on new supply requires supply-oriented policies

The rapid response of oil and natural gas supplies in the years following the first wave of market-oriented policies resulted in some complacency. There was a tendency to take for granted the continued ability of oil and gas producers to increase efficiencies, to absorb cost increases, and to manage the need to constantly expand areas of operations. The neglect has not been benign.

A strong economy has made possible the pursuit of any number of economic, social and environmental objectives. If we are to continue to be able to invest in these priority areas, we must ensure the economy, of which the oil and natural gas sector is a growth component, is placed on a stable footing. Above all, for the consumer, emphasizing supply-oriented policies is the one best way to address the current high price of energy.

Government policies can, and should, sustain and foster well-functioning markets. Conversely, policies that hinder and constrain, or render less efficient the functioning of markets, should be reformed.

Supply cannot be brought on if access to the resource is unreasonably withheld

Petroleum producers in both Canada and the United States share a common problem: the need to access new basins to maintain and increase oil and natural gas supplies is frustrated by policies that unreasonably withhold, or make excessively difficult and/or costly, access to the resource. Some potentially productive areas are effectively off-limits even though modern technology would allow responsible operations in these areas and other relevant considerations were addressed.

Other areas are subject to requirements of various kinds that add unnecessarily to the cost and timeliness of accessing the resource. In addition, while industry can be expected to engage in reasonable and early public consultation when developing projects, it is not always possible to satisfy everyone. There are situations in which the broader interests of society must prevail over individual objections.

Recognizing that governments sometimes declare areas off-limits to development, CAPP believes that, once development rights have been awarded, governments must support responsible access to the resource.

It is ultimately society that pays the cost of restricted resource access through reduced supplies.

The market cannot function without supply. A renewed political consciousness of the importance of supporting supply-oriented enterprise with supply-oriented policies is needed.

Permitting and approvals processes must be timely, consistent, predictable, efficient, and above all, respect market decisions

The administration of regulatory policies needs to be reformed to eliminate layering and duplication of requirements and to achieve timely, effective, and efficient operations.

Regulatory processes in both Canada and the United States have become unduly complex, confusing, time-consuming and costly. Regulatory requirements are layered one on top of the other. Duplication of effort is common, especially where multiple agencies are involved in environmental assessment of project approvals.

More attention needs to be paid to the coherence of the overall regulatory structure, the efficiency of its administration, and the capacity of staff. The assumption is that industry has infinite time and resources to respond to any amount of regulatory burden and that society suffers no loss through the process. The assumption is wrong. The costs both to society and to industry are lost opportunities to access resources and delayed responsiveness to the market's need for greater supply.

There is no supply without investment

Tax and fiscal regimes must be competitive to attract capital investment. Regimes can be tailored to reflect differences in industry characteristics. The taxation powers of local authorities must be put in check.

Government and tax and fiscal policies should encourage investment. Overall, fiscal policy should strive to achieve competitiveness compared to other jurisdictions and relative to other industries. Capital is highly mobile. In addition, differences in particular circumstances should be recognized.

Local municipalities and other local authorities also have taxation powers that can too easily frustrate broader fiscal objectives. The burden of local taxation has dramatically increased. This trend needs to be put in check.

There is no investment without reward; fiscal regimes must balance risk and reward

Royalty regimes must be tailored to the risk and cost profile of the resource activity, as well as the decline profile of the resource.

Royalty regimes should reflect a sharing of the risks and rewards of resource exploration and development. The share must, in addition to being competitive, also recognize the risk and the cost of the investment. Not all areas or operations have the same risk or cost profile. Oil sands development has a much different risk and cost profile from conventional oil extraction: initial investments are larger; lead times are longer; and production profiles are longer.

Likewise, frontier development has different characteristics. These differences must be recognized in royalty regimes. At the other end of the spectrum, marginal wells should not be prematurely shut in by unreasonable fiscal policies.

Technology change drives down costs, improves environmental quality, and expands the accessible supply.

Governments have a role to encourage and to participate in the research and development that leads to beneficial technological change.

Technological advancements have, as noted above, dramatically improved the cost effectiveness of the industry as well as expanding the known resource base. The environmental "footprint" of petroleum exploration and production has also been reduced. Society as a whole has benefited from these advances. There are significant opportunities for increases in energy efficiency and environmental sustainability.

Continued advances in technology require ongoing research and development in a coordinated manner. Governments already provide incentives for research and development (R&D). This should be done in a way that captures all the R&D activity contributing to technological change. For example, in Canada, the Scientific Research and Experimental Development Tax Credit fails to recognize the ongoing R&D activity of companies with operations broader than those which are purely scientific. The goal should be to facilitate technological change and improve competitiveness, not to reward particular forms of corporate structure.

Energy is too valuable to waste; conservation should be encouraged

Governments should encourage energy conservation and the reduction of waste by both consumers and producers.

Just as supply responds to price signals, so too does demand. Consumers have choices and they can make the right choices if they have the right information. Accurate market price signals provide that information. Why would anyone choose to reduce their energy demand, place any value in contracting for long-term price stability, or be prepared to support needed development if they are shielded from information that would influence their choices?

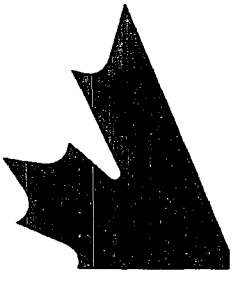
Government policies can also encourage conservation by providing incentives for investment in more energy-efficient vehicles, consumer appliances or home construction. Similarly, there may be a role for incentives where unusual costs are required to address a public desire for increased efficiency in methods of production or in energy-intensive industries.

Transmission: Market access depends on physical pipeline access

Regulatory policies should facilitate needed pipeline expansions through timely, stable decision-making and support for long-term, market-based commitments.

Overall expansion of oil and natural gas transmission capacity has kept pace with supply and market growth. Oil pipeline capacity is currently adequate to meet market needs. Additional oil pipeline capacity will be required as oil sands production increases. Natural gas pipeline long-haul capacity in the United States increased over 12 billion cubic feet per day (Bcfd), or 17%, between 1990 and 1997. Canadian natural gas pipelines added over 6 Bcfd of long-haul capacity to serve both domestic and export requirements between 1986 and 1998. Natural gas export capacity from Canada now somewhat exceeds the overall export supply. There is a demand for expansions to California and the Pacific Northwest. Pipeline capacity to the U.S. Northeast is also at its limits with several expansion proposals under consideration. Pipeline expansions in eastern Canada are also anticipated in response to the growth in demand for natural gas from offshore Nova Scotia.

The timeliness of regulatory approvals and the acquisition of needed rights-of-way remains a concern in both Canada and the United States. The regulatory policies at the provincial and state levels which govern the activities of local distribution companies also have an influence on pipeline expansions. Pipeline expansions require long-term commitments. Someone must pay for this over a very long time. Regulatory policies must support market-based commitments.



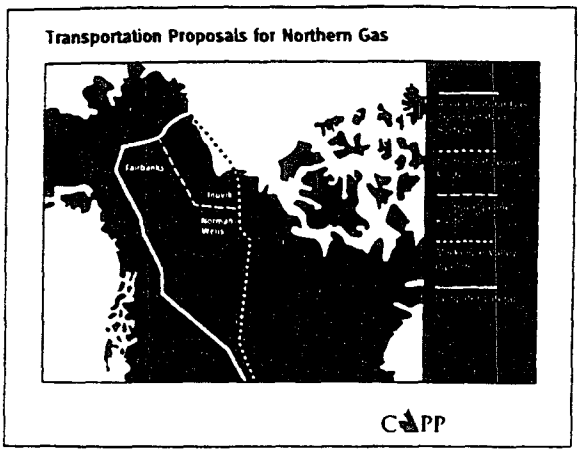
Major new pipeline development is required to access northern natural gas

Northern pipeline development will require co-ordinated and timely action within a framework of inter-jurisdictional co-operation. The market will decide timing, routing, size and other aspects of development.

Canada and the United States have long shared a common interest in the development of northern oil and natural gas resources. The market is signalling a need for a major expansion of the natural gas pipeline infrastructure in the North. As noted above, it is the market that will decide the timing of northern pipeline development. These decisions will be made in the context of the more integrated North American natural gas market and more integrated natural gas pipeline infrastructure that has emerged in the past 15 years.

The role of government is to ensure that regulatory processes are co-ordinated and that action on applications is timely. This requires a framework for inter-jurisdictional co-operation. Discussion of such a framework should include input from producers.

There is already a sound basis for Canada/United States co-operation. We have similar regulatory institutions applying similar regulatory concepts within a broad context of shared values. The Transit Pipelines Treaty ensures non-discriminatory treatment of pipelines transiting either Canada or the United States. The 1976 Northern Pipeline Agreement established a specific regime for handling the Alaska Natural Gas



Transportation System (ANGTS). It remains to be seen if potential development would fit into the ANGTS framework. However, the Northern Pipeline Agreement underlines the importance of timely processes and inter-jurisdictional co-ordination and co-operation to address the interests of both Canada and the United States.

In Canada, the need for inter-jurisdictional co-operation and co-ordination also involves the various local jurisdictions in the North, such as territorial governments, aboriginal authorities, and various other agencies and boards.

Increased supply requires clear frameworks that address the interests of aboriginal and local communities

As development in Canada moves further into new or less developed areas, the need for clear frameworks that address the needs of aboriginal communities, including economic benefits, becomes ever more important. Industry has worked hard to establish good relationships and opportunities for training and employment with aboriginal communities. However, government must take a leadership role in establishing these frameworks.

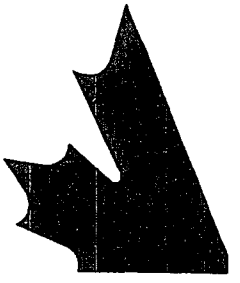
Government leadership is required to establish frameworks that address the needs of aboriginal and local communities, as well as industry partners within which development can proceed with clarity and certainty.

The needs of local communities must also be addressed as development proceeds. Too often local community concerns manifest themselves in the form of outright opposition and obstruction. A clear policy framework is required to balance the local with the broader interests of society.

Continental energy supply responses require consistent approaches to environmental issues both large and small

Similar high standards of environmental protection and enforcement for upstream petroleum operations are already in place in North America. As we move forward in developing more global strategies to address issues such as greenhouse gases, it is critical that we do so in a manner that recognizes the continental and global nature of energy supply and the increasing interdependence of our economies. We must ensure that environmental policy is developed within an economic context. Preservation of the high standards currently in existence in North America is a must.

Continental energy market strategies must include co-ordination of environmental strategies and policies.



D. Conclusion: What is needed

As we move forward in developing more global strategies to address energy production and consumption, it is critical that we do so in a manner that recognizes the continental and global nature of energy supply and the increasing interdependence of our economies.

Deregulation of oil and natural gas has been a success. The market works. What is needed now is a renewed policy effort to support development of untapped petroleum resources. These are required to meet North America's energy demand and to support development of additional infrastructure needed to bring more supplies to market.

Support means strategy and policy that are consistent with the operation of free markets and open competition, and provide the frameworks that facilitate responsible, environmentally sound development.

Elements of the Needed Policy Frameworks:

Primacy of free trade and open competition.

Producers and consumers must receive accurate market price signals.

Respect and support freedom of contract and contract sanctity.

Let the market decide the pace, scale, form and path of development.

Build on the fundamentals of the FTA and NAFTA to increase national treatment of energy investment and energy commodities.

Establish the development of energy supply as a policy priority among the highest orders of social and economic value.

Encourage conservation and reduction of waste.

Facilitate reasonable and responsible access to the resource.

Reform the administration of regulatory policies to eliminate layering and duplication of requirements and to achieve timely, effective and efficient permitting and approval processes.

Co-ordinate environmental policies and strategies.

Ensure tax and fiscal regimes are competitive and also reflect the actual characteristics of the particular industry.

Tailor royalty regimes to the risk and cost profile of the resource activity and to the decline profile of the resource.

Encourage research and development to continue to drive technological change.

Facilitate needed pipeline expansions through timely, stable decision-making and support for long-term market-based commitments.

Ensure coordinated and timely action for the development of frontier natural gas within a framework of inter-jurisdictional co-operation, recognizing the market will decide timing, routing, size and other aspects of development.

Establish frameworks that address the needs of aboriginal and local communities within which development can proceed with clarity and certainty.

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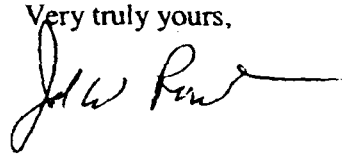
Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Dear Mr. Secretary:

To my regret I have not been able to see you when I have been in Washington, although my colleague Corbin McNeill has been so privileged. I will ask Betsy Moler who heads our Washington office to try to arrange a visit, both under my responsibilities as Co-CEO of Exelon and as Chairman of EEI.

In any event let me endorse most heartily your speech to the US Chamber of Commerce. It surely states the core of a necessary public policy. For whatever use it may be I offer the enclosed copy of my letter to Vice President Cheney, following up on the EEI visit with him. In addition let me offer the following, for whatever use it may be. The Administration does a great service in bringing public attention back to fundamental issues of energy supply, fuel diversity and working markets. However a sound energy policy must be bi-partisan to be durable and to be effectuated. And I do think we need to include an appropriate measure of environmental action and demand management to secure that.

Very truly yours,



Enclosures

27985

:ORGE R. NETHERCUTT, JR.
5TH DISTRICT, WASHINGTON

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April 6, 2001

The Honorable Spencer Abraham
Secretary, U.S. Department of Energy
1000 Independence Avenue, SW
Washington, D.C. 20585

The Honorable Donald L. Evans
Secretary, U.S. Department of Commerce
14th St. & Constitution Avenue, NW
Washington, D.C. 20230

Dear Messrs. Secretary:

Over the next two years industries in the Northwest will experience considerable economic dislocation as a result of increases in energy prices. Many industries are going to find it difficult to operate profitably and may not make it through this period. One of those energy sensitive industries, aluminum, is of particular concern to me because aluminum production is a major employer in my district.

Northwest aluminum production is presently curtailed in response to the Northwest's high energy prices. The Bonneville Power Administration is engaged in a series of discussions with the Northwest aluminum companies to purchase 1500 MW of their contractual federal power for two years beginning in October. If these purchases occur, the Northwest industry will not operate for close to 34 months, including both pre- and post-October 2, 2001, curtailments.

These proposed closures present two immediate concerns. First, the nation will not have available 40% of its domestic aluminum production for an extended period of time. I believe this raises implications for the strategic use of aluminum and national security. Second, shutting down these plants for a period of almost three years, even with some support for maintaining the labor pool, could result in some of these plants closing for good. My parochial concern is that permanent closure will result in the demise of about 10,000 family wage job in the region, including many in my district. On a national security level, the loss of 40% of aluminum production in the United States will increase our dependence on foreign sources of this strategic metal.

My request to you is that you meet with representatives of the Northwest aluminum industry to determine how the nation's energy policy can mitigate the impact on this vital industry. My scheduler, Julie Blackorby, will be in contact with your offices to arrange a meeting at your convenience.

Cordially,

George R. Nethercutt, Jr.
Representative in Congress

GRN:af

Thank you for considering this!

Dear Secretary Abraham, April 7, 2001

I am writing to you because I have many concerns about the direction of our Energy Policy.

I am concerned that the current administration is pursuing an energy policy that will be very dangerous, detrimental & devastating to the global environment.

The United States is a huge energy user. We can not base the Energy Policy for our country solely on the Supply side. Drilling in the Artic National Wildlife Refuge & other Public Lands is not acceptable to me. The United States must start to conserve energy, not just produce more. We can conserve energy in many ways ...

1) Increase fuel efficiency of Cars & Trucks
(I drive a Honda Civic which gets 40 mpg)

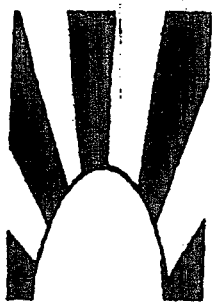
2) Increase efficiency in energy production & transmission

3) Decrease use by eliminating outdoor lighting to levels which provide safety & not wastefulness

4) Decrease use of energy in office buildings, by incorporating alternative energy sources into the building process.

You are the person in charge of a very important department. You have many important decisions to make. I hope you consider the long term implications of your departmental decisions & that you consider the health of our world in your decision making process. Thank You. Amy Bernard Schaller

2001-009734 4/10/01 9:30am



Solar Energy Industries Association (SEIA)
1616 H Street, N.W., 8th Floor
Washington, D.C. 20006-4999

Glenn Hamer, Executive Director

202.628.7475 Fax 202.628.7779
E-mail: glennhamer@aol.com

April 9, 2001

Mr. Kyle McSlarrow
Chief of Staff
Secretary of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Dear Kyle:

Thank you for inviting me to Thursday's meeting. It was an excellent exchange of information. I look forward to contributing to further discussions on energy policy.

The Solar Energy Industries Association represents the Photovoltaic industry, an important segment among the various businesses that exploit solar energy. The leaders of the Photovoltaic industry, which include companies such as BP Solar, will greatly appreciate the opportunity to meet with you to discuss how the industry could help the current energy crisis. If you can schedule some time during the week of April 23rd, SEIA and the Photovoltaic industry will highly appreciate it.

On another matter, I look forward to meeting Doug Faulkner with leaders from the Concentrated Solar Power (CSP) industry. For the CSP leaders, the meeting will present an excellent opportunity. Thank you for your help on this matter.

Again, thank you for the invitation to Thursday's meeting.

Best regards,

Glenn Hamer
Executive Director

Thanks! Thought that you might be interested in the attached.

27989

Annual Electric Generator Report--Utility (Form EIA-860A Database)

This is an electric utility generator level data file that includes such information as in-service date, energy source, nameplate capacity, summer and winter capability, etc. Data source is survey EIA-860A: "Annual Electric Generator Report--Utility." The data are compressed into a self-extracting (.exe) zip file that expands into 4 DBF files: 1 plant (PLANTYyy.DBF*), 1 utility (UTILYyy.DBF*), and 2 generator files (TYPE3Yyy.DBF* and TYPE4Yyy.DBF*) and an ASCII layout file (LAYOUT.TXT).

To expand the file, type F860AYyy.EXE* from a DOS window or double click on the file name from either File Manager in Windows 3x, Windows Exployer in Windows 95. (requires 5-6 megs space).

**Note: Substitute the applicable year for "yy" in the file name*

File Size: 600 k

Download

Year	Format
1999	DBF
1998	DBF
1997	DBF
1996	DBF
1995	DBF
1994	DBF
1993	DBF
1992	DBF

CONTACTS

Specific information on these databases may be directed to:
Tom Williams
(202)287-1926
Internet E-Mail: tom.williams@eia.doe.gov

Annual Electric Generator--Nonutility (Form EIA-860B Database)

This is the nonutility generating facility data file that includes such information as company, facility, unit ID, facility nameplate capacity, generator nameplate capacity, unit type, prime mover, energy source, qualifying facility status, NAICS codes, consumption, heat content, facility generation, generator generation, purchases, sales to utility, facility use, environmental information, generator status, operational status, on-line date. Data source is survey EIA-860B: "Annual Electric Generator Report - Nonutility." The data are compressed into a self-extracting (.exe)zip file that expands into 7 DBF files and an ASCII layout file (Layout.txt). To expand the file, type F860Byy.EXE*from a DOS window or double click on the file name from either File Manager Windows 3x, Windows Exployer in Windows 95.

**Note: Substitute the applicable year for "yy" in the file name*

File Size: 731 k

Download

Year	Format
1999	DBF
1998	DBF

CONTACTS

Specific information on these databases may be directed to:
Betty Williams
(202)287-1927
Internet E-Mail: betty.williams@eia.doe.gov

File last modified: 12/14/2000 11:32:04

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Search EIA

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.ble 1. New U.S. Electric Generating Units by Operating Company, Plant, and Month, 2000

Month/ Company	Plant	State	Generating Unit Number	Net Summer Capability[1] (megawatts)	Energy Source	Unit Type Code
January						
Alaska Village Elec Coop	Alakanuk	AK	2A	0.5	Petroleum	IC
Allegheny Engy Unit 1&2	Allegheny Engy Unit 1&2	PA	UNIT1,UNIT2	74.5	Gas	GT
California Inst Technology	California Inst Tech	CA	GEN3,GEN4,GEN5	5.2	Gas	GT,GT,ST
Carolina Power & Light	Monroe	GA	004	136.0	Gas	GT
EUI Management PH Inc	UIPH Wind Farm	ID	PLAN	6.0	Wind	WT
Foss Manufacturing Co Inc	Hampton Facility	NH	GEN8	4.3	Gas	GT
Kodiak Electric Assn Inc	Nymans Plant	AK	2	7.3	Petroleum	IC
Purdue University	Purdue University	IN	GEN3	1.8	Petroleum	IC
Resource Tech Corp	Biodyne Congress	IL	1	4.1	Landfill Gas	IC
RTC Properties Inc	RTC Properties Inc	NJ	1	13.0	Wood	ST
Sabine Cogen LP	Sabine Cogen	TX	CTG1,CTG2,CTG3	88.5	Gas	GT,GT,ST
Williams Energy Systems	Williams Engy Worchester	MA	GEN1	2.6	Landfill Gas	IC
February						
Detroit Edison Co	Delray	MI	11-1,12-1	139.4	Gas	GT
LSP Energy LP	Batesville Gen Facility	MS	CTG1	156.8	Gas	GT
Otter Tail Power Co	Dakota Magic	ND	1	1.5	Petroleum	IC
Ouzinkie City of	City of Ouzinkie	AK	3,4	.3	Petroleum	IC
Springville City of	Whitehead	UT	3	6.8	Gas	IC
Tennessee Valley Authority	Albertville	AL	DG1-DG4	3.9	Petroleum	IC
March[R]						
Carolina Power & Light	Asheville	NC	4	180.0	Gas	GT
Casco Bay Engy Co LLC	Maine Independence Stat	ME	GEN1,GEN2,GEN3	481.2	Gas	GT,GT,ST
Cogentrix Energy Inc	Southaven Energy LLC	NC	CTG1-3,STG1-3	680.9	Gas	GT
Cordova Electric Coop I	Eyak	AK	5.6	2.2	Petroleum	IC
LSP Energy LP	Batesville Gen Facility	MS	CTG2,STG1	243.5	Gas	GT
Tiverton Pwr Assoc LP	Tiverton Pwr Assoc LP	RI	UNIT1,UNIT2	239.6	Gas	GT,ST
Univ of Notre Dam Dulac	Univ Notre Dam Pwr Pl	IN	7	8.8	Coal	ST
April						
Anita City of	Anita	IA	4,5	.6	Petroleum	IC
Copper Valley Electric Assn	Valdez Co-Gen	AK	1	4.3	Petroleum	GT
Decisions Investments Corp	Biosphere 2 Center Inc	AZ	G-4	1.5	Petroleum	IC
Holland City of	491 E 48th Street	MI	9	66.3	Gas	GT
LSP Energy LP	Batesville Gen Facility	MS	CTG3,STG2	243.5	Gas	GT
MidAmerican Energy Co	Knoxville Industrial	IA	1,2,3,4,5,6,7,8	15.6	Petroleum	IC
MidAmerican Energy Co	Shenandoah	IA	1,2,3,4,5,6,7,8,9,10	19.5	Petroleum	IC
MidAmerican Energy Co	Waterloo Lundquist	IA	1,2,3,4,5,6,7,8,9,10	19.5	Petroleum	IC
Millennium Pwr Ptnr LP	Millennium Power	MA	CT01,ST01	316.4	Gas	GT,ST
Sibley City of	Sibley One	IA	5	2.9	Petroleum	IC
May						
Alabama Power Co	Barry	AL	A1	457.5	Gas	CC
Avalon HH Properties	Avalon HH Properties	NC	GEN2,GEN3	4.8	Water	HY
Bacanton Power LLC	Baconton Power	GA	CT1,CT4,CT5	153.0	Gas	GT
Butler City of	Butler	MO	NG1,NG2,SG1,SG2	7.8	Petroleum	IC
Carolina Power & Light	Wayne County	NC	1,2	360.0	Gas	GT
Cleco Evangeline LLC	Evangeline	LA	6ST	105.6	Gas	ST
Des Plaines Green Land	Lincoln Energy Center	IL	CTG1 thru GTG8	564.4	Gas	GT
Dolye LLC	Dolye Gen Facility	GA	CTG1-2,CTG4-5	263.5	Gas	GT
Fulton Cogen Associate	Manchief Electric Gen Stat	CO	UN1,UN2	328.1	Gas	GT
Gleason Power LLC	Gleason Power	TN	CTG1,CTG2,CTG3	462.4	Gas	GT
Indeck Colorado LLC	Arapahoe Combus Turb Prj	CO	UN5,UN6	64.6	Gas	GT
Kansas City Power & Light Co	Hawthorn	MO	7	73.1	Gas	CT
LSP Energy LP	Batesville Gen Facility	MS	STG3	94.9	Gas	ST
Motiva Enterprises LLC	Delaware City Plant	DE	CT1,CT2	156.4	Gas	GT
Omaha Public Power Dist	Sarpy County	NE	4,5	100.1	Petroleum	GT
Rochelle Municipal Utilities	NA1	IL	GT1	3.6	Gas	GT
Tenaska Frontier Partners	Tenaska Frontier Gen Stat	TX	GTG1-3,STG1	830.0	Gas	GT,ST
Union Elec Development Corp	Pinckneyville	IL	GEN1	40.8	Gas	GT
Waverly Municipal Elec	South Plant	IA	1,2,3,4,5,6	11.7	Petroleum	IC
West Fork Land Development	Wheatland Pwr Station	IN	CTG1 thru CTG4	459.0	Gas	GT
Wisconsin Electric Power	Germantown	WI	5	72.6	Gas	GT
June[R]						
American Mun Power-Ohio Inc	Bowling Green Pkng	OH	1	27.2	Petroleum	GT
American Mun Power-Ohio Inc	Hamilton Peaking	OH	1	27.2	Gas	GT
American Mun Power-Ohio Inc	Shelby - North	OH	1	1.8	Petroleum	IC
American Mun Power-Ohio Inc	Shelby - South	OH	1	1.8	Petroleum	IC
Androscoggin Energy LLC	Androscroggin Cogen Cntr	ME	CT03	46.4	Gas	GT
Associated Electric Coop Inc	Chouteau	OK	1,2	302.0	Gas	CS
Associated Electric Coop Inc	Chouteau	OK	3	156.4	Gas	CW
Bio Energy Partners	CSL Gas Recovery	FL	COG1	2.0	Gas	ST
Black Hills Corp	Neil Simpson II	WY	GT1	34.0	Gas	GT
Calcasieu Pwr LLC	Calcasieu Pwr LLC	LA	GT01	157.3	Gas	GT

See footnotes at end of table.

ıble 1. New U.S. Electric Generating Units by Operating Company, Plant, and Month, 2000

Month/ Company	Plant	State	Generating Unit Number	Net Summer Capability[1] (megawatts)	Energy Source	Unit Type Code
June[R]						
Calpine Corp	Pasadena Power Plant	TX	CTG2,CTG3,STG2	425.0	Gas	GT
Calvert City Power 1 LLC	Calvert City Power 1 LLC	KY	GT01-GT03	473.9	Gas	GT
Carolina Power & Light Co	Wayne County	NC	3,4	360.0	Gas	GT
Central Illinois Light Co	Hallock	IL	1-8	12.3	Petroleum	IC
Central Illinois Light Co	Kickapoo	IL	1-8	12.3	Petroleum	IC
Corn Belt Energy Corp	Gillum	IL	1,2	3.5	Petroleum	IC
Duke Energy Madison LLC	Madison Generating Station	OH	CT1-CT8	580.7	Gas	GT
Duke Energy Marshall Cnty LLC	Marshall Cnty Gen Stat	KY	CT7	68.0	Gas	GT
Duke Energy Vermillion LLC	Vermillion Generating Stat	IN	CT1-CT8	580.7	Gas	GT
DPL Energy Inc	Montpelier Elec Gen Stat	OH	GT1-GT4	200.3	Gas	GT
Georgia Power Co	Dahlberg	GA	1	79.1	Gas	CC
Georgia Power Co	Dahlberg	GA	2-5,7,8	468.9	Gas	GT
Holly City of	Holly	CO	5	.4	Petroleum	IC
Indeck Rockford LLC	Indeck Rockford Energy Cntr	IL	0001,0002	283.1	Gas	GT
Indianpolis Power & Light Co	Georgetown	IN	GT1	72.5	Gas	GT
Iola City of	Iola	KS	2	4.9	Gas	IC
Jacobs Energy	Jacobs Energy Corp	IL	West	4.7	Wood	ST
JEA	JD Kennedy	FL	GT37	157.3	Gas	GT
Kansas Gas & Electric Co	Gordon Evans EC	KS	GT1,GT2	124.1	Gas	GT
Koch Power Louisiana LLC	Koch Power Louisiana LLC	LA	01-08	170.0	Gas	GT
Lamar Pwr Partners	Lamar Power Project	TX	CTG1-4,STG1,STG2	927.2	Gas	GT
Madison Gas & Electric Co	West Marinette	WI	34	70.5	Gas	GT
Midlothian Energy LP	Midlothian Energy Project	TX	STK1-STK3	688.5	Gas	GT
Montezuma City of	Montezuma	IA	9	1.8	Petroleum	IC
Oglethorpe Power Corp	Sewell Creek Energy	GA	4	139.4	Gas	GT
PG&E Dispersed Generating Co	Bowling Green Gen Station	OH	CT1,CT2	42.1	Gas	GT
PG&E Dispersed Generating Co	Galion Gen Station	OH	CT1,CT2	42.1	Gas	GT
PG&E Dispersed Generating Co	Napolean Peaking Station	OH	CT1,CT2	42.1	Gas	GT
PG&E Dispersed Generating Co	Wadworth Gen Station	OH	CT1,CT2	42.1	Gas	GT
Reliant Energy Pwr Gen	Reliant Engy Shelby Cnty	IL	CTG1-CTG8	278.8	Gas	GT
River Falls City of	Junction	WI	10	2.9	Petroleum	IC
Rockingham Pwr LLC	Rockingham Pwr LLC	NC	CT1,CT4,CT5	411.8	Gas	GT
San Antonio Public Service Bd	A Von Rosenburg	TX	1,2	305.3	Gas	CT
San Antonio Public Service Bd	A Von Rosenburg	TX	3	129.0	Gas	CW
Southwestern Electric Coop Co	Freedom Power Proj	IL	CT1	38.3	Gas	GT
SEI Wisconsin LLC	SEI Wisconsin Neenah Pl	WI	CT01,CT02	317.2	Gas	GT
Virginia Electric & Power Co	Remington	VA	1,2	289.0	Gas	GT
West Georgia Generating Co LP	West Georgia Gen Co	GA	712-715	596.0	Gas	GT
Wolverine Pwr Supply Coop Inc	George Johnson	MI	9,10	42.5	Gas	GT
Worthington Generation LLC	Worthington Generation LLC	DE	GEN1,GEN2	314.5	Gas	GT
July[R]						
American Mun Power-Ohio Inc	Montpelier	OH	1,2,3,4,5,6	10.7	Petroleum	IC
Berlin Town of	Berlin	MD	4A	1.8	Petroleum	IC
Broad River Energy LLC	Broad River Energy Ctr	SC	1,2,3	502.4	Gas	GT
Bucksport Engy&Champion Intl	Champion Clean Energy	ME	GEN4	158.8	Gas	GT
BACONTON Power LLC	BACONTON Power	GA	CT1,CT4,CT5,CT6	204.0	Gas	GT
Cleco Evangeline LLC	Evangeline	LA	7CT,U72,6ST,7ST	812.9	Gas	GT/ST
Commonwealth Chesapeake	Commonwealth Chesapeake	VA	CT1	38.3	Gas	GT
Corn Belt Energy Corp	Parkside	IL	1,2,3	5.3	Petroleum	IC
Georgia Power Co	Dahlberg	GA	6	78.1	Gas	GT
Kansas City Power & Light Co	Hawthorn	MO	8	73.1	Gas	CT
Kansas City Power & Light Co	Hawthorn	MO	9	120.4	Waste Heat	CW
Maquoketa City of	Maquoketa	IA	9	1.8	Petroleum	IC
Midwest Electric Power Inc	MEP I GT Facility	IL	4,5	91.8	Gas	GT
Muscatine City of	Muscatine Plant #1	IA	8A	14.9	Coal	ST
Northwestern Wisconsin Elec Co	Frederic Diesel	WI	8,9,10	7.5	Petroleum	IC
Oglethorpe Power Corp	Sewell Creek Energy	GA	1,2	205.7	Gas	GT
Platte River Power Authority	Medicine Bow	WY	10,11	1.3	Wind	WT
SEI Texas LP	SEI TX Bosque Cnty Pking Plt	GA	GT1-GT4	509.8	Gas	GT/ST
SEI Texas LP	SEI TX Weatherford Pking Plt	GA	GT1-GT4	428.4	Gas	GT
Tallahassee City of	S O Purdom	FL	8	223.4	Gas	CC
Tampa Electric Co	Polk	FL	2	153.0	Gas	GT
Tennessee Valley Authority	Gallatin	TN	GT5-GT8	287.6	Gas	GT
Tennessee Valley Authority	Johnsonville	TN	GT17-GT20	287.6	Gas	GT
Tennessee Valley Authority	Powell Valley	MS	1-11	21.5	Petroleum	IC
Virginia Electric & Power Co	Remington	VA	3,4	303.5	Gas	GT
Williamette Industries Inc	Albany Paper Mill	OR	1,2	85.2	Gas	GT/ST
August						
American Mun Power-Ohio Inc	Edgerton	OH	1,2	3.6	Petroleum	IC
Berg Lumber Co	Berg Lumber	MT	GEN1	3.3	Gas	ST
Choctaw Gen Ltd Partner	Red Hills Generating Facility	MS	RHGF	477.6	Coal	ST

See footnotes at end of table.

able 1. New U.S. Electric Generating Units by Operating Company, Plant, and Month, 2000

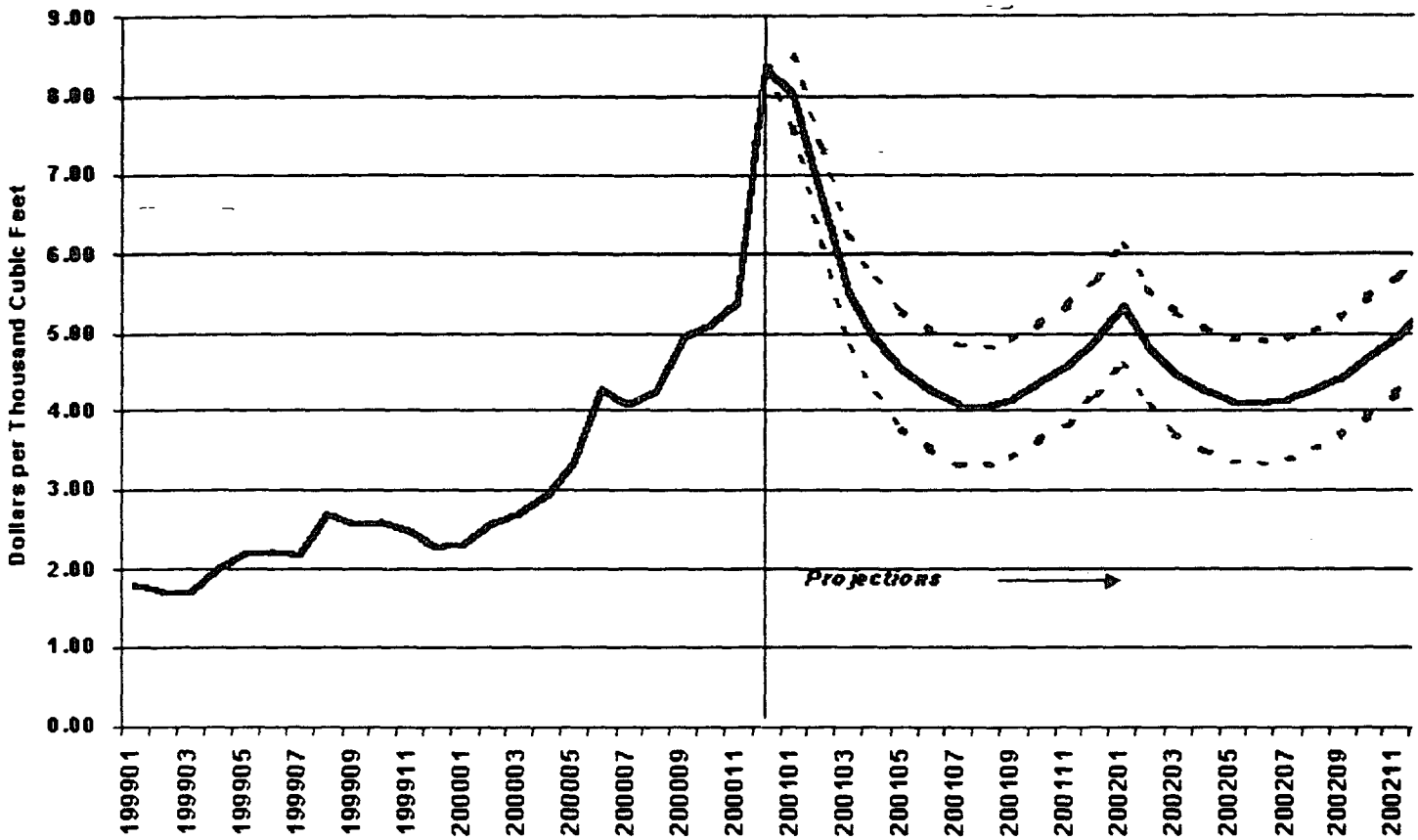
Month/ Company	Plant	State	Generating Unit Number	Net Summer Capability[1] (megawatts)	Energy Source	Unit Type Code
August						
Commonwealth Chesapeake	Commonwealth Chesapeake	VA	CT2,CT3	76.5	Petroleum	GT
Independence City of	Independence	IA	1B,4A,4B	5.4	Petroleum	IC
Rantoul Village of	Rantoul	IL	9-14	10.9	Petroleum	IC
Union Elec Development Corp	Gibson City	IL	2	114.8	Gas	GT
Velcro USA Inc	Velcro USA Inc	NH	GEN5	1.0	Gas	GT
September [R]						
Allegheny Energy Supply Co LLC	Allegheny Energy	PA	8,9	74.5	Gas	GT
Great Lakes Energy Coop	Beaver Island	MI	1,2	2.1	Petroleum	IC
Lubbock City of	J Robert Massengale	TX	8	34.4	Gas	CT
Maui Electric Co Ltd	Maalaea	HI	19	21.5	Petroleum	CT
Midlothian Energy LP	Midlothian Energy Project	TX	STK4	229.5	Gas	GT
New Knoxville Village of	New Knoxville	OH	1	1.1	Petroleum	IC
North Slope Borough of	NSB Kaktovik Utility	AK	PG1A-PG4A	2.7	Petroleum	IC
Oglethorpe Power Corp	Sewell Creek Energy	GA	3	139.4	Gas	GT
Rock Falls City of	Avenue A Gen Sets	IL	1,2	3.1	Petroleum	GT
October						
BASF Fina Petrochemicals Ltd	NROC Cogeneration Facility	TX	UN1,UN2	70.9	Gas	GT
Dayton City of	Dayton	IA	5	1.8	Petroleum	IC
Electro Generators LLC	Electro Gen Cogen Plant	PA	1,2	25.5	Gas	GT
Hamakua Energy Partners LP	Hamakua Energy Plant	HI	CT1,CT2	39.6	Gas	CT
Hamakua Energy Partners LP	Hamakua Energy Plant	HI	ST1	16.3	Waste Heat	CW
Massachusetts Water Res Auth	Deer Island Treatment Plant	MA	H101	1.0	Water	HY
Tennessee Valley Authority	Buffalo Mountain	TN	1,2,3	2.0	Wind	WT
November						
Massachusetts Water Res Auth	Deer Island Treatment Plant	MA	H201	1.0	Water	HY
December						
Florida Power Corp	Intercession City	FL	P12,P13,P14	252.4	Gas	GT
Total Capability of Newly Added Units	—	—	—	**23,558.3**	—	—
Total Capability of Retired Units	—	—	—	**139.8**	—	—
U.S. Total Capability	—	—	—	**818,602.6**	—	—

[1] Net summer capability is estimated.
[R] Revised.

Notes: •Totals may not equal sum of components because of independent rounding. •Data are preliminary. Final data for the year are to be released in the *Inventory of Electric Utility Power Plants in the United States* (DOE/EIA-0095) and *Inventory of Nonutility Electric Power Plants in the United States* (DOE/EIA-0095/2). •Unit Type Codes are: CT=Combined Cycle Combustion Turbine, CW=Combined Cycle Steam Turbine - Waste Heat Boiler only, IC=Internal Combustion, GT=Combustion (gas) Turbine, HY=Hydraulic Turbine (conventional), CC=Combined Cycle - Total Unit, ST=Steam Turbine-Boiler, WT=Wind Turbine.

Source: Energy Information Administration, Form EIA-860A, "Annual Electric Generator Report - Utility," and Form EIA-860B, "Annual Electric Generator Report - Nonutility."

Natural Gas Spot Prices: Base Case and 95% Confidence Interval



Sources: History: Natural Gas Week; Projections: Short-Term Energy Outlook, January 2001.

www.eia.doe.gov

Slide 19 of 19

Notes:

- We expect to see peak monthly spot wellhead prices this winter of over $8.40, the monthly average reported for December 2000. Recently, concern about cold weather and low stocks pushed daily spot gas prices over $10.50 per mcf. However, in early January of this year, forecasts of warm weather pushed the price down by more $1.00 per mcf in one day, indicating the extraordinary volatility in the current U.S. market.

- The gas storage situation in the United States has not improved over the last few months, a sign that demand remains strong. We believe that the 30-year records for (seasonally adjusted) storage lows may be challenged throughout the heating season.

Colorado Springs Gazette Telegraph

Thursday, June 11, 1992

CITY/STATE

Energy secretary maps the future/ Renewable sources called key to success

Associated Press

GOLDEN - U.S. Energy Secretary James Watkins on Wednesday lashed out at environmental criticism of the Bush administration, saying the United States leads the world in renewable-energy research and is actually signing contracts for such projects in developing nations.

"We have a strategy. This is not just out of the behind of a politician who just wants to get elected this year," he said.

He spoke at the groundbreaking of the $20 million Solar Energy Research Facility. The laboratory will concentrate on photovoltaics - power cells that draw their energy from sunlight.

Watkins also announced $36 million in research and development agreements between the DOE's Golden-based National Renewable Energy Laboratory and U.S. industry.

"We're not here to play games with just another laboratory . . . but to be able to lead the world in technology," Watkins said. He said that technology means billion of dollars in the world market and predicted "future wars will be economic rather than military."

He said renewable-energy research labs such as the new Solar Energy Research Facility will "not only wean ourselves away from unstable sources of energy in the world but develop new energy sources from the sun, wind and the plants that cover the earth."

Despite criticism of the United States emanating from the Earth Summit in Rio de Janeiro, Brazil, Watkins said the conference "demonstrated we're serious about conserving and developing energy." He cited two Brazilian contracts clinched this week.

One is a $1 million deal to supply 1,000 photovoltaic units to Celpe, a state-operated utility in Pernambuco

state. It will provide electricity to 1,000 dwellings in remote villages.

The other project is with sugar-cane giant Zinini. NREL technology will allow Zinini to cut its cost of making ethanol from cane residue by 30 cents a gallon.

Watkins announced these R&D agreements:

A $29 million project with Amoco to use a NREL process employing enzymes to convert vegetation into ethanol fuel. Amoco is putting up $25 million of the cost, and DOE the rest.

.A $3.3 million project with the U.S. Advanced Battery Consortium - made up of DOE, Chrysler, Ford and General Motors. They propose to adapt a NREL-developed vacuum insulation to control heat generated by high-temperature batteries planned for the electric cars of the future. The cost will be split 50-50.

A $2.7 million experiment with Coors Ceramics Co. of Golden to use NREL's high-flux solar furnace to cut costs of making silicon carbide powders used in chemical pump seals and other components in corrosive environments. Coors is putting up $1.5 million.

A $500,000 experiment with Brush Wellman Inc. of Cleveland to use NREL's solar furnace to weld metal onto ceramics used in electronic components for cars, computers, telecommunications devices and the aerospace industry. The cost split was not announced.

@QUOTE: "We're not here to play games with just another laboratory . . . but to be able to lead the world in technology." U.S. Energy Secretary James Watkins

CHAMBER OF COMMERCE
OF THE
UNITED STATES OF AMERICA

THOMAS J. DONOHUE
PRESIDENT AND
CHIEF EXECUTIVE OFFICER

1615 H STREET, N.W.
WASHINGTON, D.C. 20062-2000

April 9, 2001

The Honorable Spencer Abraham
Secretary
Department of Energy
Washington, DC 20585

Dear Secretary Abraham: Spencer

Thank you for keynoting the National Chamber Foundation's National Energy Summit. We very much appreciated your remarks, especially your comment that a sound national energy strategy must include a diversity of energy sources across all sectors and regions.

We know that in the near term you will be further developing a national energy policy and implementing those policies that have already been formulated. We look forward to deploying the Chamber's many resources to help you form and carry forward that vital policy.

Once again, Spence, we thank you for your participation.

Sincerely,

200063

Warren Chisum
STATE REPRESENTATIVE

COMMITTEES:
ENVIRONMENTAL REGULATION, CHAIR
COUNTY AFFAIRS
HOUSE ADMINISTRATION

House of Representatives

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APR 10 2001

January 15, 2001

President George W. Bush
1600 Pennsylvania Avenue
Washington D. C.

Dear President Bush,

I recently held town hall meetings around my District 88 in the State of Texas and one of the growing concerns that was voiced by my constituents are their gas bills. Many of my constituents are on fixed incomes and are having a difficult time paying such high heating bills. In some cases they are having to go without medical treatment or food to pay to stay warm.

I would appreciate if you would look into a National Energy Policy in the whole nation.

I hope you will be able to help us with this growing concern.

Sincerely,

Warren Chisum

Warren Chisum

District 88: Carson, Childress, Collingsworth, Dallam, Donley, Gray, Hall, Hansford, Hartley, Hemphill, Hutchinson, Lipscomb, Ochiltree, Roberts, Sherman, Wheeler

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27999

014727

Peter Hain MP
Minister of State for Energy and Competitiveness in Europe

2001-014727 6/20 P 3:34

Department of Trade and Industry
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London SW1H 0ET

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EMail Address:
mpst.Hain@dti.gsi.gov.uk

Honourable Spencer Abraham
Secretary of Energy
US Department of Energy
1000 Independence Ave SW
WASHINGTON DC 20585
USA

10 April 2001

Dear Spence,

Thank you for your letter of 5 March and your congratulations on my appointment as Energy Minister. I very much look forward to building on the existing long-standing relationship between our Departments.

I have asked my office to contact yours to arrange a suitable date for a visit to the US as soon as this is practicable. However, for planning purposes, a visit in June as I had originally hoped may not now be possible. Nevertheless, I hope it will not be too long before we can go firm on dates.

Recalling our recent telephone conversation, I look forward in particular to discussing progress on your Task Force on energy policy, and our energy policy review including security of supply issues. As regards the Memorandum of Understanding on energy research, I understand a meeting between officials has now been fixed for early September.

Yours sincerely,

Peter

28000

011419

William S. Weaver
President & CEO

PUGET SOUND ENERGY

2001-011419 5/2 P 3:49

April 11, 2001

Secretary Spencer Abraham
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20515

Dear Secretary Abraham:

Thank you for your time while I was recently in Washington D.C. I appreciated the opportunity to discuss a few issues of great importance to Puget Sound Energy during this energy crisis, particularly proposed solutions such as personal energy management that encourages conservation and sends appropriate price signals to consumers.

I welcome the opportunity to work with you and the Vice President's Working Group on National Energy Policy in bringing attention to this problem to ensure that we work together to solve the pending crisis in our region and the nation.

I look forward to working more closely with you on this or other issues of mutual interest. If I can ever be of assistance to you, please let me know.

Best regards,

William S. Weaver
President and
Chief Executive Officer

THE EUROPEAN INSTITUTE

5225 WISCONSIN AVENUE, N.W., SUITE 200, WASHINGTON, DC 20015-2014
TELEPHONE: (202) 895-1670 ▪ FAX: (202) 362-1088 ▪ E-MAIL: INFO@EUROPEANINSTITUTE.ORG

April 11, 2001

The Honorable Spencer Abraham
Secretary of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585

REF: National Energy Policy Briefing for European Officials

Dear Mr. Secretary:

On behalf of the Board of Directors and Members of The European Institute, we would like to invite you to present the U.S. National Energy Policy to our Roundtable on Energy, Environment and Transportation. The Roundtable examines questions related to energy and sustainable development within the context of evolving policies in Europe and the U.S.

This meeting would include senior representatives from 24 European countries at a time and place of your choosing.

The Roundtable on Energy, Environment and Transportation also includes Airbus Industrie of North America, American Forest & Paper Association, BMW (US) Holding Corp., The Boeing Company, British Nuclear Fuels Ltd. (BNFL), COGEMA Inc., DaimlerChrysler, Delta Air Lines, Inc., Electricité de France, ENI, Enron Corporation, Exxon Mobil Corporation, General Electric Company, IBM Corporation, Lafarge Corporation, Lufthansa German Airlines, Nuclear Energy Institute, Siemens AG, and Swissair/Sabena.

European and corporate officials are eager to initiate a transatlantic energy dialogue to better understand the U.S. approach to meeting its energy needs.

We would be honored to receive you for this important meeting. If you or your staff have any questions, please call us at (202) 895-1670 or email: sfaulkner@europeaninstitute.org.

Sincerely,

Scot M. Faulkner
Executive Director

Jacqueline Grapin
President

2001-010347 Apr 17 A 9:10

Please log.

STATE OF NORTH DAKOTA

Washington Representative
Hall of States
400 North Capitol Street, NW, Suite 585
Washington, DC 20001
Tel: 202.347.6607

MEMORANDUM

TO	:	Kyle McSlarrow, Chief of Staff
FROM	:	Toby Burke, Washington Representative
DATE	:	April 12, 2001
RE	:	Request For Meeting With Secretary Abraham

Governor Hoeven shall be visiting Washington on Monday, April 30 and respectfully requests a meeting with Secretary Abraham to discuss the current energy situation and the development of a national energy policy. In particular, Governor Hoeven would like to discuss the issues of generation and transmission of power and the role North Dakota can play in addressing the current energy crisis.

I appreciate your consideration of our request. If you have any questions, please do not hesitate contact me at 202.347.6607.

Thank you.

010672

ISSUES
IN SCIENCE AND TECHNOLOGY

April 17, 2001

Spencer Abraham
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Dear Secretary Abraham:

In hopes of eliciting a response from you, I am enclosing a copy of "Searching for a National Energy Policy" by John P. Holdren.

This article appears in the Spring 2001 issue of *Issues in Science and Technology*, which has just come out.

Our hope is that you will agree to comment on this article for our letters section, called Forum. We would welcome a brief response of up to 500 words on any aspect of the article or on the broader questions it raises for inclusion in the Summer 2001 issue. We need your comments by May 11th. (A letter received after this deadline could be included in a later issue.)

We prefer the letter be sent via e-mail to kfinnera@nas.edu. Can we print your e-mail address with your letter?

I look forward to hearing from you and to presenting your thoughts to *Issues* readers. If you have any questions, please contact me at (202) 965-5648.

Very truly yours,

Kevin Finneran

Kevin Finneran
Editor-in-Chief
Issues in Science and Technology

Enclosures

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THE CECIL AND IDA GREEN CENTER FOR THE STUDY OF SCIENCE AND SOCIETY AT THE UNIVERSITY OF TEXAS AT DALLAS

28004

JOHN P. HOLDREN

Searching for a National Energy Policy

The answers will be found in improved technologies and incentives to use them, not in the Arctic National Wildlife Refuge.

The United States and the world face a daunting array of energy-related challenges. We must work out how to provide, reliably and affordably, the supplies of fuel and electricity needed to sustain and build economic prosperity. We must limit the financial drain, vulnerability to supply-price shocks, and risk of armed conflict that result from overdependence on foreign oil. We must reduce the environmental damage done by technologies of energy supply, ranging from local and regional air pollution to the disruption of global climate. We must minimize the accident and proliferation dangers associated with nuclear energy.

The place of these issues on the public agenda depends on whether they appear to be going well or badly. And for most of the past 15 years, energy matters have seemed to most Americans to be going rather well. Real energy prices were falling. Gasoline lines and electricity blackouts were absent. Urban air quality was generally improving. The science of the impact of fossil fuel use on global climate was widely seen as contentious and inconclusive. There were no major nuclear-reactor accidents after Chernobyl (1986), and concerns about nuclear proliferation and the nuclear energy's role in it were on the back burner.

Much of this has now changed. Heating oil shortages and price spikes in the winter of 1999–2000 were followed by huge increases in natural gas prices in 2000, with painful effects on homeowners, industrial users, and electricity generation. The electricity crisis in California focused the attention of the nation on whether the reliability and affordability of the electricity supply could become casualties of defects in electricity-sector deregulation in other states as well. Oil imports, in the meantime, crept up from their 1985 low of 29 percent of U.S. oil consumption to 57 percent in 2000. Meanwhile, the improving trend in urban air quality has slowed; the scientific consensus about the reality and seriousness of fossil fuel–related global climate change has solidified; and nuclear proliferation has been propelled back onto

John P. Holdren is the Teresa and John Heinz Professor of Environmental Policy and director of the Program on Science, Technology, and Public Policy at Harvard University's John F. Kennedy School of Government, as well as professor of Environmental Science and Public Policy in the Department of Earth and Planetary Sciences at Harvard.

the front burner by the 1998 Indian and Pakistani tests and by U.S. concerns about Russian sales of nuclear energy technology to Iran.

As a result of these developments, energy policy is again a matter of public concern. What will the new Bush administration do about it? What should it do?

Drilling our way out of dependency?

Early indications are that the new administration plans to make drilling in the Arctic National Wildlife Refuge (ANWR) the centerpiece of its energy policy. That would be a mistake. The contribution of the ANWR to domestic oil supplies would, at best, be slow to start, modest at its peak, and strictly temporary, providing limited leverage against the oil-import part of our energy problems and almost no leverage at all against the other parts. Whether the ANWR belongs in the national energy portfolio at all—given the ratio of its possible benefits to its costs and risks—is problematic. It certainly should not be the centerpiece.

Overdependence on imported oil is a very real problem. U.S. oil imports are running over 10 million barrels per day, out of total domestic consumption of about 18 million barrels. A quarter of U.S. imports come from the Persian Gulf, and another quarter from other Organization of Petroleum Exporting Countries (OPEC) members. The bill for oil imports in 2000 was well over $100 billion, passing one percent of GNP for the first time since 1985. The economic impact of oil-import dependence is still not as great today as it was 20 years ago, because oil's share of the nation's energy mix has fallen since then, and because the amount of energy needed to make a dollar of gross domestic product (GDP) has also fallen. But the impact is considerable in sectors of the economy that remain heavily dependent on oil, and oil dependence as a fraction of national energy supply is high enough to make the defense of foreign oil supplies a major mission of U.S. armed forces and, indeed, a potential source of actual armed conflict. Moreover, under a business-as-usual scenario, U.S. oil imports are projected to continue to rise. Net U.S. imports of oil in 2020 under the "reference" case in the latest Energy Outlook report of the U.S. Energy Information Administration (EIA) will reach 16.6 million barrels per day, which is 64 percent of projected U.S. consumption. And because both OPEC and the Persian Gulf hold larger shares of world reserves than of current production, their shares of world production and exports are likely to increase over time. The prospect of increasing dependence on these unpredictable partners by the United States, its allies, and even some of its potential adversaries is not reassuring in economic or national security terms.

Dependence on imported oil can be reduced by increasing domestic oil production or by reducing oil use; the latter can be achieved either by increasing the efficiency with which oil is converted into goods and services or by substituting other energy sources for oil. All of these approaches have been used in varying degrees over the past two decades, and all of them have a role to play in the decades ahead. All of them can and should be strengthened with further policy initiatives. But analysis of recent history and future prospects indicates that much larger gains will come from reducing consumption through efficiency increases and substitution than from increasing domestic production.

U.S. domestic oil production declined between 1970 and 2000, despite the urgency that the oil embargoes and price shocks of the 1970s placed on increasing exploration. The all-time peak of U.S. domestic production of crude petroleum plus natural gas plant liquids (together characterized as "total petroleum") was 11.3 million barrels per day in 1970. By 2000, it was only 8.0 million barrels per day. It is hard to estimate the amount by which prices, policies, and technological improvements slowed the decline in U.S. domestic oil production over this period from what it otherwise would have been; certainly, advances in seismic exploration, horizontal drilling, and secondary oil recovery helped add to U.S. production. Nonetheless, Alaska's contribution (which peaked at about 2 million barrels per day) had fallen by 2000 to about 1 million barrels per day, and U.S. offshore production was contributing about the same 1.5 million barrels per day to domestic supply at the end of the 1990s as it had contributed 30 years earlier.

Stemming the expected continuing decline in domestic petroleum production in the decades ahead will not be easy, with or without the ANWR. According to the EIA reference scenario, which does not consider production from the ANWR, U.S. domestic petroleum production will be only 7.5 million

barrels per day in 2010 and 7.9 million in 2020. These levels are marginally lower than the 2000 figure, despite assumed continuing technological innovation in exploration and extraction and a 30 percent increase in offshore production. Even in EIA's "high world oil price" scenario, under which some additional fields become profitable, domestic production in 2020 would be only 0.7 million barrels per day higher than in the reference scenario.

The contribution of the ANWR to domestic oil supplies would at best be slow to start, modest at its peak, and strictly temporary.

What might be added to this by drilling in the coastal shelf of the ANWR? First of all, it is not clear how much oil would be found there. The U.S. Geological Survey's 1998 estimate of how much might be recoverable ranged from 4 to 12 billion barrels. Since U.S. oil consumption is the equivalent of about 6.6 billion barrels of crude per year, this means that the ANWR could ultimately provide the equivalent of 7 months to 2 years of current U.S. oil supply, or 1 to 4 years of current imports.

At the upper end of the range of estimates, the ANWR would be comparable to the Prudhoe Bay field. If that were so, a production trajectory similar to Prudhoe Bay's would presumably ensue, with production ramping up over a decade or so to 1.5 to 2 million barrels per day, remaining at that level for a decade or two, and then tailing off. The question is whether the possibility that the ANWR could displace perhaps 10 percent of projected U.S. oil imports in the period from 2010 to 2020, with declining contributions thereafter, justifies the certain environmental damage that will be caused by exploring for oil in this unique and fragile habitat and the risk of even larger damage from oil production and transport if oil is found.

The answer ought to depend, at least in part, on the prospects for achieving comparable or larger (and longer-lived) reductions in U.S. oil-import dependence at lower costs and risks and with larger ancillary benefits. Let me turn, then, to the possibilities for reducing oil imports and for simultaneously addressing other dimensions of the energy challenges we face, through increased energy efficiency and through expanded use of non-oil sources of energy supply.

Efficiency first

The historical record reveals the potential of the energy "resource" that is available in efficiency improvements. From 1955 to 1970, the energy intensity of the U.S. economy stayed essentially constant, at about 19 quadrillion British thermal units (Btu) per trillion 1996 dollars of GDP. But from 1970 to 2000, driven in the first part of this period by the oil price shocks of the 1970s and later by continuing technological innovation and structural changes in the economy, energy intensity fell at an average rate of 2 percent per year. In the year 2000, it was 10.5 quadrillion Btu per trillion 1996 dollars. As a result, total U.S. energy use in that year was 79 quadrillion Btu lower than it would have been if energy intensity had remained at the 1970 value.

For most of the past 30 years, oil's share of U.S. energy supply slowly declined as well, falling from 43.5 percent in 1970 to 38.8 percent in 2000. If oil share and energy intensity had both remained at their 1970 values, the U.S. economy of the year 2000 would have required 36 million barrels per day of crude oil rather than the 18 million barrels per day it actually used.

As for the future, it remains clear that by far the greatest immediate as well as longer-term leverage for reducing dependence on imported oil lies in increasing the efficiency of energy use overall and of oil use in particular. (Improvements in overall energy efficiency free up non-oil sources of supply that can then, in principle, substitute for oil.) Notwithstanding the impressive efficiency gains over the past 30 years, every serious study of the matter indicates that the technical potential for further improvements remains large. Most studies also indicate that further efficiency increases are the most economical option available for reducing oil dependence.

The EIA reference forecast projects an average rate of decline of 1.6 percent per year for the energy intensity of the U.S. economy over the next 20 years.

This already reduces total U.S. energy use in 2020 by about 50 quadrillion Btu (equivalent to about 23 million barrels of oil per day) as compared to what energy use would be if the energy intensity of the economy remained at its 2000 value and economic growth averaged, as EIA assumes, 3 percent per year. If the rate of decline in U.S. energy intensity from 2000 to 2020 were as high as was achieved from 1995 to 2000 (2.8 percent per year) the further savings in U.S. energy use in 2020, beyond those in the EIA reference forecast, would be equivalent to another 11 million barrels per day of oil.

The potential for efficiency improvements is nowhere more apparent than in the transportation sector. In 2000, more than 12 million barrels per day of petroleum products were being used for transportation fuel: 8 million barrels per day of that in gasoline and 2 million barrels per day in diesel fuel. U.S. automotive fuel economy has been essentially constant since 1991, at about 21 miles per gallon, thanks to the false reassurance of low gasoline prices, the absence in recent years of increases in the Corporate Average Fuel Economy (CAFE) standards, and the growing proportion of sport utility vehicles and pickup trucks purchased by consumers, for which the current CAFE standards are lower than for ordinary cars.

Perfectly comfortable and affordable hybrid cars already on the market get 60 to 70 miles per gallon. With the help of the government-industry Partnership for a New Generation of Vehicles, more advanced hybrid and possibly also fuel-cell–powered cars that would get 80 to 100 miles per gallon could be on the market before 2010. Straightforward arithmetic shows that doubling the average fuel economy in a U.S. fleet of gasoline-burning vehicles the size of today's would save 4 million barrels of oil per day. Comparable efforts to improve the fuel economy of trucks, as recommended in the 1997 study of U.S. energy R&D strategy that I chaired for the President's Committee of Advisors on Science and Technology (PCAST) in 1997, could save a further 1.5 million barrels per day by 2020. A government initiative to help bring this about was launched last year.

Specific opportunities for major efficiency increases are easily identifiable in industry and in residential and commercial buildings as well. In industry, these opportunities include: increased use of advanced combined-heat-and-power systems; improved electric motors and drive systems; and reductions in process-energy requirements in the chemical, petroleum-refining, forest products, steel, aluminum, metal-casting, and glass industries (which together account for about 20 percent of total U.S. energy use). The EIA projects overall industrial energy intensity to fall 25 percent between 2000 and 2020 in the reference case and nearly 30 percent in a high-technology case. The 1997 PCAST study and studies by the Department of Energy (DOE) national laboratories have argued that bigger gains are possible.

In residential and commercial buildings, advances in the energy performance of the building shells and of the energy-using devices inside—especially in air conditioning, refrigeration, heating, and lighting—offer big potential gains. For example, the EIA high-technology case knocks 1.5 quadrillion Btu off the 5-quadrillion Btu growth projected for the residential sector in the period from 2000 to 2020 in the reference case, and a "best available technology" case reduces the 2020 figure by another 4 quadrillion Btu to a level below current use. The Partnership for Advancing Technology in Housing, launched in 1998, aims to achieve a 50 percent improvement in efficiency in new homes by 2010.

Expanding non-oil energy supplies

Although the largest and most cost-effective leverage in the decades immediately ahead resides in increasing energy efficiency, there is also considerable potential in expanding energy supplies from sources other than oil. The sources with the largest short-term and medium-term potential to directly displace oil in the U.S. energy mix are natural gas and biofuels.

Natural gas could displace oil in a number of industrial applications, in home heating, and in motor vehicles. In the EIA reference case, petroleum use in the industrial sector increases between 2000 and 2020 by the equivalent of 1.2 million barrels of crude oil per day, and natural gas use increases by about the same amount. In principle, higher growth of natural gas use could displace some or all of that growth in the use of petroleum. Residential use of oil, amounting in total to the equivalent of about 600,000 barrels of crude oil per day in 2000, falls by about 100,000 barrels per day by 2020 in the EIA reference scenario, whereas natural gas use in the resi-

dential sector increases by the equivalent of 600,000 barrels per day. Again, gas use could increase faster, further reducing oil use.

In the transportation sector, which is by far the largest user of oil, the EIA projects contributions from natural gas as a motor vehicle fuel equivalent in 2020 to equal 600,000 barrels per day, about twice the 2000 value. Here too, the potential for natural gas is clearly larger than envisioned by EIA. (Concerns that recent increases in natural gas prices mean we are running out of gas are misplaced. Gas futures prices have recently been declining, and the EIA projects increasing additions to domestic reserves, as well as increasing production from onshore, offshore, and unconventional sources, through 2020.)

The first step the Bush administration and Congress ought to take in reshaping U.S. energy policy is to boost federal spending for energy R&D.

As for liquid fuels from biomass, the 1997 PCAST study estimated that an aggressive program to produce ethanol from cellulosic biomass could be displacing 1.5 million barrels per day of oil by 2020 and over 3 million barrels per day in 2035. The EIA estimate of the contribution of biomass fuels for the transportation sector in 2020 was far smaller, but EIA's assumptions did not include incentives for biomass use of the sort that would be contemplated if the country actually got serious about reducing oil imports and greenhouse gas emissions.

The production of liquid hydrocarbon fuels from coal is technically feasible using a variety of approaches, but it is not yet economically competitive with oil or with the production of liquid fuels from natural gas. In addition, the production of liquids from coal by means of existing technology results in carbon dioxide emissions about twice as large per barrel as for petroleum: a major drawback in light of climate change risks. As oil and natural gas become more expensive over time, advanced coal-to-liquid technologies that can capture and sequester carbon dioxide rather than releasing it to the atmosphere may eventually become attractive. The 1997 PCAST study recommended increasing R&D on these carbon-sequestering coal technologies.

The potential for reducing U.S. oil consumption by replacing oil-fired electricity generation with other fuels is quite limited. In 2000, oil generated only 2.7 percent of U.S. electricity, using 500,000 barrels per day. In the EIA reference scenario, oil use for electricity falls by 2020 to less than 100,000 barrels per day. Instead, we should focus on developing technologies to displace the use of natural gas to produce electricity so that this natural gas could then be used to displace oil in the industrial, residential, and transportation sectors.

From an environmental, and quite possibly economic, standpoint, the most attractive candidates to displace some of the growth of gas-fired generation envisioned in the EIA scenario are the non-hydro renewable sources. A very conservative estimate of their potential for doing so out to 2020 is provided by the EIA "high renewables" scenario, which in 2020 obtains 107 billion kilowatt-hours (kWh) from biomass: about 65 billion kWh each from wind and geothermal and 5 billion kWh from solar. The additional non-hydro renewable energy generation in this scenario, compared to the 2000 figure, totals 145 billion kWh, which is equivalent to about 700,000 barrels per day of oil.

The EIA estimate of renewable electric potential is conservative, because the EIA study did not consider the possibility of substantial increases in the prices of fossil fuels or the possibility of major policy changes that would sharply increase the incentives for expanding the use of nonfossil fuels. When the 1997 PCAST study made some estimates of what might be achievable from renewable electric options under prices or policies that encouraged these options very strongly, it found the potential for as much as 1,100 billion kWh by 2025 from wind systems with storage technologies and similar quantities by 2035 to 2050 from solar-electric systems with storage, from biopower, and from hot-dry-rock geothermal. These are possibilities, not predictions, but the figures do indicate very large potential; 1000 billion kWh per year is the equivalent of about 5 million barrels of oil per day.

As for nuclear energy, there are no new nuclear power plants on order in the United States, and no new orders are likely as long as gas-fired electricity generation remains as cheap as EIA expects. The range of nuclear contributions in 2020 in the EIA scenarios thus depends only on how many current plants are still operating. The difference between the EIA's "high nuclear" and "low nuclear" variations in these respects amounts to 240 billion kWh in 2020, which is equivalent to 1.2 million barrels of oil per day.

The 1997 PCAST study recommended a modest increase in federal nuclear energy R&D in order to clarify safety issues associated with license extension, and it recommended a somewhat larger and longer-term nuclear energy research initiative focused on clarifying the prospects for improvements in the cost, safety, waste management, and proliferation resistance characteristics that will determine whether deploying a new generation of nuclear reactors in the United States in the longer term becomes a real option. PCAST also recommended an increase in the funding for R&D on fusion energy, which, although it remains far from commercialization today, could conceivably make a large contribution to electricity generation in the second half of the 21st century.

Recent policy

The potential to reduce U.S. oil dependence using currently available as well as still-to-be-fully-developed energy efficiency and non-oil energy supply options is clearly very large. The question is how much of this technical potential will be realized in practice, and by when. The key to expanded use of the currently available options is incentives. The keys to achieving the potential of the emerging options are first, research, development, and demonstration; and second, incentives to promote the early commercialization and widespread deployment of the results.

Energy R&D is valuable for many reasons beyond reducing costly and dangerous overdependence on foreign oil. It can reduce consumer costs for energy supplies and services, increase the productivity of U.S. manufacturing, and improve U.S. competitiveness in the multi–hundred-billion-dollar world market for energy technologies. It also can lead to improvements in air and water quality, help position this country and the world to cost-effectively reduce greenhouse gas emissions, improve the safety and proliferation resistance of nuclear energy operations everywhere and enhance the prospects for environmentally sustainable and politically stabilizing economic development around the world.

Many of these benefits fall under the heading of "public goods," meaning that the private sector is not likely to invest as much to attain them as the public's interest warrants. That is one of the main reasons why the government needs to support energy R&D, even though the private sector will continue to do a considerable amount on its own. The 1997 PCAST study concluded that the federal government's applied energy technology R&D programs (then totaling $1.3 billion per year for fossil, fission, fusion, renewable, and end-use efficiency technologies combined) were "not commensurate in scope and scale with the energy challenges and opportunities that the 21st century will present, [taking into account] the contributions to energy R&D that can reasonably be expected to be made by the private sector under market conditions similar to today's."

Accordingly, the PCAST study recommended increasing DOE's budget for these programs to $1.8 billion in fiscal year (FY) 1999 and $2.4 billion in FY 2003 (figures are in as-spent dollars). The R&D portfolio proposed by PCAST addressed the full range of economic, environmental, and national security challenges related to energy in the short and long term. Also recommended were a number of improvements in DOE's management of its R&D efforts.

In its FY 1999 budget request, the Clinton administration included a total increment of about two-thirds of what PCAST recommended for that year, and Congress appropriated about 60 percent of the request. The net result was an increment about 40 percent as large as PCAST recommended for FY 1999. Appropriations continued to increase in FY 2000 and FY 2001, but the gap between the PCAST recommendations and the amounts appropriated widened: In FY 2001, the total applied energy technology R&D appropriation was $1.7 billion—$0.5 billion below the PCAST recommendation for that year. The details of the Bush administration's request for FY 2002 are not available as this is written, but indications are that there will be cuts in most of the energy R&D categories. (It is worth noting that the $0.5 billion gap for FY 2001 could be paid for with half a cent per gallon from the federal gasoline tax and that

fully funding the PCAST recommendations for FY 2002 would barely return real spending for these purposes to where it was in FY 1991 and FY 1992, under the senior President Bush.

A followup PCAST study in 1999, which I also chaired, focused on the rationales for and ingredients of the federal role in strengthening international cooperation on energy innovation. The resulting 1999 report, Powerful Partnerships, noted that many characteristics of the global energy situation that affect U.S. interests will not be adequately addressed if responses are confined to the United States, or even to the industrialized nations as a group.

We need an array of price and nonprice incentives that will encourage deployment of energy efficiency and advanced energy supply technologies.

The oil import problem is one compelling example, insofar as the pressures on the world oil market and on oil from the politically fragile Persian Gulf depend on the sum of all countries' imports. The solution therefore depends on the pace at which options that displace oil imports are deployed in other countries, not just in the United States. Another problem whose solution depends on deployment of advanced technologies everywhere is the contribution of anthropogenic greenhouse gases to global climate change. In addition, the use of public/private partnerships to promote energy technology innovation abroad, as proposed by the 1999 PCAST panel, would help U.S. companies increase their share of the trillions of dollars in energy technology purchases that developing countries will be making over the next few decades.

The panel recommended an increment of $250 million per year, beginning in the FY 2001 budget, for federal support for international cooperation on energy research, development, demonstration, and deployment. These recommendations have not fared as well so far as the 1997 recommendations on U.S. domestic energy R&D. The Clinton administration did form the interagency task force that the panel had recommended for coordinating the government's efforts in this domain, and the FY 2001 budget request contained an International Clean Energy Initiative of $100 million. But only $8.5 million of this was actually appropriated by Congress.

A new national energy policy

The first step the Bush administration and Congress ought to take in reshaping U.S. energy policy is to boost federal spending for energy R&D and for international cooperation on energy technology innovation to the levels recommended in the 1997 and 1999 PCAST reports. The investments involved are modest; the PCAST studies and many others have shown that the returns on such investments in the past have been high; and the leverage that advanced energy technologies offer now against looming energy-linked challenges in the economic, environmental, and national security dimensions of the public's well-being is immense.

That should be the easy part. More difficult, but nonetheless essential, is to put in place an array of price and nonprice incentives and other policies that will encourage the deployment of energy efficiency and advanced energy supply technologies in proportion to their public benefits. Elements of such an array should include tighter CAFE standards, expanded use of renewable energy portfolio standards and production tax credits, and energy efficiency standards and labeling programs for energy-using equipment in residential and commercial buildings.

Perhaps most important, the price signals affecting our energy choices will not be "right" until they better reflect the high costs and risks to our society from the climate-imperiling emissions of carbon dioxide by fossil fuel combustion and from overdependence on imported oil. The sensible action, which could easily be made consistent with the desire of the Bush administration to cut taxes overall, would be to increase taxes on things that society has an interest in constraining (in this case, oil use and emissions of carbon dioxide to the atmosphere) while decreasing taxes on things we want to encourage (such as income and capital gains).

The natural antipathy of consumers to higher en-

ergy taxes could be alleviated not only with offsetting reductions in other taxes but also with education about the economics of the matter. Failing to reflect the dangers of overdependence on oil imports and climate-disrupting emissions in the price of energy from fossil fuels is a prescription for underinvesting in technological alternatives that would reduce these dangers. And underinvesting now is a prescription for higher costs later in the form of bigger damages from climate change and higher oil import bills. It should also be remembered that the revenues from energy taxes, unlike those from OPEC price hikes, stay in the United States, where the money can be used not only to reduce other taxes but also to reduce the disproportionate effects of energy price increases on the poor and to support research, development, demonstration, and accelerated deployment of advanced energy options.

What should be the role, finally, of the ANWR in a new national energy policy? As already indicated, the contribution from the ANWR would be modest at best—very limited even in its temporary leverage against oil imports and relatively short in duration—but bought at a high environmental (and political) cost. Whatever the ANWR might bring in the way of a modest and temporary reduction in oil import requirements, it would buy nothing against the parallel problem of climate change risks and little if anything against electricity supply problems such as those plaguing California.

Still, if there were few or no alternatives to the ANWR for reducing dependence on oil imports, one might imagine the public's swallowing the sacrifice of energy development in this unique wilderness. But there are abundant alternatives. Expanded use of natural gas is more promising in the short term, and expanded reliance on biomass and other renewables is more promising in the middle and long terms. And the potential of improvements in energy efficiency dwarfs that of the ANWR in the short, middle, and long terms alike. Renewable energy sources and efficiency, moreover, address climate risks and electricity supply as well as oil dependence, and they are sources that keep on giving, in contrast to the temporary contributions of a new oil field.

If the Bush administration and Congress adopt the more comprehensive, more technology-centered, and more forward-looking approach outlined here for addressing the energy challenges facing this country and the world, the ANWR will not be needed. We will be able to have the energy we need, and our wilderness too. If, against all odds, the contributions of alternatives to the ANWR prove, 10 or 20 years down the road, to be insufficient, then whatever oil lies beneath that particular piece of Arctic tundra will still be there to be found. In the meantime, it may be hoped that President Bush and his advisors will not allow a divisive struggle over developing the ANWR to distract us from fashioning the larger strategy that our energy challenges and opportunities require.

Recommended reading

Energy Information Administration, U.S. Department of Energy, *Annual Energy Outlook 2001 With Projections to 2020* (Washington, D.C., Government Printing Office, December 2000) (www.eia.doe.gov/oiaf/aeo/).

Interlaboratory Working Group on Energy-Efficient and Low-Carbon Technologies, U.S. Department of Energy, *Scenarios of U.S. Carbon Reductions: Potential Impacts of Energy-Efficient and Low-Carbon Technologies to 2010 and Beyond* (Washington, D.C., Government Printing Office, 1997).

Panel on Energy Research and Development, President's Committee of Advisors on Science and Technology, Executive Office of the President of the United States, *Federal Energy Research and Development for the Challenges of the Twenty-First Century*, November 1997 (ksgnotes1.harvard.edu/BCSIA/Library.nsf/pubs/PCAST:21stR&D).

Panel on International Cooperation in Energy Research, Development, Demonstration, and Deployment, President's Committee of Advisors on Science and Technology, Executive Office of the President of the United States, *Powerful Partnerships: The Federal Role in International Cooperation on Energy Innovation*, June 1999 (ksgnotes1.harvard.edu/bcsia/library.nsf/pubs/pwrprt).

FIFE OIL COMPANY, INC

2001-012372 May 16 p 3:54

May 14, 2001

The Honorable Dick Cheney
Vice President of the United States
Eisenhower Executive Office Building
Washington, D. C. 20501

Dear Mr. Vice President:

As the CEO and founder of one of America's independent oil and gas producing companies, I have been extremely encouraged by your remarks on energy and enthusiastically anticipate the President's energy policy to be released this Thursday. After so many administrations and such volatile times in the energy business, it is indeed refreshing to anticipate the Bush Administration's intent to tackle a politically supercharged, yet necessary, task of bringing some purpose and reason to fulfilling America's energy needs. We who know this industry understand that the time has come to resolve this issue for the sake of future generations.

My company generates its exploration capital from small investors and we sometimes partner with like-size companies to finance drilling ventures. Independents, such as my company, are the future for on-shore domestic exploration on private lands. There is a great potential for we independents who are willing and able to deal with land owners and the usual regulatory and environment issues involved in such exploration activities.

In South Louisiana the potential for discovery is revealed in a recent article in **GasTIPS** by Kim Hemsley of Schlumberger. Hemsley's article focuses on the significance of South Louisiana Oligocene-Miocene oil and gas prospects as being the most prolific in North America with great future potential particularly with the new discovery technologies available. South Louisiana in the past 80 year period has produced over 90 TCF of natural gas with proportional quantities of oil or condensate. According to "Petroleum Information/Dwights LLC 1999 petroROM", this production has come from over 860 fields of which 47 have produced at 500 BCF (billion cubic feet), 16 at over 1 trillion cubic feet (TCF), and 5 at 2 TCF.

While this production is impressive, what is more interesting is the fact that of the 70,000 wells that have been drilled in South Louisiana within the Twentieth Century most have been relatively shallow plays according to Hemsley. Only 5,900 wells (8.4%) have penetrated below 15,000 feet. More importantly, only 1,900 wells (2.7%) have penetrated 17,000 feet while a miniscule 205 wells (0.03%) have exceeded 20,000 feet. Hemsley states that wells of total depths below 15,000 feet are concentrated in a small

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fraction of basin area, leaving millions of acres of deep potential untested.

America's energy needs can only be met by an industry-wide effort of exploration: majors and independents. The major oil companies are well capitalized and can exploit large-scale efforts such as the President's intention of opening new Federal Lands for exploration. In such efforts, we independents do not have the ability to participate yet we can make a difference in solving America's energy needs by pursuing exploration activities on a scale and in areas where the major oil companies have long abandoned serious activity.

What the independents need is exploration capital. Such investment capital would be readily available through tax incentives. If individuals in higher income brackets could receive a tax credit for investments in oil and gas exploration activity, independents would have more than enough investment capital to explore the potential deep plays in South Louisiana and other Gulf Coast states. Exploration activity would begin at a high level across the entire spectrum of the oil and gas industry.

Democrats have made much in the Press about the dollar value of the President's tax cuts for high income individuals. Here is a way for the President to provide a more acceptable tax cut by directing individual investment toward an industry whose efforts will solve a national need that is becoming more evident each day.

Much of this South Louisiana deep potential is natural gas which is fuel the President's Plan will cite as the energy source for 90% of the new electric power facilities according to an article in today's **WALL STREET JOURNAL** which is based upon a recent interview you granted Jim VandeHei.

The oil and gas industry is behind you and the President. We were behind you before the election and now more even more solidly behind you as we see your efforts to address energy issues and tax issues that were heretofore ignored. Tax incentives for energy exploration is a win-win for all Americans. A strong domestic energy base creates jobs, provides for our defense and national security, and will provide market stability and affordable energy for all Americans.

Godspeed you and the President in your efforts to redirect our nation toward a future of security and stability of what we know and enjoy as our American way of life.

Sincerely,

Charles M. Fife, Jr.
President

Cc: Senators Breaux and Landrieu, Representatives John and Tauzin, and Secretary Abraham

2001-010785 4/24 P 3:47

010785

INTERNATIONAL FEDERATION OF INDUSTRIAL ENERGY CONSUMERS NORTH AMERICA
1225 I Street NW, Suite 300, Washington, DC 20005
202.408.9494 (v) • 202.408.0877 (f) • gilmareh@apca.org

April 19, 2001

The Honorable Richard B. Cheney
Vice President
Eisenhower Executive Office Building
Washington, D.C. 20501

NATIONAL ENERGY POLICY – COGENERATION AND PURPA

Dear Mr. Vice President:

Thank you for the opportunity to provide input into the National Energy Policy Development Group. We believe co-generation of electricity should be considered a strategic component of the Administration's position on energy and environmental policy. The undersigned strongly support the use of co-generation of electricity and steam as a way of improving energy efficiency, reducing air emissions, increasing the reliability of the electric transmission grid and improving the global competitiveness of U.S. industry.

In this regard, it is important that Congress not amend the Public Utility Regulatory Policies Act (PURPA) to alter statutory provisions that provide for the purchase and sale of power from qualified facilities (QFs). PURPA provides several invaluable protections that allow co-generation plants to function efficiently in a market dominated by monopoly electric utilities. They include connection to the grid, backup power at non-discriminatory prices and the sale of excess power at the utility's avoided cost.

When enacted in 1978, Sec. 210 of PURPA, among other things, sought to encourage the development of non-utility power generation, specifically renewable power sources. Where it was particularly effective was in establishing an environment in which high-efficiency power generation technologies, such as co-generation, could exist within a monopoly utility structure. The benefits of this greater use of co-generation were made evident by a report issued by the Congressional Research Service last year that included these findings:

- The energy saved from co-generation in 1997 was equivalent to the electricity use of 11.2 million households, or 5 percent of U.S. oil imports.
- NOx emissions savings from co-generation in 1997 were equivalent to removing more than 39 million cars from the road – more than 30 percent of light duty vehicles.
- Without co-generation made viable through PURPA, U.S. electric utility emissions of SO2 would have been 18 percent higher in 1997 than they were, NOx emissions, 14 percent higher.

Any legislative or regulatory changes that alter the statutory provisions that provide for the purchase and sale of power from qualified facilities (QFs) would jeopardize the economic viability of industrial co-generators and other QFs at a time when our nation is desperately short of electric power. Such a reversal of federal law would only add to the uncertainty that has

28015

hampered new power plant development in states that are transitioning to retail competition as well as all but stop industrial co-generation power projects in states with traditional monopoly electric utility regimes.

The undersigned companies and industries depend heavily on co-generation for reliable, competitive and environmentally beneficial electricity and steam. We believe that the time is not right and ask that the Administration oppose any attempts to jeopardize the contributions of industrial co-generation through changes to PURPA.

Sincerely,

Dale A. Louda, Jr.
IFIEC North America Secretary

Director, Legislative Affairs, American
Portland Cement Alliance

On behalf of:

Abbott Laboratories
American Chemistry Council
American Forest and Paper Association
American Portland Cement Alliance
Bayer
California Portland Cement Company
Celanese Chemicals
CII Carbon, LLC
Coors Brewing Company
Council of Industrial Boiler Owners
The Dow Chemical Company
Dow Corning Corporation
Eastman Chemical Company
Electricity Consumers Research Council
The Fertilizer Institute
The Goodyear Tire and Rubber Company
Lyondell Chemical Company
McDermott International
PPG Industries
Rhodia, Incorporated
Vulcan Chemicals

cc: Secretary of Energy Abraham

ıing, Todd

From: Dandy, Majida
Sent: Friday, April 20, 2001 3:30 PM
To: Harding, Todd
Subject: FW: NEPD

add to schedule

-----Original Message-----
From: Nicole_E._Grodner@who.eop.gov%internet
[mailto:Nicole_E._Grodner@who.eop.gov]
Sent: Friday, April 20, 2001 10:53 AM
To: Dandy, Majida; lfenton@doc.gov%internet;
brian_waidmann@ios.doi.gov%internet; dwm@usda.gov%internet;
tim.adams@do.treas.gov%internet; john.flaherty@ost.dot.gov%internet;
McSlarrow, Kyle; mcginnis.eileen@epa.gov%internet;
liz.digregorio@fema.gov%internet;
Augustine_T._Smythe@omb.eop.gov%internet;
dan.mccardell@do.treas.gov%internet; ray_joiner@ios.doi.gov%internet;
Marlene.minix@usda.gov%internet; kreaves@doc.gov%internet;
suzanne.scruggs@ost.dot.gov%internet; patty.mchugh@ost.dot.gov%internet;
schwarz.denise@epamail.epa.gov%internet; wade.powers@fema.gov%internet;
Karen_E._Keller@omb.eop.gov%internet; Craig_Felner@who.eop.gov%internet;
michelle.poche@ost.dot.gov%internet; linda.figura@do.treas.gov%internet
Subject: Re: NEPD

next National Energy Policy Development Meeting for Principals' plus one is May 2, 2001 at 2:45 p.m. for 1.5 hours. Please confirm that your Principal is available for participation.

I will forward the agenda or other relevant materials as they become available. Please contact me if you have any questions.

Thank you,
Nicki Grodner
Cabinet Affairs
456-2566

28017

2001-010984 4/26 P 3:42

American Gas Association

DAVID PARKER
President and CEO

April 24, 2001

The Honorable George W. Bush
The White House
Washington, DC 20500

Dear Mr. President:

On behalf of the 185 natural gas utility members of the American Gas Association, and their 60 million natural gas customers, I would like to take one more opportunity to say how strongly our industry supports the development of a national energy policy. I also would like to summarize briefly the issues that are of utmost importance to us.

Energy is the lifeblood of our economy, and it is possible to have access to the energy we need to maintain our economy and quality of life, while at the same time protecting our environment. But a comprehensive national energy policy must be put in place if we are to ensure that all of our public interests are balanced.

For America's homes and businesses to continue to rely on affordable energy we must ensure that energy supply keeps pace with demand. Also, over the next 20 years we will need to use all of our energy resources to meet America's energy needs, and we will continue to require a safe, reliable and expanding infrastructure to deliver it. A national energy policy should also encourage the use of all available fuels in their most efficient manner, such as the direct use of natural gas in homes and business, and nuclear or coal in central station power plants.

I have attached for your review, once again, our principles and legislative recommendations for a national energy policy, which were developed and approved by the AGA Board of Directors. AGA believes that a comprehensive, balanced energy policy that uses all energy sources to their best advantage, and recognizes the vital role of natural gas, will guarantee the clean, secure, affordable supply of energy that is needed for America's economic growth and prosperity.

AGA is committed to providing you and Congress the support necessary to enact this type of legislation, which will assure reliable energy security for American families and businesses and thereby ensure prosperity for future generations.

Respectfully,

David N. Parker

Enclosures

cc: Secretary Paul O'Neill
Secretary Gale Norton
Secretary Don Evans
Secretary Ann Veneman
Secretary Norman Mineta
Secretary Spencer Abraham
Director Mitchell E. Daniels, Jr.
Administrator Christine Todd Whitman
Executive Director Andrew Lundquist

American Gas Association

FEDERAL ENERGY POLICY PRINCIPLES

Preamble

Ample, reliable energy supply at affordable prices is key to providing economic and national security for Americans. The American Gas Association (AGA) recognizes that, while the United States has tremendous energy resources, America's current energy supply and infrastructure will not sustain our growing economy and we need to act now to meet our country's energy needs for the 21st Century.

In order to continue to meet the energy needs of our unprecedented growing economy and provide affordable energy for consumers, America will need to utilize all domestic fuels and energy sources efficiently. This is also the right approach for American citizens who will benefit from more reliable and affordable energy from domestic energy sources, cleaner air, and a stronger economy.

AGA is committed to working to enact a bipartisan, consensus, market-based national energy strategy that will ensure the future security, comfort, and economic well being of our nation's citizens by meeting their energy needs, without sacrificing the quality of our environment. AGA will work with consumers, policy makers, and its partners in the energy industry to accomplish this goal.

Principles

To realize the goal of abundant energy supply for the 21st Century, America needs to enact a market-based, federal energy strategy that would accomplish the following:

1. Meet Consumer Energy Needs
   - Ensure safe, reliable and affordable energy supply for all American families and businesses today and in the future
   - Provide a balanced energy portfolio that promotes the wise use and efficient use of all fuels
   - Encourage necessary long-term energy supply and infrastructure investments
   - Meet the needs of our growing economy and create and preserve American jobs
   - Seek market-based solutions that reduce regulatory uncertainty

2. Ensure the Quality of Our Environment
   - Increase the use of new cleaner and more efficient energy technologies
   - Enhance the development of renewable and cleaner energy sources
   - Increase energy efficiency and energy conservation through sustainable development and fair and balanced incentives and standards
   - Ensure short-term energy and environmental policies support long-term goals

3. Increase our National Security
   - Increase domestic energy supply
   - Achieve greater energy independence through lower foreign oil imports

24 April, 2001
13:39

RECOMMENDED NATURAL GAS UTILITY PROVISIONS FOR INCLUSION IN NATIONAL ENERGY POLICY LEGISLATION

Goals:

To decrease America's dependence on foreign oil to fifty percent of oil consumption by the year 2010 by conserving energy resources, improving energy efficiencies, increasing domestic energy supplies, and enhancing the use of renewable energy resources.

To accommodate and facilitate development of an expanded direct use natural gas market for residential, commercial, and industrial consumers, which would benefit the nation through increased economic and energy efficiency, enhanced energy security resulting from reduced dependence on imported oil, and improved environmental quality as a result of lower emissions of CO_2 and pollutants.

Key Legislative Components of the Bill

TITLE I—PROVISIONS TO ENHANCE THE USE OF DOMESTIC ENERGY RESOURCES.

Section 101. National Academy of Sciences Study of Exploration and Production.

Direct the National Academy of Sciences to perform a cost-benefit analysis with respect to utilizing the domestic natural gas resource base to reduce oil-import dependence and to assess the role of new technological developments in the exploration and production process. In making its cost-benefit analysis, NAS must include new exploration and production technologies as a part of the algorithm tested to determine the net benefits of providing access to additional domestic gas resources.

TITLE II—PROVISIONS TO FACILITATE RENEWAL AND EXPANSION OF DOMESTIC ENERGY INFRASTRUCTURE.

Section 201. Office of National Energy Policy.

(a) Create, within the Executive Office of the President, an Office of National Energy Policy, which will be directed to coordinate and expedite actions of executive-branch agencies and independent agencies to implement national energy policy as expeditiously as possible. The Office shall be directed to coordinate and expedite the actions of these agencies to reduce dependence on foreign oil to fifty percent of consumption, to conserve energy resources, to improve energy efficiencies, to increase domestic energy supplies, to increase energy infrastructure to meet America's energy needs, and to enhance the use of renewable resources. The Office will be empowered to work with relevant state agencies to achieve these goals and shall specifically address state concerns with respect to federal impediments to achieving these goals as well as encouraging solutions to state impediments to achieving these goals.

(b) The Office will be empowered to coordinate and expedite decision-making on permitting processes for development of the pipeline and gas distribution infrastructure necessary to sustain projected natural gas demand in the year 2010. The Office shall be empowered to issue, by rule or order, binding deadlines for completion of required agency actions and to provide that failure to act within the deadlines specified shall be deemed to be approval of the pending application.

(c) The Office will be empowered to enter into consultations with officials of Canada and Mexico with regard to energy issues of mutual concern.

Section 202. Report by Office of National Energy Policy.

Direct the Office of National Energy Policy, within 6 months, to prepare and deliver to the President and Congress a report assessing existing impediments to development of the domestic energy infrastructure necessary to sustain projected energy demand in the year 2010. The report shall include, among other things, an identification of those impediments that may be overcome by federal administrative action and those impediments that require legislative action.

Section 203. Interagency Working Group on Natural Gas.

Establish, within the Office of National Energy Policy, an Interagency Working Group on Natural Gas to produce a biannual report setting forth a policy and strategy relating to expanding natural gas usage. The Working Group will consult with cognizant state agencies to receive their views with respect to such a strategy.

Section 204. Interagency Task Force on Exploration and Production on Federal Lands.

Establish, within the Office of National Energy Policy, an Interagency and Intergovernmental Task Force on Energy and Federal Lands to streamline regulation of exploration and production on federal lands (including federal waters and the Outer Continental Shelf), while protecting the environment.

The task force shall, within 6 months, prepare and deliver a report to the President and Congress assessing existing impediments to development of the domestic natural gas resource base on federal lands. The report shall include, among other things, an identification of those impediments that may be overcome by federal administrative action and those impediments that require legislative action.

Section 205. Interagency Agreement on Energy Infrastructure.

Direct the Federal Energy Regulatory Commission and all other federal agencies involved in the environmental review of interstate pipeline applications to enter into an interagency agreement to expedite processing of applications, including deadlines for each agency to complete its required actions. Failure of an agency to complete its review by the deadline shall be deemed to be assent to the project.

Section 206. Reduction of Infrastructure Lead Times.

Reduce infrastructure lead-times and federal impediments of state siting through regulatory reform of federal agencies.

Section 207. Increased Funding for Infrastructure Safety and Reliability.

Increase funding on RD&D to enhance pipeline and distribution infrastructure safety and reliability to optimize utilization of pipeline and distribution infrastructure, and to increase the operational efficiency of pipeline and distribution infrastructure.[S. 3002.]

TITLE III—PROVISIONS TO ESTABLISH COMPREHENSIVE, BALANCED AND EQUITABLE EFFICIENCY AND ENVIRONMENTAL REGULATIONS.

Section 301. Congressional Findings.

Congress finds that it is the policy of the United States to reduce the reliance upon foreign-source energy (i.e., energy produced outside North America), to encourage reliance upon energy produced in North America, and to improve the energy efficiency of the United States as a whole. Furthermore, Congress finds that it is the policy of the United States, in implementing energy efficiency measures, to consider principally, but not exclusively, the total energy consumed in an application.

Section 302. Energy Efficiency Programs.

Direct DOE and other agencies to reexamine current efficiency and environmental regulations in light of the stated national energy policy. Charge DOE with placing priority in energy efficiency rulemaking, analysis of energy efficiency policies, and all codes and standards activities on energy efficiency as measured over the full fuel cycle (i.e., Total Energy Efficiency), including air emissions of criteria air pollutants and carbon dioxide and on cost effectiveness of alternatives for achieving efficiency targets.

Section 303. Cost Effectiveness and Economic Justification.

Direct DOE and other agencies to review current regulations and assess future regulations to ensure that the costs and benefits of each energy option are accurately assessed. Provide specific guidance for DOE's consideration of cost effectiveness and economic justification of energy efficiency regulations and standards, including cost-benefit analysis, stakeholders to be addressed, and fuel competitiveness issues. Much of this section would codify and clarify DOE procedures currently covered by regulations (e.g., the 1996 "Process Improvement Rule"), but which provide considerable ambiguity on the specifics of compliance.

Section 304. Voluntary Standards.

Revise and define the role of DOE staff, national laboratories, and contractors in regard to model codes and voluntary standards to reduce undue federal government influence. Revise the roles of voluntary standards (including ASHRAE standards) in energy policy and the role of DOE in establishing minimum efficiency standards for equipment and buildings to gain more equitable treatment of natural gas end use options.

TITLE IV—PROVISIONS TO PROTECT CONSUMERS AND LOW-INCOME FAMILIES AND ENCOURAGE ENERGY EFFICIENCY.

Section 401. Extend and Increase Funding for LIHEAP Program.

(a) Extend the LIHEAP program from 2001 to 2006, increase the base authorization from $2 billion to $3 billion annually, and increase emergency funds authorization from $600 million to $1 billion annually.

(b) For years subsequent to 2001, ensure that LIHEAP funding tracks changes in low-income consumer fuel costs by increasing the authorization specified in Section 401(a), in formulaic fashion, tracking increases in Energy Information Administration short-term forecasts of residential heating costs.

Section 402. Government Building Energy Efficiency.

Authorize $500 million per year for 5 years for capital improvements, including distributed energy resources and natural gas systems, to modernize government facilities through the installation of sustainable energy systems, especially to replace energy systems that are older, less energy efficient and less environmentally sensitive, including high efficiency and renewable energy systems. Sustainable energy systems funded with this authorization must be cost effective as well as environmentally beneficial.

Section 403. Energy Efficiency of School Buildings.

Reauthorize DOE program to increase energy efficiency in school buildings and provide funds to switch buildings to the most economical and efficient energy source.

Section 404. Conversion of Federal Facilities from Oil-Fueled to Gas-Fired.

Authorize federal funds to convert federal buildings and other facilities from fuel oil to natural gas.

TITLE V—TAX PROVISIONS TO ENHANCE THE USE OF CLEAN AND DOMESTIC ENERGY RESOURCES AND TO IMPROVE ENERGY EFFICIENCY.

Section 501. Tax Incentives For Environmental Preservation And Other Costs Associated With Siting and Construction of Energy Infrastructure.

(a) Allow current-year deduction of costs for environmental scoping and preparation of environmental impact statements and studies for new gas distribution, storage, and transmission infrastructure.

(b) Allow three-year accelerated depreciation for environmental mitigation and related actions for new gas distribution, storage, and transmission infrastructure.

(c) Allow seven-year accelerated depreciation for other costs of new gas distribution, storage, and transmission infrastructure.

Section 502. Tax Incentives For Clean, High-Efficiency, Distributed Energy Resources.

(a) Provide tax credits for distributed energy resources, including but not limited to natural gas fuel cells, microturbines, turbines, reciprocating engines, and natural gas cooling and dessicant systems. For natural gas fuel cells, microturbines, turbines, and reciprocating engines, tax credits would be available only for units that are highly efficient and comparatively environmentally beneficial.

(b) Revise depreciation schedules for distributed energy resources and combined heat and power to provide for seven-year depreciation. "Distributed energy resources" for purposes of this section is not limited to particular technologies; instead, electric generation of any type shall qualify so long as approximately fifty percent of the power generated is consumed at the site of the generation, or within reasonable proximity of the site of generation, and the facility has a capacity of 5Mw or less.

Section 503. CIAC Repeal.

Remove tax associated with homes and businesses connecting to a utility to receive natural gas.

Section 504. Deduction For Costs of Storing Natural Gas.

Allow deduction of certain expenses associated with the storage of natural gas, including liquefaction facilities and propane-air injection facilities.

Section 505. Tax Incentives for Natural Gas Transportation.

Provide tax credits for NGVs and alternative transportation fuels, including infrastructure required to serve these alternatives.

Section 506. Tax Normalization.

Normalize the treatment of the revised tax provisions in the bill.

TITLE VI—PROVISIONS TO EXPAND THE USE OF NEW NATURAL GAS TECHNOLOGIES.

Section 601. Energy Research, Development, and Demonstration Funding.

(a) Increase federal funding for research, development, and demonstration for sustained and improved natural gas system reliability and integrity, infrastructure expansion, and reasonable natural gas prices and rapid commercialization of new on-site natural-gas equipment advances that would provide lower emissions, greater North American energy reliability, and sustain America's leadership in energy technologies.

(b) Utilize ten percent of the federal share of royalties received for production from new federal lands opened to exploration and production to support research, development, and demonstration. This funding will, in aggregate, be subject to a stated dollar cap. Approximately half of these royalties will be designated to support exploration and production RD&D, and half of these royalties shall be designated to support distribution and transmission RD&D.

(c) Authorize for each of the fiscal years 2001-2006 federal funding for natural gas research, development, and demonstration of $600 million annually.

Section 602. Periodic Review of Energy Regulations to Accommodate New Technologies.

Direct federal government agencies to review existing rules and standards periodically to ensure that promising technologies, such as distributed energy resources that offer diversity of supply and other benefits are not discourage from market entry.

TITLE VII—PROVISIONS TO SUPPORT AND ENCOURAGE ENHANCED DOMESTIC NATURAL GAS EXPLORATION AND PRODUCTION

AGA supports legislative initiatives to increase the production of natural gas from current sources and to bring forth enhanced production from new and potential sources of domestic natural gas supply.

THE BUSINESS ROUNDTABLE

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Samuel L. Maury
President

Patricia Hanahan Engman
Executive Director

April 25, 2001

HAND DELIVERED

The Honorable Richard B. Cheney
Vice President of the United States
Washington, D.C. 20502

Dear Mr. Vice President:

The Business Roundtable strongly commends this Administration for forming a special White House energy task force that will address critical energy issues. We encourage the development of a coherent and comprehensive strategy that effectively responds to the daunting economic, technological and environmental challenges ahead.

Below, the BRT outlines the long-term goals that should shape this strategy, and we offer some short-term recommendations. We are guided by three principles. First, a diverse energy supply promotes energy security and supports economic stability. Second, the Federal Government and private sector should engage in science and technology R&D to address long-term energy and environmental concerns. Third, processes should be developed and followed to align energy and environmental policies.

National Energy Security and Economic Stability is a goal that is now at risk. The wrong policy actions, such as unnecessary federal land use restrictions, popular consumer price caps, and casual opening of national emergency energy reserves, only exacerbate the energy supply and demand problem and undermine market mechanisms. For the most part, this can, and should, be corrected through promoting diverse energy supplies; vigilantly maintaining competitive markets; avoiding price controls; and minimizing or eliminating regulatory, tax and trade disincentives to improving energy efficiency and spurring technology innovation.

Energy Technology Research and Development is a goal that should be actively pursued by the Federal Government. The U.S. has substantial human resources dedicated to technological innovation, public and private. Public resources should be applied to productive and diverse energy technology R&D, including broad climate change R&D of emission reductions, carbon sequestration and adaptation technologies. These resources should be deployed in collaboration with business to assure that new and existing energy supply and energy conservation technologies are accepted by global markets. However, the government should avoid "picking winners and losers;" therefore, transparent processes should be established which develop and prioritize an energy technology R&D agenda and which continually assess and improve returns on government R&D investments.

Energy and Environmental Policy Alignment is imperative in the current energy crisis. The Federal Government should better align energy and environmental policies and the associated regulatory processes with a view to optimizing the synergies between these areas in policy decision-making. Risk-based analytical methods should be used across Federal agencies to compare, assess and communicate energy technology benefits and human health and environmental risks. Furthermore, ongoing risk analysis can point to the challenges and opportunities for long-term technological innovation, and perhaps, help avoid accelerating and/or escalating, crisis-like swings and clashes.

Finally, the BRT makes the following short-term strategy recommendations.

- Review regulations and regulatory processes both to identify and remove unjustifiable barriers to bringing energy technologies and services to market and to develop incentives that will not only enhance the functioning of the marketplace for energy, but also, achieve greater environmental results. In particular, rationalize and streamline Clean Air Act new source review requirements to produce a simpler, more workable permitting program – one that will not impede the ability of businesses to apply technology to increase process and operational efficiency and improve environmental performance.

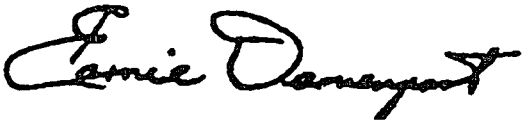
- Develop energy and environmental policies that are fully informed by our historical experience with, and understanding of the consequences of, using market interventions such as price caps, natural resource management bans and mandates.

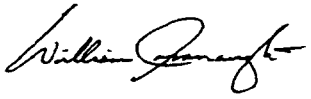
- Establish a balanced and transparent science and technology advisory process of government, industry and academia to identify and prioritize energy and environmental risks and recommend an R&D agenda.

- Bring these actions into a realistic global perspective. National energy independence does not, and will not, exist for the foreseeable future. Such a goal would distort markets and misallocate global resources. Meeting our national energy security needs necessitates supply diversification within a global energy market. Efforts to impose unilateral trade sanctions should be avoided. Foreign direct investment by the U.S. in prospective oil producing countries will be essential to meet future U.S. energy requirements.

The Business Roundtable has long been studying these issues. We have several publications (www.brt.org) that address many of our goals. These include: "Unleashing Innovation: The Right Approach to Global Climate Change," "Environmental Blueprint 2001," "Towards Smarter Regulation," and several others on subjects such as climate change and information management. Please know that we are committed to thoughtfully and constructively engaging these issues and stand ready to participate with you in shaping and executing a strategy that addresses the serious energy problems that confront us.

Sincerely,





Earnest W. Deavenport
Chairman & CEO
Eastman Chemical Company
Chairman, Environment, Technology &
The Economy Task Force
The Business Roundtable

William Cavanaugh
Chairman, President & CEO
Progress Energy, Inc.
Chairman, Energy Committee
The Business Roundtable

cc: The Honorable Spencer Abraham
The Honorable Joe M. Allbaugh
The Honorable Josh Bolten
The Honorable Mitchell Daniels
The Honorable Donald L. Evans
The Honorable Lawrence Lindsey
The Honorable Norman Y. Mineta
The Honorable Gale Norton
The Honorable Paul Henry O'Neill
The Honorable Colin L. Powell
The Honorable Donald H. Rumsfeld
The Honorable Ann M. Veneman
The Honorable Christine Todd Whitman
Mr. Ruben S. Barrales
Mr. Andrew D. Lundquist

Enclosures (3)

2001-011634 May 7 p 12:02

NAM National Association of Manufacturers

Michael Elias Baroody

Executive Vice President

April 27, 2001

The Honorable Spencer Abraham
Department of Energy
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Secretary:

On behalf of the National Association of Manufacturers (NAM) and the 18 million people who make things in America, I am inviting you to address the manufacturing community's leading representatives at the NAM's Issue Briefing Breakfast on either May 16th or May 22nd.

The NAM's Issue Briefing Breakfast series has become a dynamic gathering for public and government affairs executives and Washington representatives from major corporations and trade associations to discuss the major legislative issues of the day. We were pleased to begin this year's Issue Briefing Breakfast series with Vice President Richard Cheney on Wednesday, February 28, 2001. Our format customarily calls for 15-20 minutes of remarks, followed by questions and comments from the audience. We would anticipate substantial media interest and attendance exceeding 125.

We welcome any comments and insight you can provide on the legislative priorities, program changes and other issues for the Department of Energy, especially your remarks regarding President Bush's energy plan. The NAM's Issue Briefing Breakfast series is a long-standing program in which we have secured high level members of the Senate and House of Representatives as well as cabinet members, to discuss important legislative topics with the manufacturing community.

We hope you will be able to join us at this event. The breakfast will be at the Grand Hyatt Hotel located at 1000 H Street, NW. We will begin at 8:30 a.m. and will conclude no later than 10:00 a.m. and we are more than willing to adjust the time to accommodate his schedule. As we wish to firm up our program as soon as possible, quick consideration would be greatly appreciated. If you have any questions or concerns, please contact George Southworth, the NAM's associate director of public affairs at (202) 637-3122.

Sincerely,

Mike

WESTERN GOVERNORS' ASSOCIATION

Dirk Kempthorne
Governor of Idaho
Chairman

Jane Dee Hull
Governor of Arizona
Vice Chairman

James M. Souby
Executive Director

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www.westgov.org

April 27, 2001

The Honorable Richard B. Cheney
Vice President of the United States
The White House
1600 Pennsylvania Ave. N.W.
Washington, DC 20501

Dear Mr. Vice President:

On March 9, the Western Governors' Association transmitted a draft Memorandum of Understanding and joint implementation plan to you. The agreement would help align and coordinate our efforts to address the energy crisis now confronting the Western United States. The document was based on our very productive meeting with you on February 27. We also initiated a review among our states and public utility commissions to make sure the proposal was as complete as possible. That process has been completed with only minor, constructive changes, and we are pleased to transmit our final proposal to you for your consideration.

This agreement, along with the underlying support of participating agencies, should provide the necessary resources to enable a powerful state-federal partnership. Such a partnership will be essential to address both the short- and longer-term issues facing the region. Our work together will also provide a model for addressing the unique needs of the nation's other regions.

We thank you for your keen interest in resolving the Western energy crisis and look forward to working with the Administration as we move forward together to solve these problems. Please contact any one of us or our executive director, Jim Souby, if you have any questions.

Sincerely,

Dirk Kempthorne
Governor of Idaho
Chairman

Jane Dee Hull
Governor of Arizona
Vice Chair

John A. Kitzhaber, M.D.
Governor of Oregon
Co-Lead Governor for Energy

Jim Geringer
Governor of Wyoming
Co-Lead Governor Energy

cc: Western Governors

Enclosures

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MEMORANDUM OF UNDERSTANDING AMONG THE PRESIDENT'S NATIONAL ENERGY POLICY DEVELOPMENT GROUP AND ITS MEMBER OFFICES AND AGENCIES AND THE WESTERN GOVERNORS' ASSOCIATION AND ITS MEMBER STATES REGARDING ENERGY DEVELOPMENT AND CONSERVATION IN THE WESTERN UNITED STATES

I. Purpose

The purpose of this Memorandum of Understanding (MOU) is to establish a framework for cooperation between Western States and the Federal government to rapidly resolve immediate energy shortages and longer-term energy problems facing the West. This effort will involve the States and the Federal government. Other stakeholders may be called upon from time to time to provide advice. The regional approach will serve as a demonstration of principles and practices, which may be adopted nationally or in other regions.

II. Objective

To encourage cooperation among the President's National Energy Policy Development Group (NEPDG), its member offices and agencies, the Western Governors' Association (WGA) and its members states for the following purposes:

(1) Improving intergovernmental systems that authorize and enable planning, financing, permitting and siting of energy facilities;

(2) Increasing energy supplies;

(3) Building needed energy infrastructure; and

(4) Increasing the efficiency of energy use.

III. Background

Energy prices and supplies in the Western United States have become uncertain and highly volatile over the past year. Electricity and natural gas transmission systems may no longer be adequate to provide reliable, secure energy to citizens, businesses and governmental and national defense facilities. Due to unique Western land ownership patterns, widely dispersed population centers and government facilities, and the isolated nature of the Western Interconnection for electricity transmission, this situation poses

unique policy, management, and investment problems that must be addressed to ensure protection of public health, welfare, the environment and national security.

The Nation's energy policy must be broad-based and flexible so that each state and region in the nation can maximize its contributions to the economy and well-being of its citizens. The signatories to this agreement and the offices, agencies and states they represent are committed to carrying out both short and long-term, cost-effective efforts to resolve the energy crisis in the Western States. This may involve: obtaining and sharing necessary public information relating to energy markets and emerging energy technologies; identifying and implementing cooperative strategies for research, development, demonstration and adoption of policies, procedures and programs that will ensure delivery of new energy supplies, greater efficiency, more sustainable conservation practices and new or improved energy technologies; and assessing the effectiveness of implementation policies and practices.

The signatories are committed to market-based approaches so that the selection and financing of energy facilities and strategies, including those for research and development, will be based on wide competition, broad participation and market discipline.

The signatories seek a regional, integrated, cooperative approach to identifying solutions to problems. The proposed approach for this MOU will bring together the signatories or their designated representatives to share information and collaborate to the extent permitted by law.

IV. Authorities

Nothing in this MOU alters the responsibilities or statutory authorities of NEPDG and its member offices and agencies, or the WGA, and its member States and insular areas. This MOU does not supersede existing agreements among any of the signatories.

V. Responsibilities

The signatories agree to prepare a workplan and provide an annual report to identify and list by priority energy needs and requirements. The workplan and report will identify and assess governmental approaches, including regulatory practices that affect the development of energy supply, conservation and efficiency in the West. The report will consider current funding levels and allocations for governmental energy activities, the most pressing energy production, transmission and efficiency problems, and identify for demonstration and/or implementation the most promising new solutions.

The report will be completed and submitted to the signatories no later than February of each year for use as a resource in the formulation and review of the states' and nation's energy policies.

The signatories agree that this MOU may serve as a prelude to other regional or National programs for identifying and implementing needed new, cost-effective energy strategies for development and deployment.

VI. Authentication

This MOU becomes effective upon its signature by all parties. The MOU will continue in effect for three (3) years or until modified by mutual consent. Participation by any signatory member may be terminated at the request of any signatory with ninety (90) days prior notice.

FOR THE NATIONAL ENERGY POLICY DEVELOPMENT GROUP AND ITS MEMBER OFFICES AND AGENCIES

_____

Vice President of the United States Date

FOR THE WESTERN GOVERNORS' ASSOCIATION AND ITS MEMBER STATES

_____

Chairman of the Western Governors' Association Date

_____

Vice Chair of the Western Governors' Association Date

_____

Lead Governor of the Western Governors' Association Date

_____

Lead Governor of the Western Governors' Association Date

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JOINT IMPLEMENTATION PLAN FOR MEETING ENERGY NEEDS IN WESTERN STATES

May 2001

Introduction:

This addendum to the Memorandum of Understanding (MOU) of May __, 2001 regarding energy development and conservation in the western states established a plan for initial implementation of the MOU.

This plan is intended to create the mechanisms necessary to implement the MOU and provide a legal and accepted basis to pursue regional cooperative efforts.

Proposed Approach:

First working independently, and then jointly, the Federal agencies and WGA will accomplish tasks in four areas in FY 2001-2004:

Task 1: **Improve intergovernmental systems**

- Establish policies that upon request extend NEPA "cooperating agency" status to states for energy project reviews as a matter of routine practice and provide funding to states to participate.
- Develop information to enable the timely development of alternatives for evaluation in EISs.
- Establish integrated state-federal processes for the shared development of energy plans, programs, policies and projects.
- Develop processes for the effective participation by key stakeholders in the consideration of energy issues.
- Investigate the application of information technologies to siting and permitting functions for energy facilities.
- Develop a budget and plan for accomplishing Tasks 1, 2, 3 and 4.
- Establish mechanisms for key stakeholder participation in the execution of Tasks 2, 3 and 4.

Task 2: **Increase energy supplies**

- Enable the operation of existing generation through expedited local, state and federal permit decisions affecting the operation of existing and retired generation while protecting the public health and environment.
- Enable the deployment of distributed generation through the identification of practices in the western power system that create barriers to distributed generation and the adoption of practices to overcome such barriers, such as standardized interconnection practices and information necessary for local zoning decisions.

- Streamline local, state and federal permitting of new renewable and fossil energy generation and associated electric transmission and natural gas pipelines.
- Speed the local, state and federal permitting of new, cleaner and more efficient technologies including the development of information necessary for agency reviews of the performance of new technologies and the sharing of such information among state and federal permitting agencies.
- Expand the efficient production and use of natural gas, oil, and coal through the development of new technologies and the timely permitting and leasing of resources.

Task 3: **Build needed energy infrastructure**

- Identify and evaluate the bottlenecks in western energy system (e.g., electric transmission, natural gas and petroleum pipelines).
- Determine financial impediments to investment in necessary infrastructure to eliminate bottlenecks in the western energy system.
- Seek opportunities to deploy new technologies to relieve bottlenecks.

Task 4: **Improve the efficiency of energy use**

- Coordinate federal agency efficiency efforts with state energy efficiency initiatives.
- Collaborate in evaluations of the effectiveness of energy efficiency initiatives in the West.
- Seek opportunities to identify and conduct pilot projects to test the implementation of new programs and technologies to increase energy efficiency.
- Conduct public outreach to encourage conservation and efficiency.
- Expand State and Federal energy efficiency programs and initiatives.

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012056

PUGET SOUND ENERGY

Timothy J. Hogan
Vice President
External Affairs

May 2, 2001

The Honorable Spencer Abraham
Secretary
United States Department of Energy
1000 Independence Avenue, NW
Washington, DC 20585

2001-012056 5/11 P 3:49

Dear Secretary Abraham:

On behalf of Puget Sound Energy and its customers, I want to thank you and President Bush for leading the national discussion regarding the need for a federal energy policy. Attached you will find a short position paper entitled "The Benefits of Demand-Side Management and Dynamic Pricing Programs." This paper was prepared by McKinsey & Company and explains how demand-side management and time-of-day energy pricing can assist in reducing price peaks and lowering energy costs for consumers all across the nation. We believe this paper is an excellent outline of the benefits of time-of-day electricity pricing and believe the inclusion of such programs would be an excellent fit with President Bush's energy policy.

In short, the federal government can lead an effort to achieve tremendous savings in national energy costs by encouraging wide-scale deployment of real-time or time-of-day energy pricing. McKinsey & Company believes that a national implementation of real-time pricing would result in $10 billion to $15 billion in annual electricity cost savings. This is because time-of-day pricing enables individuals to see the true cost of the energy they use when they use it. Information on the real cost of energy will empower customers to take control of their energy usage – and many small decisions can have huge benefits. *If just half of the 818,000 households that Puget Sound Energy serves with electricity use their dishwasher during off-peak hours rather than during high-demand peak times, it would free up enough power-generation capacity in the Puget Sound region to serve about 100,000 households.* Furthermore, this shift in energy usage will ensure that we are all using our recourses most efficiently.

The benefits from widespread time-of-day pricing programs are already being demonstrated. On April 25, 2001, state regulators approved time-of-day rates for 300,000 Puget Sound Energy (PSE) residential electric customers. The rates will take effect beginning May 1, 2001 and run through September 30, 2001 for a trial period; if successful, the program will be continued. Since December, these customers have been receiving detailed information in their monthly bills and on PSE's web site showing daily information on when they use electricity, and how the price varies between peak and off-peak times.

The beauty of time-of-day pricing is that it is a market-based solution that puts consumers in charge of their energy use decisions and it should be included in a national energy policy. If encouraged for nation-wide implementation, time-of-day pricing programs would enable millions of energy consumers around nation to take greater control of their energy bills. With that control, customers can work collectively to shave the highest portion of peak energy loads. Reduced peak demand leads to reduced peak prices.

Thank you again for your work on a federal energy policy. If you have any questions after reading this paper or would like to learn more about PSE's time-of-day pricing program, please do not hesitate to give me a call at (425) 462-3464.

Sincerely,

Timothy J. Hogan

WHITE PAPER

The Benefits of Demand-Side Management and Dynamic Pricing Programs

McKinsey & Company

May 1, 2001

"Without the ability of end-use electricity consumers to respond to prices, there is virtually no limit on the price that suppliers can fetch in shortage conditions."—William Massey, FERC Commissioner, August 2000

"The demand side of the market is not functioning well because customers are not seeing real-time price signals . . . With real-time pricing options and their supporting technologies in play, we would get the full benefits of deregulation."—Ahmad Faruqui, Electric Power Research Institute

EXECUTIVE SUMMARY

The wide-scale deployment of dynamic pricing[1] has the potential to promote long-term efficiencies in electric power markets. Current rate structures provide consumers with little understanding of the underlying cost of the electricity they consume. As a result, they are unable to react to daily or hourly fluctuations in wholesale market prices by changing their consumption behavior. The variability of demand is one of the primary causes of wholesale price-spikes and, in the case of markets with tight supply constraints such as California, contribute to rolling blackouts. By more closely linking retail prices to wholesale prices, end users would have greater incentive to reduce their consumption on peak, which would in turn lead to lower overall energy costs for all.

Our conservative estimate is that the wide-scale (i.e., national) implementation of dynamic pricing would result in annual electricity cost savings on the order of $10 billion to $15 billion. Approximately 20 percent of total financial savings comes from individuals reducing their consumption during peaks; the remaining 80 percent is generated by the lower wholesale peak prices that result from reducing peak load and accrues to all consumers. In addition, there could be significant societal benefits associated with implementing dynamic pricing.

With falling technology and digital communications costs, the infrastructure needed for dynamic pricing can now be brought to the mass market, albeit with relatively long payback periods (5 to 6 years). However, since so much of the benefit of dynamic pricing is the result of collective and not individual usage, a free-rider problem threatens to prevent this deployment. By our estimates, dynamic pricing would have to be extended to one-half or more of mass market customers in order to deliver positive economics. Such a wide-scale deployment will require an institutional solution.

This whitepaper summarizes our belief that dynamic pricing solutions and demand-side management programs can be powerful complements to the supply-side initiatives required to create an enduring energy policy.

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[1] Dynamic pricing refers to any pricing option in which prices change in response to changes in costs. This can include time-of-use (TOU) rates, which are set based on expected wholesale prices or real-time pricing (RTP) in which actual market prices are transmitted to customers.

DEREGULATION: THE INCOMPLETE EXPERIMENT

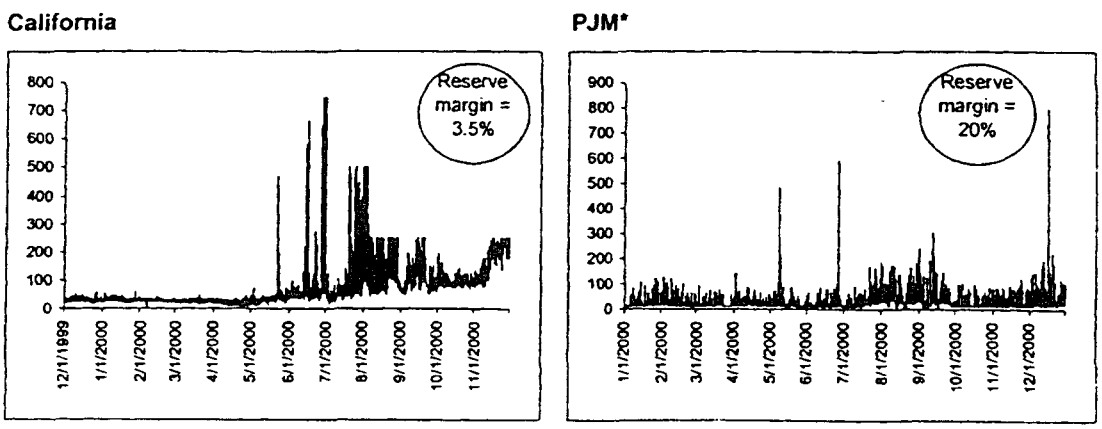
Given recent turmoil in restructured electricity markets, many observers have begun to question whether deregulation is delivering the anticipated benefits to consumers. The problems in these newly deregulated markets, however, should not be interpreted as evidence that electricity restructuring has been a failure. Rather, restructuring is not yet complete—and it will not be complete until retail and wholesale markets are more effectively linked.

Many of the recent, headline-grabbing problems in electricity markets can be attributed to a short-term imbalance of supply and demand. Over time, as new generating resources and additional infrastructure are brought on line, the high prices witnessed in the Western United States should fall. However, the lack of connection between wholesale and retail markets will continue to present longer-term problems in all markets. The reason is that wholesale prices for energy are highly volatile, and under current regulatory structures, there is no way to tie consumer demand to actual market prices for power. In other words, there is no market mechanism at present for managing the demand side of the equation.

Evidence shows that this price volatility exists in all energy markets. As shown in Exhibit 1, wholesale prices in the California Power Exchange averaged $81/MWh, with a range from $6/MWh to $750. The high average price is reflective of tight supply conditions. California's reserve margin for Summer 2000 was only 3.5 percent compared to standard utility practice of carrying a 15 percent cushion. But even in markets with excess capacity, wholesale electricity prices exhibit significant volatility. For example, in the Pennsylvania, New Jersey, Maryland power pool (or PJM), the average price was $34/MWh, but ranged from a low of $10/MWh to a high of $800/MWh, despite a reserve margin of nearly 20 percent.

EXHIBIT 1 — PRICE VOLATILITY IN WHOLESALE POWER MARKETS – 2000

The causes of the fundamental volatility of electric commodity prices are varied. Unlike



* Pennsylvania, New Jersey, Maryland power pool

Source: California Power Exchange; PJM ISO; McKinsey analysis

other commodities, electricity cannot be stored in large quantities; consequently, as

demand increases over the course of a day or a season, more expensive (peaking) capacity must be dispatched to serve additional load. Since natural gas is the fuel of choice for these peaking plants, their marginal costs are, in turn, affected by volatility in gas markets. Beyond "peaker" plants, the cost of generators varies significantly, which contributes to market variability. Additionally, consumer loads themselves change significantly over the course of a day, which increases the volatility of prices.

This market volatility combined with consumption inefficiencies imposes significant costs on society: the most obvious of which are the interruptions, rolling blackouts, and financial distress that currently plague the Western United States. But there are other economic and social costs as well, including the need to build capacity and related infrastructure and consume natural resources in the provision of electricity that could be avoided altogether.

ONE SOLUTION: DYNAMIC PRICING

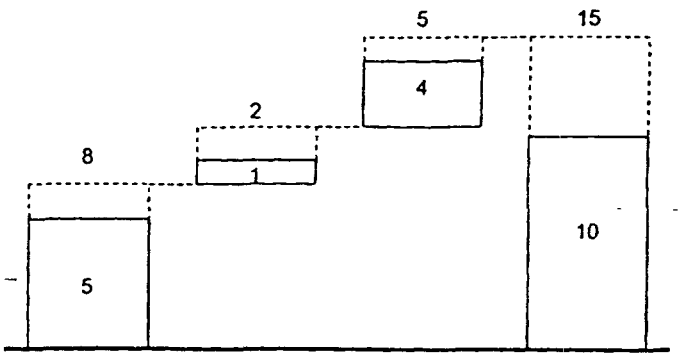
If deregulation is ever to be complete, utilities and policy makers must find a way to better link retail demand to wholesale market forces, especially at the level of residential and small commercial end users. Many large commercial and industrial customers already have time-of-use programs in place. By exposing smaller customers to dynamic (or time-varying) prices, end-users would have the incentive to curtail demand at peak times and to shift their demand from high- to low-priced periods—resulting in significant savings.

A conservative estimate indicates that the economic benefit gained from shifting even small amounts of demand away from peak price periods could range from $10 billion to $15 billion annually. (See Exhibit 2.) This analysis assumes that all users would shift approximately 5 to 8 percent of their load consumption from peak periods (roughly 3 hours a day) to off-peak hours and would curtail usage of another 4 to 7 percent altogether during peaks.[2] These assumptions have been substantiated by actual experiments with real-time pricing, such as one in Texas where some consumers shifted and curtailed as much as 36 percent of their demand during price peaks.[3]

2 Based on PJM hourly loads and prices for the Year 2000, extrapolating to a national set.

3 According to a study by consultants Eric Hirst and Brendan Kirby. Over a 5-hour period, participants in the study reduced an average of 15 percent of their demand.

EXHIBIT 2 — ECONOMIC BENEFITS FROM DYNAMIC PRICING *ESTIMATE*
$ Billions



	Residential	Small C&I	Large C&I	Total
Percent of total value	53	10	37	100
Percent of total load	40	10	50	100

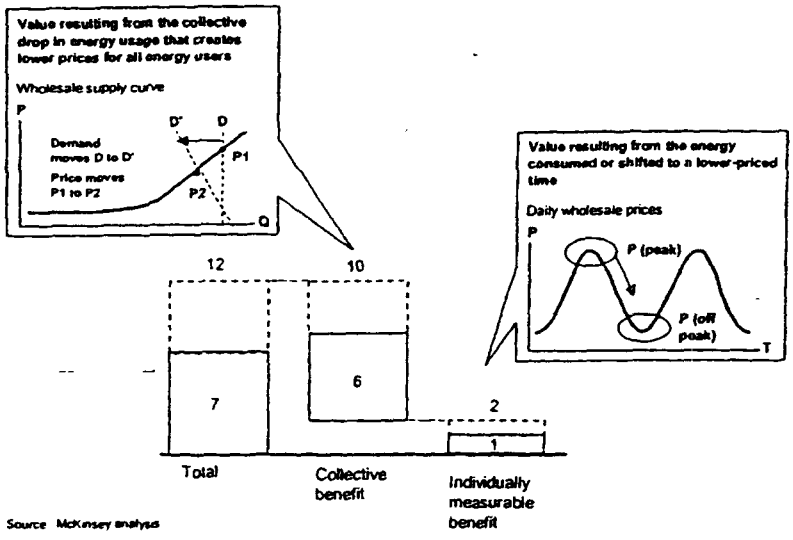
Note: Assumes customers shift 5 to 8% of peak load to off-peak hours and curtail an additional 4 to 7% of resulting peak load; savings based on actual prices and load for PJM power pool in Year 2000 extrapolated to national load; peak hours defined as highest 10% of daily and annual prices
Source: PJM ISO; McKinsey analysis

Changing consumption patterns during peak periods reduces energy cost savings in two ways. As shown in Exhibit 3, about 20 percent of the value created by dynamic pricing comes from individuals responding to high prices and curtailing electricity consumption—e.g., turning off lights or increasing their thermostat by several degrees in the summer—or shifting consumption to non-peak periods—e.g., by running a dishwasher or water heater at night. However, there is a second-order effect of this reduction in peak demand that results in even greater savings—nearly 80 percent of the total value created. As more customers respond to wholesale market conditions, demand for peak energy drops, resulting in a lower market-clearing price for all energy consumed at that time.

EXHIBIT 3 — ECONOMIC BENEFITS FROM DYNAMIC PRICING IN MASS MARKET

$ Billions

ESTIMATE

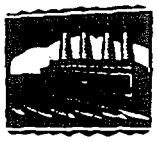


Source McKinsey analysis

Shifting and curtailing demand would also lead to benefits beyond the obvious economic gains. With universal application, peak energy demand could be lowered by at least 30,000 MW nationally, translating to perhaps as many as 250 peaking plants that would not need to be built. Society could avoid the burning of 680 bcf of gas per year and the resulting 31,000 tons of NO_x emissions. Water quality would be improved, and stresses on land use would be relieved. Additionally, by deploying dynamic pricing programs, utilities could optimize other parts of their value chain that are driven by peak demand—gas storage as well as electric transmission and distribution capacity. They would also achieve some reduction in metering costs by installing automated meter reading systems that would be required to support real-time or time-of-use pricing. Exhibit 4 summarizes these additional benefits.

EXHIBIT 4 — INDIRECT BENEFITS OF BROADLY DEPLOYED DYNAMIC PRICING SOLUTION

ESTIMATE



- ~250 "peaker" plants not built
- Power infrastructure for peaks reduced by 31,000 MW, saving $16 billion in capital costs (one-time)

- 31,000 tons of NO_x not emitted (per annum)

- Reduction in water used for hydro electric generation
- Gas demand reduced by 680 bcf/year
- Gas transmission reduced by 2 bcf/day

- Other environmental benefits, e.g.
  - Cleaner water
  - Thermal pollution
  - Hydro power impact on ecosystems

- Enough saved electricity to supply 7 million new homes annually
- Significant benefits for avoiding blackouts (lost productivity)

- Other system benefits
  - Avoided transmission and distribution investment
  - Reduced meter reading costs

Notes: Assumes 125 MW peaking plant, $500/kW capital cost, 25% load factor, 10,000 heatrate, 0.9 lb NOx/MWh
Source: Department of Energy; EIA Power Annual Volume II; BAEF Report; EIA RECS 1997; McKinsey analysis

Implementing dynamic pricing programs need not be complex. A basic solution—requiring only real-time or time-of-day metering and billing—could achieve significant results. Consumers would manually set their appliances and home systems to run in off-peak periods, or they would use less energy during peak times of the day. Financial incentives would be communicated through bills that reflected actual costs. Over time, as network technology and standards evolve—and costs drop—the emergence of smart appliances and home networks could support automated real-time response to energy price signals.

THE CHALLENGES OF DYNAMIC PRICING FOR SMALL USERS

So if implementing dynamic pricing for residential and small commercial users is so beneficial, why have so few companies pursued it?[4] Despite the significant value at stake, several barriers prevent the wide-scale deployment of more dynamic pricing in retail electricity markets: current rate structures, inadequate infrastructure, and the necessity of wide-scale deployment to achieve significant benefits.

First, most customers are currently charged for usage under a regulated rate structure. These rates are typically uniform across a customer class and across time (both hours of day and days of the year). Moreover, typical retail rates do not change in response to an individual customer's actions. Consequently, individuals' prices do not reflect their

4 On April 25, 2001, the Washington Utilities and Transportation Committee approved a trial time-of-use rate for more than 300,000 of Puget Sound Energy's customers.

incremental impact on system costs, nor do they give customers the proper incentives to consume energy more efficiently. Reforming rate structures at the state level and allowing prices that reflect actual costs at the time of consumption would provide real financial incentives for end users to curb usage during peak periods. Such a structure would also reduce the amount of cross-subsidization across ratepayers within a customer class.

Second, the industry today does not yet have the adequate metering and billing infrastructure in place to implement dynamic pricing. Currently, nearly all mass-market residential and commercial customers have meters that record consumption on a monthly basis. Since neither the distribution utility nor the retail provider can observe the customer's actual consumption patterns during the day, it is impossible to link customer actions to wholesale market prices. Thus, necessity forces utilities to assign customers a statistical load profile that may accurately reflect the *average* consumption of similar homes or businesses, but that does not reflect the customer's *actual* usage. Without such specific usage information, the customer cannot benefit from shifting or curtailing load in response to higher prices.

To obtain the amount and quality of data necessary for efficient consumption decisions, the utility must upgrade its metering and billing infrastructure. At a minimum, any dynamic pricing program requires that data be collected on a more frequent (e.g., hourly) basis. Luckily, a number of recent advances in automated meter reading technology, the expansion of Internet access, and the declining cost of digital communications has made real-time pricing systems more practical for smaller commercial and residential customers. But despite this fact, many utilities are still concerned about the longer-term cost recovery associated with advanced metering investments—a fact that could prohibit widespread deployment. Several proceedings currently underway call into question the role of utilities in meter reading and billing; as a result, management teams are still reluctant to invest in what may become the next major "stranded asset."

One final complication exists in the deployment of effective dynamic pricing programs—a classic free-rider problem. As discussed above, approximately 20 percent of total savings comes from individuals either shifting or curtailing their consumption during peak price periods. The remaining 80 percent is generated by the lower wholesale peak prices that result from reducing overall demand during peaks. As more customers respond to wholesale market conditions, demand for peak energy drops, resulting in a lower market-clearing price for all energy consumed at that time.

In aggregate, relatively small individual reductions in demand can potentially create significant savings. For example, our analysis shows that a 10 percent reduction in peak could result in a 20 to 30 percent reduction in peak price on average.[5] Another report by The Brattle Group found that a 10 percent reduction in demand could lead to a 50 percent reduction in peak price.[6] Moreover, this collective benefit accrues to all customers,

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5 Calculated by determining the average price reduction for a corresponding drop in peak demand.

6 A report by Peter Fox-Penner and Dean Murphy of The Brattle Group. They found that as little as a 10 percent reduction in price spikes (fly-ups) could result in as much as a 73 percent reduction in peak price.

regardless of whether they participate in dynamic pricing or have made investments in improving the utility metering and communications infrastructure.

Since so much of the value comes from collective actions, there is a risk that consumers or their utilities, especially in the mass-market residential or commercial sectors, will not invest in real-time metering of their own accord. However, unless significant customers are offered this opportunity, the economics will not be positive. By our estimates, at least half of mass market customers would need dynamic pricing capabilities in order to justify the infrastructure expense. Such a wide-scale deployment will require an institutional solution.

THE NEED FOR AN INSTITUTIONAL SOLUTION

In spite of the clear and measurable benefits, these obstacles are preventing the deployment of dynamic pricing solutions. We believe an institutional solution is called for to encourage and support the deployment of the systems and technologies which will enable dynamic pricing. Without such a solution, peak energy consumption will continue to be unnecessarily high, prices will be more volatile than necessary, and more energy infrastructure than necessary will be required. A more efficient solution exists, one that combines effective demand-side and supply-side actions.

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CARE

Paul C. Oakley
Executive Director

2001-011606 5/4 P 4:09

May 2, 2001

The Honorable Spencer Abraham
Secretary of Energy
Department of Energy - 7A-257
1000 Independence Avenue, SW
Washington, DC 20585

Dear Secretary Abraham:

Over the past several months, our nation's energy problems have gained increasing attention, whether it is the rolling electricity blackouts in California, increasing natural gas bills or rising gasoline prices.

A number of opinion articles have been published in various newspapers across the country that underscore the importance of affordable and reliable energy to America. Copies of these articles are enclosed.

These articles demonstrate the need for America to have a comprehensive and balanced national energy policy that recognizes the key role of our abundant domestic energy resources, including electricity from coal. We thought you might find them informative as the Bush administration develops its energy policy recommendations.

The Coalition for Affordable and Reliable Energy (CARE) is a broad alliance of more than 45 organizations representing numerous businesses, organized labor, consumer groups and thousands of concerned individuals from across America. CARE has been working for the past year to promote the need for a national energy policy that enables us to meet our future energy needs while striking a sensible balance among social, economic, national security, environmental and energy goals.

If you have any questions or seek further information, please visit our web site, www.careenergy.com, or contact me directly at (202) 639-2805.

Sincerely,

Paul C. Oakley

Paul C. Oakley
Executive Director

Coalition for Affordable and Reliable Energy
50 F Street, N.W., Suite 5300, Washington, DC 20001
PHONE (202)639-2802 FAX (202)639-2803 EMAIL poakley@careenergy.com

The MONTANA STANDARD

April 13, 2001
Butte, MT

Coal: A hope for Montana's future

(Editor's Note — Courtney Young is a professor of mineral and coal processing with the Metallurgical and Materials Engineering Department at Montana Tech.)

By Courtney A. Young

This might come as a shock to environmentalists who oppose the use of coal but, at a time when there is reason for concern about our national energy needs and their economic and environmental consequences, it is worth noting an optimistic trend. The overall efficiency of this country's coal-fired power plants has been rising steadily over the years.

No longer the dirty fuel of the past, coal is being burned much cleaner, due in large part to the availability of improved pollution-control technologies. The Environmental Protection Agency says power plants that use coal are 33 percent less polluting than in 1970, even as coal-based electricity production has nearly tripled. Emissions of sulfur, the leading cause of acid rain, are near zero. Credit goes to steady, incremental changes from engineering breakthroughs in coal mining, preparation, combustion, waste cleanup, and state-of-the-art instrumentation and controls. A well-known example is Montana's own Syncoal Process operated by Western Energy at the Rosebud Mine near Colstrip. Needless to say, Montana's coal is very low in sulfur to begin with, particularly in comparison with Eastern U.S. coals.

Because coal will account for the bulk of the nation's power supply for the foreseeable future, it's time to move away from debate about greenhouse-gas emissions to consideration of advanced research to render coal environmentally benign. The Electric Power Research Institute in California is using advanced technology to develop systems to gasify coal that produce electricity with virtually no air pollution or greenhouse-gas emissions. Likewise, researchers at Los Alamos National Laboratory have developed an innovative technique to convert coal into hydrogen for use in fuel cells while preventing greenhouse gases from reaching the atmosphere. Carbon dioxide is captured, exposed to silicate rock, and solidified into an inert mineral for safe disposal underground. The Zero Emission Coal Alliance, a coalition of U.S. and Canadian coal companies and utilities, says this gasification process would cost about a cent more per kilowatt-hour. The alliance plans to build a pilot plant to demonstrate the process within five years. A process like this could be used at any coal-fired power plant.

The reason for coal's importance is clear. It provides 52 percent of Montana's electricity and is the nation's number one fuel for power generation. This explains why utilities across the country are pumping hundreds of millions of dollars into efforts to increase the environmental efficiency of their coal plants. Our state's economy would improve with (1) increased jobs either directly related to coal or in a variety of support industries needed for its sustenance, thus increasing the tax-base, (2) high-paying jobs which would help Montana return to the top ten states in per capita income from its current ranking of 49th down from 7th in 1970, (3) production of coal-bed methane which is credited for creating huge government surpluses in Wyoming, and (4) growth to the coal tax fund. Like you, I am sick to death of our beloved state struggling like some third-world country. Coal is one opportunity to help pull the State of Montana out of its deficit; we owe it to our futures and the generations that follow.

The implications in all of this for Montana are significant. Our state has large coal reserves, a well-established coal industry and a reputation for clean-coal research at its universities which, for example, helped develop the Syncoal Process mentioned above. Clearly, preventing coal mining and/or even stopping the use of coal is not the answer.

Make no mistake, the market for coal will continue to grow, since power demand nationally is rising faster than the system's ability to generate and deliver it, driven by computers, fax machines, wireless telephones and the other accoutrements of our digital economy. The fact is, electrical use linked to these silicon devices has grown from essentially nothing a decade ago to 13 percent of total electricity demand in the U.S. This is more than the steel, pulp and paper, and chemical industries combined! Electricity supplies are tight in many parts of the country and it is predicted that the rolling blackouts that left parts of California without power will spread throughout the West this summer with Montana and the rest of the drought-stricken Northwest being hit the hardest. Hydroelectric facilities just will not be able to keep up with demand due to low water levels and, of course, there are no plans to construct new dams in spite of the fact that the technology is absolutely pollution free — no acid rain results and no greenhouse gases are emitted.

According to the Department of Energy, the country will need an additional 400,000 megawatts of electricity generation capacity by 2020 — the equivalent of 400 large power plants. The natural gas plants planned for Butte and the two in South Dakota will be critical to meet some immediate needs but will fall far short of the ultimate need. Working to realize the full potential of coal for powering the future in tandem with other domestic energy sources offers a significant opportunity. The stakes — for Montana and the nation — are very high.

These are my personal views and do not necessarily reflect the views of Montana Tech.

The Patriot-News

April 8, 2001
Harrisburg, PA

Bring on clean coal, nuclear power

BY EDGAR BERKEY

AS I SEE IT

This decade looms as a period of great challenge for electric utilities, not only in California but also in the Northeast. Already we're seeing the first stages of what could eventually become a widespread electricity supply crisis.

Within the next five years, more than half of all existing coal-fired boilers in the country will be at least 35 years old, and the demand for electric power nationally is expected to reach or exceed available generating capacity in many areas.

This winter, many utilities in the mid-Atlantic region recorded electricity demand that was not expected until the next decade or beyond. Nationally, we are planning for 1.8 percent annual electricity growth and experiencing 3 percent. In New York State, where the supply crunch in the Northeast is most serious, people are using 12.2 percent more electricity than they were eight years ago, but generating capacity has grown only 2.6 percent.

This is of concern because, as seen in California, soaring power prices coupled with supply disruptions can be obstacles to industrial and business growth and to a sound economy.

The need for additional supplies of electricity is obvious. Across the country, 95 percent of the power plants being planned or built will use natural gas. But the economic risks of relying on natural gas for virtually all new electricity generation are enormous. Because demand for natural gas is outrunning supplies, wholesale prices for the fuel are quadruple what they were a year ago on the spot market, resulting in sharply higher gas bills for residential customers and electric utilities.

Though gas companies are stepping up drilling, most of the major fields in the United States are already tapped and much of what remains is off limits for environmental reasons. Even accelerated drilling will not produce new gas for several years, and it now seems likely that growth rates in production and pipeline capacity will lag behind rapidly rising gas demand, making gas much more expensive. All of this points to the need for restraint in our use of gas for electricity generation.

The question then, is how to assure an adequate supply of electricity. The response goes beyond quick fixes such as switching to the use of oil. Greater energy efficiency and conservation are part of the answer, but they alone will not assure long-term availability of electricity.

For a matter of such overriding national interest as meeting long-term electric power demand, the cure is straightforward: we need to make greater use of clean-coal technology and revive commercial nuclear power in this country. These fuels are domestically abundant, economically competitive and their supply is secure.

Together, coal and nuclear power account for 76 percent of the nation's electricity generation, but there hasn't been a coal or nuclear plant built in many years.

The basic attractions of coal are its abundance and low cost. Electricity from existing coal plants costs much less than power generated from either natural gas or oil. And the use of new technologies is making coal plants even more efficient.

No longer the dirty fuel of the past, coal is being burned much cleaner due in large part to improved pollution control technologies. The Environmental Protection Agency says that coal-fired plants are 33 percent less polluting than in 1970, even as coal-based electricity has nearly tripled. Credit goes to steady, incremental changes, year after year, from engineering breakthroughs in coal preparation, combustion, emissions cleanup and state-of-the-art electronic instrumentation and controls.

Ironically, environmental concerns about global warming, combined with high costs of natural gas, have improved the climate for nuclear power's revival. Even some longtime critics of nuclear power have said that advanced nuclear power plants might be part of the answer to the nation's energy needs.

Most of the problems that hurt nuclear power in the 1980s — high inflation, lack of standardized design for plants and high operating costs — are now under control.

Congress needs to approve a comprehensive energy bill that provides adequate funding for research and development, particularly on clean-coal technology and systems for new and even safer nuclear plants. One of the most promising designs is the Pebble Bed Modular Reactor, perhaps the most exciting advance in nuclear power technology in 20 years.

Funds should be earmarked for construction of a pilot plant to demonstrate this new design, which relies on passive safety systems, like gravity, and is inherently safe. The design also has economic advantages, since a plant's modules would be built in a factory and assembled on site.

The Pebble Bed Reactor is small, and therefore, less expensive to build. A single Pebble Bed Reactor produces 110 megawatts, which is about 10 percent of the output of a large conventional nuclear plant. Because each reactor is a module, a utility could add to its generating capacity gradually, in step with demand. Construction of one unit would take three years, instead of the 10 to 15 years that have been required for a conventional plant.

All of this is not to suggest that coal and nuclear power alone can guarantee adequate electricity supply in the Northeast and across the country. We will continue to need a balanced mix of energy sources, including natural gas and oil, where necessary, as well as hydroelectric power, solar, wind and other renewables.

But only a steady program of new power plant construction, using the most abundant fuel sources we have, coal and nuclear power, is likely to ensure energy reliability for the long term.

Edgar Berkey is vice president and chief science officer of Concurrent Technologies Corp. of Pittsburgh and a member of the U.S. Department of Energy Environmental Management Board.

The Providence Journal

April 3, 2001
Providence, RI

Save natural gas

Build coal-fired and nuclear plants

MARTIN E. NELSON

ANNAPOLIS, Md.

ELECTRICAL DEMAND in the United States is growing 3 percent annually, twice the rate of just a few years ago. This will result in a doubling of the required power-plant capacity in the next 24 years. To meet this rise in demand, which most likely will occur barring a prolonged recession, a huge increase in capital investment for power-plant construction will be required.

Currently, 76 percent of the nation's electricity comes from coal and nuclear power, even though there have been almost no new construction orders placed for either type of plant in the past 20 years. The American power industry is expecting to meet the increased demand by building power plants fueled with natural gas, but this strategy is shortsighted, since the demand for gas is outrunning supplies.

Natural gas has arguably the greatest price volatility of all major industrial commodities, because of the difficulty in storing and transporting it. Besides, there are many other uses for natural gas, such as in the production of common plastic products used in households and in other petrochemical industrial processes. In fact, the overall consumption of natural gas rose 4 percent last year.

The economics of new natural gas plants will be dominated by the cost of this premium energy fuel. At current price levels, gas accounts for about 90 percent of the total power-production cost over the lifetime of a plant. Therefore, relying heavily on natural gas for new electricity production is very risky.

Another problem facing natural gas is that most of North America is a mature area for gas production. That's because most of the attractive places for future production lie in environmentally sensitive areas such as northern Alaska or offshore. Also, gas-production companies find that their current fields are depleting at a faster rate than expected. This means gas companies must spend ever more money to find ever smaller quantities of natural gas.

If we want electricity at a reasonable and stable price, there are those who say that its cost to the consumer should be regulated. However, this approach would act as a disincentive to the production of new power supplies, which America must have to maintain economic growth. Instead of regulation, our nation should look to coal and nuclear power to supply the needed energy.

America has more coal and uranium reserves than any other country. Our nation's endowment of coal and uranium is comparable to Saudi Arabia's share of the world's crude-oil reserves.

Today, coal plants can be built using state-of-the-art clean-coal technologies, such as coal gasification. And next-generation nuclear plants can be built to standardized designs, three of which have been certified by the Nuclear Regulatory Commission. Nuclear plants have another advantage: They emit no pollution or greenhouse gases.

If America is to have a stable and affordable supply of electricity, more coal and nuclear plants need to be built. Natural gas should be saved largely for household and industrial use.

Martin E. Nelson is a professor of mechanical engineering at the U.S. Naval Academy.

The Times-News

April 1, 2001
Kingsport, TN

Coal a vital resource as the demand for electricity increases

By RICHARD E. BERGENBACK

It' time to drop the taboo against coal and accept the idea that we cannot afford to forgo its use in generating electricity.

To understand why this is so, one must realize we are drifting toward another energy crisis that is likely to be greater and more permanent than those of the 1970s. This time our problem will center not only on oil and natural gas but also on electricity. In Tennessee, we are recording a level of electricity use not expected until the next decade or beyond. Spurred on by increased use of air conditioning and home computers, electricity demand has been increasing 2 to 3 percent a year, while electricity production has lagged. Power reserve margins in the Southeast are shrinking. If we are to avoid electricity shortages like those that struck California, we will need all of our energy sources, especially coal.

Coal is an inexpensive source of fuel and it is plentiful. Coal-fired power plants account for 63 percent of the electricity consumed in Tennessee and more than half of the electricity used nationally. Together with nuclear energy, these coal plants continue to serve us well, providing affordable and reliable power that reduces energy costs for households, industry and government, thereby raising productivity and profitability, creating jobs and boosting economic growth.

Yet, even as power demand has soared, there hasn't been a large power plant built in the United States in the past 10 years. During the Clinton administration, stringent environmental restrictions governing emissions from coal-fired plants discouraged investment in new coal capacity, causing utilities to switch to natural gas. As a result, 95 percent of the new electricity capacity planned or under construction in the United States will burn natural gas.

Although it's the preferred fuel for electricity generation, gas has its own set of problems. Now that 15 percent of the nation's electricity is produced at gas-fired plants, up from less than 10 percent just a few years ago, demand for gas is outrunning supplies. Wholesale prices for the fuel have more than quadrupled what they were a year ago, resulting in sharply higher gas bills for residential customers. While gas companies are stepping up drilling, most of the major fields in the United States are already online, and much of what remains is off-limits for environmental reasons. Even accelerated drilling will not provide sufficient new gas for several years, and it now seems likely that growth rates in production and pipeline capacity will lag behind demand, making gas much more expensive. Therefore, every effort should be made to save gas for home heating, business and industrial use.

President Bush has spoken about the need for energy diversification, producing electricity from more than a single energy source. To achieve this, the administration needs to pursue a science-based, cost-benefit approach to environmental improvement. Common sense should be used in establishing clean-air standards. It would be a pity indeed if the environmental movement, which deserves the gratitude of Americans for many contributions to a better life, were to be subverted by ideologues going full speed ahead in demanding smog-free vistas regardless of the cost.

The need for a more sensible approach to environmental regulation takes on greater urgency, given the Department of Energy's estimate that the country will need 300,000 megawatts of additional generation capacity by 2020 — the equivalent of 300 large power plants. It would be virtually impossible to achieve that goal without the use of coal, the nation's most abundant fuel.

There's been a lot of misguided breast-beating about coal. The fact is, coal is being burned much cleaner due in large part to improved pollution-control technologies. The Environmental

Protection Agency says coal-fired plants are 33 percent less polluting than in 1970, even as coal-based electricity has nearly tripled. The Tennessee Valley Authority and investor-owned utilities are spending hundreds of millions of dollars to increase the capacity and environmental efficiency of coal plants, adopting engineering breakthroughs in coal preparation, combustion, waste cleanup, and state-of-the-art electronic instrumentation and controls.

Since coal will account for the bulk of the nation's energy supply in the years ahead, it's time to move from a heated debate about global warming to developing economical ways to render coal environmentally benign. We need to conceive of bold, groundbreaking advances in technologies to capture and store carbon dioxide and turn them into working realities.

One model for action is the Zero Emission Coal Alliance. It combines the capabilities of U.S. and Canadian mining companies and electric utilities with the scientific expertise of Los Alamos National Laboratory to demonstrate a process in the next five years in which the net efficiency of coal-based power generation is at least doubled, while not emitting any greenhouse gases. The carbon dioxide is captured and chemically turned into a solid and inert material to be permanently sequestered underground. It's a sterling example of a private and public sector partnership where scientists and other researchers work together toward a common goal.

The market implications of emission-free coal generation are enormous. "The United States can play a major role in the growing international market for new generating capacity by providing advanced technology for hundreds of new coal plants that will be needed over the next decades," says Kurt Yeager, president of the Electric Power Research Institute in Palo Alto, California.

In sum, we need a balanced energy policy and a commitment to stay the course and not let changing national priorities divert us from paying attention to the need for a stable and secure electricity supply.

The stakes for our nation — and the world — are very high.

Richard E. Bergenback is professor of geology at the University of Tennessee at Chattanooga.

THE CINCINNATI ENQUIRER

March 12, 2001
Cincinnati, OH

U.S. energy policy needs to be long-term

By Dr. Attila Kilinc
Guest columnist

As recent events in California show it is no longer possible to ignore the fact that our power driven economy requires more electricity. In the United States 51 percent of electric energy is generated by coal, 19.7 percent by nuclear energy, 15.3 percent by natural gas, 8.3 percent by hydroelectricity, and 3.2 percent by petroleum and 2.4 percent by other means making the coal the biggest provider of energy. Even as the environmental movement disparages the use of fossil fuels in producing electricity, coal is making a comeback.

Today electric utilities and independent power producers are investing hundreds of millions of dollars in coal-fired plants in order to boost their output of electricity. The basic attraction of coal remains its low cost and abundance. The Energy Information Administration estimates the U.S. supply of coal at 251 years, crude oil at 10 years, and natural gas at nine years. According to Ohio Department of Natural resources, 9.075 billion tons are technologically recoverable, 2.722 billion tons are economically mineable and, optimistically, 1.361 billion tons of compliance coal remains. This represents approximately a 60-year reserve based on Ohio's 1999 coal production.

Almost 90 percent of the electricity we use in Ohio is produced at coal-fired plants. Together with nuclear power plants, these coal units continue to serve us well, providing affordable and efficient power that sustains our state's growing economy.

Electrical companies also are building new power plants that will use natural gas. But there hasn't been a large coal plant built in many years, and we risk becoming overly dependent on gas for electricity generation. Today 95 percent of the power plants being built in the United States will be gas-fired. Considering demands on the fuel for home heating and industrial use, it's not clear how the U.S., which produces more than 80 percent of its own gas, will meet ballooning demand. Producers have been calling on the Bush Administration to release more land and offshore areas to drilling. And new pipelines are on the drawing board. Both options, however, are still years away from affecting production rates.

No longer the dirty fuel of the past, coal is being burned much cleaner due in large part to improved pollution-control technologies. Nationally, the emission of SO2 from coal-fired power plants has dropped 54 percent since 1980 and the emission of NOx has dropped 32 percent since 1990. Interestingly, these reductions have been achieved during a time when the consumption of coal by the electric utility industry has increased 280 percent since 1970. DOE hopes to develop a zero-emissions coal plant within the next 15 years so that it will be ready for commercial use no later than 2035.

In the most dramatic development to date, researchers at Los Alamos National Laboratory have developed an innovative technique to gasify coal into hydrogen for use in fuel cells that generate electricity without causing any air pollution. Carbon dioxide is captured and solidified into an inert mineral for safe disposal underground.

The Zero Emission Coal Alliance, a coalition of U.S. and Canadian coal companies and utilities, says this gasification process would cost about a cent more per kilowatt-hour than power produced by conventional coal-fired plants. The coalition's goal is to build a pilot plant within five years to demonstrate the process for eventual commercialization. Sequestering carbon underground would shatter several myths. First, it would disprove the idea that no amount of effort to combat global warming will succeed unless we stop using coal.

To reduce greenhouse-gas emissions, we are moving toward a solution, thanks to a research program under which the coal industry and utilities are voluntarily taking steps to reduce greenhouse emissions.

Meanwhile, power demand is rising faster than the system's ability to generate and deliver it, driven by computers, fax machines, wireless telephones and the other accoutrements of our affluent society.

The fact is, electricity use linked to silicon devices has grown from essentially nothing a decade ago to 13 percent of total electricity demand in the U.S. - more than the steel, pulp and paper, and chemical industries combined. The implications of that kind of demand for power are enormous.

According to the Energy Information Administration, by the year 2020 we will need 300,000 megawatts of new capacity, or the equivalent of 1000 base-load power plants.

Our energy policies should focus on the long term. We need to maintain a balanced mix of energy sources and pay special attention to the benefits of clean-coal technology. The alternative is costly power failures that will quickly dwarf what would have been prudent investments in a healthy power system. Equally important is the necessity to develop new and dynamic national and state energy policies.

Attila Kilinc is head of the University of Cincinnati Department of Geology.

THE TAMPA TRIBUNE

March 11, 2001

POWER TO THE PEOPLE

Every fuel and energy technology generates organized opposition

By M. JACK GHANIAN
for The Tampa Tribune

M. Jack Ghanian is interim dean of the University of Florida College of Engineering.

"Anywhere but here." It could become our nation's political anthem. Incinerators, drug treatment centers and halfway houses for the mentally handicapped may be acceptable, as long as they are on the other side of town. Not to mention the opposition to truck terminals and shopping centers. And now some people want to make it nearly impossible for state officials to designate sites for power plants.

With regard to electricity generation, that overworked phrase "not in my back yard" — NIMBY — seems especially apt. It is having a direct impact on many electric utilities and on our nation's economic health.

THE NEWS&OBSERVER

March 8, 2001
Raleigh,N.C.

For energy, don't rule out coal...

By Paul F. Cwik

BUIES CREEK

Just below the surface of the nation's energy debate a dangerous notion is taking hold. Some environmental groups are beginning to argue that the California electricity crisis is a unique event that couldn't happen elsewhere in the country. Lay off building new power plants, they say, and concentrate resources on energy conservation and renewable power supplies, with the focus on "small hydro" (water-powered electricity generation), wind turbines and solar energy.

Such economic ignorance fuels the naive belief that we can have adequate electricity supplies without building new power plants. Californians are now learning that's not true.

California politicians stopped short of fully deregulating the electrical industry, and thereby made matters worse. They dictated where utilities could purchase power and under what terms, and erected numerous roadblocks over the years to building new generation plants and transmission systems.

In fact, no major new power plants have been built in California in the past 10 years. Small turbines that burn natural gas have provided the only additional electricity. The results were inevitable — billions of dollars lost and possible bankruptcy for utility companies, as well as blackouts for consumers.

One lesson is that just as America cannot rely on a single energy source, neither can this country depend entirely on conservation. Over time, higher electricity prices will help reduce the quantity demanded, but a swing to more efficient appliances and motors cannot fuel future economic growth. Even with energy savings, the Department of Energy estimates the country will need 300,000 megawatts of additional generation capacity by 2020 — the equivalent of 300 large power plants.

Some of those power plants need to be built in North Carolina. The next few years could be crucial, since we must find ways to resist the temptation to become overly dependent on a single energy source in meeting our electricity requirements.

Although natural gas is the preferred fuel for generating electricity, it's not free of problems. Because demand for gas is outrunning supplies, wholesale prices for the fuel have quadrupled in the past year, resulting in sharply higher gas bills for residential customers. While gas companies are stepping up drilling, most of the major fields in the United States are already on-line, and much of what remains is off-limits for environmental reasons. Even accelerated drilling will not provide sufficient new gas for several years to meet growing demand. It now seems likely that growth rates in production and pipeline capacity will lag behind rapidly rising gas demand, making gas much more expensive.

So if we wish to save gas for home heating, business and industrial use, we need to find alternatives for the generation of electricity.

Together with nuclear power's contribution, coal-fired plants serve us well, providing affordable and efficient power that sustains our state's growing economy. Electricity from coal costs much less than power generated from either oil or natural gas. And the use of new technologies is making coal even more affordable.

No longer the dirty fuel of the past, coal is being burned much cleaner due in large part to improved pollution-control technologies. Even the Environmental Protection Agency acknowledges that the amount of sulfur dioxide, nitrogen oxides and other pollutants that coal-fired electricity plants emit has dropped 33 percent since 1970, despite the fact that coal plants now provide three times as much electricity. Credit goes to steady, incremental changes from engineering breakthroughs in coal preparation, combustion, waste cleanup and state-of-the-art electronic instrumentation and controls.

Economic realities will ensure that coal remains a primary source of energy for the foreseeable future. So it makes sense to concentrate research efforts into means of using that fuel efficiently and with as few waste emissions as possible.

Technological innovation in our use of coal will help ensure that we can maintain a livable environment. The right way to accomplish this is through public and private cooperation in scientific research — and we are doing that. The wrong way would be to turn our back on coal.

Alternative energy sources such as solar or wind cannot provide the electricity 24 hours a day, every day of the year that is required. Nor can we depend on conservation alone to meet our energy needs. We would pay a huge price for such shortsightedness in terms of electricity shortages, closed industries and lost jobs. It's time to expand the use of clean coal.

Paul F. Cwik is an assistant professor of economics at Campbell University.

The Detroit News AND Free Press

March 1, 2001

Can we depend on coal to avoid energy woes?

Cleaner-burning coal promises best way for powering Michigan

By Aureal T. Cross

Yes

The collapse of California's overstressed power system should be a wake-up call to the country that the era of boundless electricity is over — at least for the near future. Although electricity drives the economy, anyone who thinks this nation is serious about energy should consider that few new major power plants have been built in the past 10 years. Nationally, electricity production began failing to keep pace with power demand two years ago, and today there is little spare capacity.

Coal-fired power plants account for nearly 75 percent of the electricity consumed in Michigan, and more than half of the electricity used nationally. These plants continue to serve us well, providing affordable and reliable power. Electric utilities and independent power producers are investing hundreds of millions of dollars in the plants to boost their output of electricity and make them more environmentally efficient.

Now there is pressure from environmental groups to dismantle hydroelectric dams. And how ironic that some of the same groups in California that once tried to block the construction of "base-load" power plants now loudly fear that a coal or nuclear plant might have to close temporarily for maintenance.

Although it's now the preferred fuel for generating electricity, natural gas is not free of problems. Because demand for gas is outrunning supplies, wholesale prices for the fuel have more than doubled in a year, resulting in sharply higher residential gas bills. While gas companies are stepping up drilling, most major fields in the United States are already on-line, and much of what remains is off limits for environmental reasons. Even accelerated drilling will not provide sufficient new gas for several years. It seems likely that growth rates in production and pipeline capacity will lag behind rapidly rising gas demand, making gas much more expensive.

The basic attractions of coal are its abundance and low cost. Electricity from coal costs much less than power generated from either natural gas or oil. And the use of new technologies is making coal even more affordable.

No longer the dirty fuel of the past, coal is being burned much cleaner due largely to improved pollution-control technologies. The Environmental Protection Agency says coal-fired electricity plants are 33 percent less polluting than in 1970, even as coal-based electricity has nearly tripled. Credit goes to steady, incremental changes from engineering breakthroughs in coal preparation, combustion, waste cleanup, and state-of-the-art electronic instrumentation and controls.

Promising developments in clean-coal technology are coming. The Electric Power Research Institute in California plans to develop advanced power plants that produce electricity from coal with virtually no air pollution or greenhouse-gas emissions.

In the most dramatic development in clean-coal technology, researchers at Los Alamos National Laboratory have developed an innovative technique to gasify coal into hydrogen for use in fuel cells that generate electricity without any emissions. Carbon dioxide is captured and solidified into an inert mineral for safe disposal underground. The Zero Emission Coal Alliance, a coalition of coal companies and utilities, says this gasification process would cost about a cent more per kilowatt-hour than power produced by conventional coal-fired power plants.

Sequestering carbon underground would disprove the idea that no amount of effort to combat global warming will succeed unless we stop using coal. And it means less need for additional government regulations that hamper electricity generation. We are moving toward a solution, thanks to research programs, under which the coal industry and utilities are voluntarily limiting carbon emissions.

The reason for coal's importance is clear. Electricity is the cleanest and most efficient energy source. The rise in greenhouse emissions concerns all of us. But this should not be permitted to muddle what remains the essential point: We need to recognize the critical contribution of coal to energy supply now and in the future.

Aureal T. Cross is professor emeritus of geological sciences at Michigan State University.

ASHEVILLE
CITIZEN-TIMES

February 28, 2001
Asheville, NC

Don't black out coal as one solution to energy demands

PAUL CWIK

By Paul F. Cwik

Just below the surface of the nation's energy debate, a dangerous notion is taking hold. Some environmental groups are beginning to argue that the California electricity crisis is a unique event that couldn't happen elsewhere in the country. Lay off building new power plants, they say, and concentrate resources on energy conservation and renewable power supplies, with the focus on small hydro, wind turbines, and solar energy. Such economic ignorance fuels the naive belief that you can have adequate electricity supplies without building new power plants. Californians are now learning that's not true. Californian politicians stopped short of fully deregulating the electrical industry, and thereby made matters worse. They dictated where utilities could purchase power and under what terms, and erected numerous roadblocks over the years to building new generation plants and transmission systems. In fact, no major new power plants have been built in California in the past ten years. Small turbines that burn natural gas have provided the only additional electricity.

The results were inevitable - billions of dollars lost and looming bankruptcy for utility companies as well as blackouts for consumers.

One lesson is that just as America cannot rely on a single energy source, neither can this country depend entirely on conservation. Over time, higher electricity prices will help reduce quantity demanded, but a swing to more efficient appliances and motors cannot fuel future economic growth. Even with energy savings, the Department of Energy estimates the country will need 300,000 megawatts of additional generation capacity by 2020 - the equivalent of 300 large power plants. Some of those power plants need to be built in North Carolina. The next few years could be crucial, since we must find ways to resist the temptation to become overly dependent on a single energy source in meeting our electricity requirements.

Although natural gas is the preferred fuel for generating electricity, it's not free of problems. Because demand for gas is outrunning supplies, wholesale prices for the fuel have quadrupled in the past year, resulting in sharply higher gas bills for residential customers. While gas companies are stepping up drilling, most of the major fields in the United States are already on-line and much of what remains are off-limits for environmental reasons. Even accelerated drilling will not provide sufficient new gas for several years to meet growing demand. Together with nuclear power's contribution, coal-fired plants serve us well, providing affordable and efficient power that sustains our state's growing economy.

Electricity from coal costs much less than power generated from either oil or natural gas. And the use of new technologies is making coal even more affordable. According to the Utility Data Institute, in 1999 production costs at U.S. coal-fired plants averaged 2.07 cents per kilowatt-hour (kwh), lower than oil-fired plants at 3.18 cents per kwh and far lower than natural gas plants at 3.52 cents per kwh. Coal's advantage was even greater last year, as the price of oil and especially natural gas jumped.

No longer the dirty fuel of the past, coal is being burned much cleaner due in large part to improved pollution-control technologies. Even the Environmental Protection Agency acknowledges that the amount of sulfur dioxide, nitrogen oxides and other pollutants that coal-fired electricity plants emit has dropped 33 percent since 1970, despite the fact that coal plants now provide three times as much electricity. Credit goes to steady, incremental changes, breakthroughs in coal preparation, combustion, waste cleanup, and electronic instrumentation and controls. Economic realities will ensure that coal remains a primary source of energy for the foreseeable future. So it makes sense to concentrate research efforts into means of using that fuel efficiently and with as little waste emissions as possible.

Technological innovation in our use of coal will help ensure that we can maintain a livable environment. The right way to accomplish this is through public and private cooperation in scientific research - and we are doing that. The wrong way would be to turn our back on coal. Alternative energy sources such as solar or wind cannot provide the electricity 24 hours a day, every day of the year, that is required. Nor can we depend on conservation alone to meet our energy needs. We would pay a huge price for such shortsightedness in terms of electricity shortages, closed industries, and lost jobs. It's time to expand the use of clean coal.

Cwik is Assistant Professor of Economics, Campbell University.

The Oakland Press

February 21, 2001
Pontiac, MI

New technologies boost attractions of coal as source for power

BY AUREAL CROSS

The collapse of California's overtressed power system should be a wake-up call to the rest of the country that the era of boundless electricity is over, at least for the near future.

Although electricity is the engine that's driving the economy, anyone who thinks this country is serious on the subject of energy should consider that few new major power plants have been built in the last 10 years. Nationally, electricity production began failing to keep pace with power demand two years ago, and today there is little spare capacity.

Coal-fired power plants account for nearly 75 percent of the electricity consumed in Michigan and more than half of the electricity used nationally. These coal plants continue to serve us well, providing affordable and reliable power that sustains Michigan's growing economy. Today, electric utilities and independent power producers are investing hundreds of millions of dollars in the plants to boost their output of electricity and make them more environmentally efficient.

Now there is pressure from environmental groups to dismantle hydroelectric dams. How ironic that some of the same groups in California that once tried to block the construction of "base-load" power plants are now loudly fearful that a coal or nuclear plant might have to close temporarily for maintenance.

Although it's now the preferred fuel for generating electricity, natural gas is not free of problems. Because demand for gas is outrunning supplies, wholesale prices for the fuel have more than doubled what they were a year ago, resulting in sharply higher gas bills for residential customers.

The basic attractions of coal are its abundance and its low cost. Electricity from coal costs much less than power generated from either natural gas or oil. The use of new technologies is making coal even more affordable.

No longer the dirty fuel of the past, coal is being burned much cleaner because of improved pollution-control technologies.

The Environmental Protection Agency says coal-fired electricity plants are 33 percent less polluting than in 1970, even as coal-based electricity has nearly tripled. Credit goes to steady, incremental changes, year after year, from engineering breakthroughs in coal preparation, combustion and waste cleanup to state-of-the-art electronic instrumentation and controls.

Promising developments in clean-coal technology are coming. The Electric Power Research Institute in California plans to develop advanced power plants that produce electricity from coal with virtually no air pollution or greenhouse-gas emissions.

We are moving toward a solution, thanks to research programs under which the coal industry and the utilities are voluntarily taking steps to limit carbon emissions.

The reason for coal's importance is clear. Electricity is the cleanest and most efficient energy source. The rise in greenhouse emissions concerns all of us. But this should not be permitted to muddle what remains the essential point: We need to recognize the critical contribution of coal to energy supply now and in the future.

(Aureal Cross is professor emeritus of geological sciences at Michigan State University.)

The Grand Rapids Press

February 17, 2001
Grand Rapids, MI

Coal provides ample, cheap energy supply

This commentary is by Aureal T. Cross, professor emeritus of geological sciences at Michigan State University.

The collapse of California's over-stressed power system should be a wake-up call to the rest of the country that the era of boundless electricity is over — at least for the near future.

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Although it's now the preferred fuel for generating electricity, natural gas is not free of problems. Because demand for gas is outrunning supplies, wholesale prices for the fuel have more than doubled what they were a year ago, resulting in sharply higher gas bills for residential customers.

While gas companies are stepping up drilling, most of the major fields in the United States are already on-line and much of what remains is off-limits for environmental reasons. Even accelerated drilling will not provide sufficient new gas for several years to meet growing demand. It now seems likely that growth rates in production and pipeline capacity will lag behind rapidly rising gas demand, making gas much more expensive. Therefore, every effort should be made to save gas for home heating, business and industrial use.

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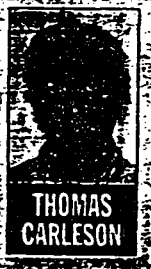
Sequestering carbon underground would disprove the idea that no amount of effort to combat global warming will succeed unless we stop using coal.

The reason for coal's importance is clear. Electricity is the cleanest and most efficient energy source. The rise in greenhouse emissions concerns all of us. But this should not muddle the essential point: We need to recognize the critical contribution of coal to the energy supply.

The Idaho Statesman

February 13, 2001
Boise, ID

Best choices for generation of power are coal, nuclear



THOMAS CARLESON

The recent deregulation of utilities in California and the subsequent jump in PG&E utility profits (rises of up to 243 percent as reported by an Associated Press release of Dec. 19) as an energy shortage hit California may be a warning of things to come in the near future.

The power companies claim that the profit taking was due to "enormous demands on electricity and supply problems when (the state) deregulated (the utilities)."

It seems that the utilities have been more cognizant of the future supply and demand for power than the government. Unfortunately, the construction of new power plants has stagnated in this country largely due to government regulation. This may lead to a future energy crunch.

Growth in energy usage over the last 10 years has been about 14.7 percent (DOE figures). In 1990 the total energy consumption was 84.2 quadrillion BTUs and just last year that had risen to 96.6 quads. Electricity consumption has grown 25.3 percent from 1990 to 1998, a growth rate of a little over 3 percent per year.

On the other hand, the yearly increase in net generation of electricity has been about 2 percent over the last few years.

As energy consumption continues to increase, there is a need for the construction of new facilities for electric power generation.

What kind of new plants should be constructed? U.S. electrical generation is largely from coal combustion. (About 50 percent of total generation from 1990 to 1999 was from coal-fired power plants.)

The next largest producer of electricity is nuclear power (about 20 percent between 1990 and 1999). The other fuels (natural gas and oil) constitute about 20 percent of electrical production.

Due to rising costs, natural gas and oil will probably result in a smaller fraction of the electrical energy production in this millennium.

Wholesale natural gas prices doubled over the last year and about one-third of the U.S. trade deficit has been for payment of shipments of imported oil. (Oil imports constitute over 50 percent of U.S. consumption.)

Renewable energy sources (including hydroelectric power) constitute about 10 percent, mostly from hydroelectric power. With the concern for endangered species some of the dams in the Northwest may no longer be available for power generation.

It seems, then, that the logical choices for new power plants are coal and nuclear.

Coal reserves in this country and Canada are large. Coal is the cheapest fossil fuel and current government regulations ensure that coal-fired power plants' emissions are minimized.

Since 1970, overall coal-fired power plant emissions in the U.S. have decreased by 50 percent even as coal-based electricity generation has nearly doubled.

Nuclear fuel production has been stagnant since the late 1980s largely due to government regulation leading to high costs and concerns over safety and environmental damage. As a consequence, countries like France, Japan, and England have taken the lead for nuclear power development.

In the United States, electric generation costs from nuclear fuel are about 2 cents per kwh compared to electrical generation costs from natural gas of 3.5 cents per kwh.

Nuclear safety and power-plant efficiency have improved significantly and now there is a recognition within the financial community that nuclear plants are increasingly attractive assets in a deregulated electricity market.

Safe transportation of nuclear fuel is a reality. The United States is currently evaluating a facility in Yucca Mountain, Nev., for storage of spent fuel rods. It seems that the future increases in electricity for this country can be realistically met with new coal- and nuclear-fired power plants.

Our government should be encouraged to allow the permitting of these facilities with prudent speed lest we suffer energy crises that threatened states like California this month.

Thomas E. Carleson is professor of chemical engineering for the University of Idaho in Moscow.

Lansing State Journal

February 11, 2001
Lansing, MI

Coal carries promise for our energy needs

Aureal Cross

The collapse of California's power system should be a wake-up call to the rest of the country that the era of boundless electricity is over – at least for the near future. Although electricity is the engine that's driving the economy, anyone who thinks this country is serious on the subject of energy should consider that few new major power plants have been built in the past 10 years.

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The reason for the coal's importance is clear. Electricity is the cleanest and most efficient energy source. The rise in greenhouse emissions concerns all of us. But this should not be permitted to muddle what remains the essential point: We need to recognize the critical contribution of coal to energy supply now and in the future.

Aureal T. Cross of East Lansing is a professor emeritus of geological sciences at Michigan State University.

The Gainesville Sun

February 11, 2001
Gainesville, FL

Power plant sites can't be snubbed

M. JACK OHANIAN

"Anywhere but here." It could become our nation's political anthem.

Incinerators, drug treatment centers and halfway houses for the mentally handicapped may be acceptable, as long as they are on the other side of town. Not to mention the opposition to truck terminals and shopping centers.

And now some people want to make it nearly impossible for state officials to designate sites for power plants.

With regard to electricity generation, that over-worked phrase — not in my backyard (NIMBY) — seems especially apt. It is having a direct impact on many electric utilities and on our nation's economic health.

That is because the nation has a serious electricity shortage. Power blackouts and sky-high bills, which have besieged California, are a distinct possibility elsewhere in the country.

The issue is a simple one: There is not enough electricity being produced, and in some places there are not enough transmission lines to get electricity to where it is needed.

Just about every fuel and technology that can deliver affordable electricity in the quantities that the digital economy requires has encountered public opposition.

In Chicago, politicians placed a moratorium on small, natural gas power plants that are designed to switch on during periods of peak demand, after protests by homeowners who didn't want the "peaker" units in their neighborhoods.

And when the Pacific Gas & Electric Co. wanted to anchor a floating power plant in San Francisco Bay to help avert potential brownouts, environmentalists objected, claiming that the plant's four turbines would pollute the air and spill fuel into the bay.

Even wind turbines — among the most renewable of energy resources — have come under fire. A proposed wind farm near Los Angeles was thwarted by bird enthusiasts.

Plans for another wind farm near the abandoned Shoreham nuclear plant on Long Island were dropped after a local environmentalist group argued against it.

And environmentalists who oppose the system of hydroelectric dams and reservoirs in the Pacific Northwest because it impedes migratory systems recently succeeded in forcing dam operators to scale back operations.

Their protests have worked to reduce the supply — and increase the cost — of hydropower in California and in neighboring states.

To make matters worse, the construction of coal-fired plants has ground to a halt, and nuclear energy has been demonized. Evidently many people seem unaware that coal and nuclear power together provide about three-quarters of the nation's electricity.

Is it possible we don't have the will to build power plants anymore? Not if we give in to opponents of public projects of all kinds so that whatever it is we try to do comes out second best or worse. Did our ability to build for the future, and our children's future, finally succumb to Nimbyism?

Do environmental activists who are making it nearly impossible to construct power plants have a point of view we should consider? Of course. But officials need to balance those concerns against the greater public need for electricity at reasonable cost.

While there is no escaping electricity supply problems in the short term, we can start making smart decisions. The Energy Department estimates that between now and 2020, we will need about 300,000 megawatts of additional capacity, or the equivalent of 300 large, new power plants. It is time to make sure the plants get built in a timely fashion within sensible environmental bounds.

State governments must insist on a balanced energy strategy, not relying on a single fuel for additional electricity but rather a mix of coal, nuclear energy, natural gas and renewable sources.

The nation's demand for electricity is growing nearly 3 percent a year, double the rate of just a few years ago.

Only a steady program of power plant construction, along with sound conservation practices, can ensure smooth operation of millions of air conditioners, personal computers, cellular phone chargers and plain old light bulbs.

We need a commitment to stay the course and not let our attention be diverted from the need for a stable and secure energy supply.

M. Jack Ohanian is interim dean of the University of Florida's College of Engineering.

The Lima News

February 4, 2001
Lima, OH

Diversification key to nation's electric woes

Tunc ALDEMIR
Guest columnist

Worried about the danger of electricity shortages that could spin out of control, state governments are considering measures to encourage the construction of power plants. Yet, while there is no argument that combustion turbines and combined-cycle plants using natural gas are the easiest to build, policymakers are deluding themselves if they think they can ignore the important roles that coal and nuclear power play in helping to hold down electricity costs.

Coal-fired plants and nuclear plants provide virtually all of the electricity in Ohio. Though they were built decades ago, these units serve us well, providing affordable and efficient power that sustains our state's economy.

But in recent years the demand for electricity has outpaced supply, sapping Ohio's power reserves and staining the ability of utilities to meet electricity requirements at times of peak demand. This has forced some factories to shut down temporarily and prompted calls for voluntary cutbacks in electricity use by residential customers.

The situation is not has bad as in some states, where in many places electricity deregulation has not produced the needed power. Consider California. A shortage of generating capacity in that state has caused the price of electricity to skyrocket.

Part of the reason is that California utilities must purchase power at market prices from electrical companies, but another factor is the state's growing dependence on power plants that burn natural gas.

Talk about a nightmare. The price of natural gas has quadrupled in the past 12 months and is now about $10 per thousand cubic feet, which is equivalent to oil at $58 a barrel, twice the current price.

Ohio currently has 22 proposals for new power plants, including at least seven that state regulators have approved. Unfortunately, almost all of them are combustion turbines that burn natural gas.

Why should we be alarmed by this? Because it suggests a much more fragile energy system than anyone suspected, a system strained by stupendous risks in failing to invest in a mix of energy sources.

Relying almost exclusively on a single source for electricity creates a serious energy vulnerability. Nationally, natural gas is the fuel for 95 percent of new electrical facilities and the energy source of choice for home heating and industrial use. Even the natural gas industry concedes there is insufficient low-cost gas to meet projected use, and that we need to expect price increases.

To make matters worse, the construction of coal-fired plants has ground to a virtual halt, and there hasn't been an order for a nuclear plant in the U.S. since 1978.

Just about every fuel and technology that can deliver affordable power in the quantities that the digital economy requires has encountered serious opposition, usually from environmental activists.

No energy source has escaped their wrath. Wind turbines — among the most renewable energy sources — has come under fire. A proposed wind farm in California was thwarted by bird enthusiasts.

Environmentalists who oppose the system of hydroelectric dams and reservoirs in the Pacific Northwest because they are bent on unleashing wild rivers recently succeeded in forcing dam operators to scale back operations. That has worked to reduce the supply — and increase the cost — of electricity in a region that is home base to the digital economy.

And in New York state, environmental groups have blocked construction of a gas-fired plant along a scenic stretch of the Hudson River, claiming that the plant would mar the view.

We can't have it both ways. We must find a balance between producing energy and environmental priorities.

Is it really possible we don't have the will to build power plants anymore? Not if we give into extreme opponents of power projects so that whatever it is we try to do comes out second best or worse.

Do activists who are making it nearly impossible to construct power plants have a point of view we should consider? Of course. But officials need to balance those concerns against the needs of the greater public for energy as well.

Remedies are long past due. California Gov. Gray Davis has suggested that local governments be denied certain state tax support if they refuse to allow a power plant to be built in their district.

Because no single energy source can meet rising electricity demand, the only answer is diversification. Every effort should be made to keep hydroelectric dams and nuclear plants operating. Those who still believe that nuclear power is too costly should consider this: For the first time in more than a decade, production costs at U.S. nuclear plants are the lowest of any major reliable electricity source, dropping below coal-fired plants, according to the Utility Data Institute. In 1999, production costs at nuclear plants averaged 1.83 cents per kilowatt-hour, lower than coal at 2.07 cents per kwh, and still far lower than oil-fired plants at 3.18 cents per kwh and natural gas plants at 3.52 cents per kwh.

While there is no escaping the economic headaches and inconveniences of inadequate power supplies in the short term, we can start making some smart decisions.

The Energy Department estimates that between now and 2020 we will need about 300,000 megawatts of additional power capacity, or the equivalent of 300 large, new power plants.

It is time for the Energy Department, state governments and electrical companies to make sure they get built. But beyond that we need a balanced energy policy and a commitment to stay the course and not let changing national priorities divert us from paying attention to the need for a stable and secure electricity supply.

Tunc Aldemir is a professor in the Department of Mechanical Engineering at The Ohio State University.

The Columbus Dispatch

January 29, 2001
Columbus, OH

Include nuclear, coal options in energy policy

TUNC ALDEMIR

Worried about the danger of electricity shortages that could spin out of control, state governments are considering measures to encourage the construction of power plants. Yet, while there is no argument that combustion turbines and combined-cycle plants using natural gas are the easiest to build, policymakers are deluding themselves if they think they can ignore the important roles that coal and nuclear power play in helping to hold down electricity costs.

Coal-fired plants and nuclear plants provide virtually all of the electricity in Ohio. Though they were built decades ago, these units serve us well, providing affordable and efficient power that powers our state's economy. But in recent years, the demand for electricity has outpaced supply, sapping Ohio's power reserves and straining the ability of utilities to meet electricity requirements at times of peak demand. This has forced some factories to shut down temporarily and prompted calls for voluntary cutbacks in electricity use by residential customers.

The situation is not as bad as in some other states, where electricity deregulation has not produced the needed power. Consider California. A shortage of generating capacity has capped the price of electricity to skyrocket. Part of the reason is that California utilities must purchase power at market prices from electrical companies, but another factor is the state's growing dependence on power plants that burn natural gas. Talk about a nightmare. The price of natural gas has quadrupled in the past 12 months and is now about $10 per thousand cubic feet, which is equivalent to oil at $60 a barrel, twice the current price.

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Relying almost exclusively on a single source for additional electricity capacity creates a serious energy vulnerability. Nationally, natural gas is the fuel for 95 percent of new electrical facilities and the energy source of choice for home heating and industrial use. Even the natural-gas industry concedes there is insufficient low-cost gas to meet projected use and that we should expect price increases.

To make matters worse, the construction of coal-fired plants has ground to a virtual halt, and there hasn't been an order for a nuclear plant in the United States since 1978.

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Environmentalists who oppose the system of hydroelectric dams and reservoirs in the Pacific Northwest because they are bent on unleashing wild rivers recently succeeded in forcing dam operators to scale back operations. That has worked to reduce the supply and increase the cost of electricity in a region that is home base to the digital economy.

In Chicago, politicians clamped a moratorium on combustion turbines that are designed to switch on during periods of peak demand after protests by homeowners who didn't want the so-called peaker units in their neighborhoods. And in New York, environmental groups have blocked construction of a gas-fired plant along a scenic stretch of the Hudson River, claiming that the plant would mar the view.

We can't have it both ways. We must find a balance between producing energy and environmental priorities.

Is it really possible we don't have the will to build power plants anymore? That's how things seem when we give in to extreme opponents of power projects. Did our ability to build for the future, and our children's future, finally succumb to NIMBY-ism — not in my back yard?

Do activists who are making it nearly impossible to construct power plants have a point of view we should consider? Of course. But officials need to balance these concerns against the needs of the greater public for energy, as well.

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Because no single energy source can meet rising electricity demand, the only answer is diversification. Every effort should be made to keep hydroelectric dams and nuclear plants operating. Those people who still believe that nuclear power is too costly should consider this: For the first time in more than a decade, production costs at U.S. nuclear plants are the lowest of any major reliable electricity source, dropping below coal-fired plants, according to the Utility Data Institute. In 1999, production costs at nuclear plants averaged 1.83 cents per kilowatt-hour, lower than coal at 2.07 cents per kwh, and far lower than oil-fired plants at 3.18 cents per kwh and natural gas plants at 2.82 cents per kwh.

While there is no escaping the economic headaches and inconveniences of inadequate power supplies in the short term, we can start making some smart decisions. The U.S. Energy Department estimates that between now and 2020 we will need about 200,000 megawatts of additional power capacity, or the equivalent of 300 large new power plants.

It is time for the U.S. Energy Department, state governments and electrical companies to make sure these plants are built. But beyond that, we need a balanced energy policy and a commitment to stay the course and not let changing national priorities divert our attention to the need for a stable and secure electricity supply.

Tunc Aldemir is a professor of nuclear engineering at Ohio State University.